

## TECHNICAL MANUAL

### UNIT MAINTENANCE MANUAL

FOR  
CARRIER, PERSONNEL, FULL TRACKED, ARMORED M113A3  
2350-01-219-7577 (EIC AEY)

CARRIER, COMMAND POST, LIGHT TRACKED M577A3  
2350-01-369-6085 (EIC AE7)

CARRIER, ANTI-TANK (TOW), FULL TRACKED, ARMORED M901A3  
2350-01-369-7253 (EIC AFD)

CARRIER, FIRE SUPPORT PERSONNEL, FULL TRACKED, ARMORED  
M981A3  
2350-01-369-6079 (EIC AFB)

CARRIER, SMOKE GENERATOR, FULL TRACKED M1059A3  
2350-01-369-6083 (EIC AFA)

CARRIER, MORTAR, 120-MM M121, SELF-PROPELLED M1064A3  
2350-01-369-6082 (EIC AE8)

CARRIER, STANDARDIZED INTEGRATED COMMAND POST SYSTEM  
(SICPS) M1068A3  
2350-01-369-6086 (EIC AFC)

CARRIER, MECHANIZED SMOKE OBSCURANT M58  
2350-01-418-6654 (EIC 5CG)

SUPERSEDURE NOTICE — This manual supersedes TM 9-2350-277-20-1 dated 24 July 1994, including all changes.

DISTRIBUTION STATEMENT A — Approved for public release; distribution is unlimited.

---

## HEADQUARTERS, DEPARTMENT OF THE ARMY

2 January 2001



## WARNING SUMMARY

### WARNING SUMMARY

This section provides a summary of all critical safety information in this manual. It includes general WARNINGS not found in the Work Package (WP) procedures and hazardous materials WARNINGS.

Prior to starting any WP procedure, the WARNINGS included in the text for that WP must be reviewed and understood.

Also review the materials list in the INITIAL SETUP of the WP for hazardous materials used during maintenance of the equipment. Then refer to the detailed WARNINGS for hazardous materials listed separately in this WARNING SUMMARY under the heading HAZARDOUS MATERIALS WARNINGS.

### GENERAL WARNINGS NOT FOUND IN WP PROCEDURES

The following WARNINGS are general safety statements. They are not unique to any specific procedures. All personnel operating this equipment or working near this equipment must understand and continually observe the precautions in these WARNINGS.



**Unlocked ramp can open and move down slowly.**

**If ramp system is damaged, unlocked ramp can fall suddenly.**

**Personnel can be killed or injured.**

**Take care when you work near ramp.**

**Keep away from ramp that has come open during carrier operation.**



**Energized system and equipment can burn you. If MASTER POWER SWITCH is ON, electrical system and equipment will be energized. Make sure MASTER POWER SWITCH is OFF when you work on electrical systems or equipment.**

## WARNING SUMMARY (cont)

---

### WARNING

---



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one person familiar with the operation and hazards of the equipment is nearby. That person should also be competent in giving first aid. When an operator assists a technician, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. When working inside equipment with power off, take special care to ground every capacitor likely to hold a dangerous potential.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

**KEEP** one hand away from the equipment to reduce the hazard of current flowing through life-sustaining organs of the body.

---

### WARNING

---



**Power cable connections** should not be attempted until grounding system and signal/data cabling have been completed.

**System ground** must be completed prior to making any power connections. Failure to do so may result in personal injury and/or damage to the equipment. Improper or loose connection between the surface wire grounding systems and ground lugs could cause a short in the system, which may cause personal injury.



## WARNING SUMMARY (cont)

---

### WARNING

---



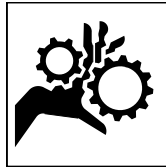
**Battery post and cables touched by metal objects can short circuit and burn you. Gas from batteries can explode and injure you. Battery acid can blind you or burn you.**

- **Do not wear jewelry when you work on electrical systems.**
- **Use caution when you work near battery or electrical system with tools or other metal objects.**
- **Do not get acid on your skin or in your eyes.**
- **Do not allow sparks near batteries.**

---

### WARNING

---

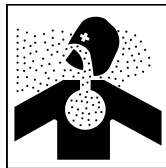


**Start up of equipment or moving parts could injure you or others. If other personnel are working on your carrier, be sure you know what they are doing. Place DO NOT OPERATE tags on MASTER SWITCH when needed to prevent startup.**

---

### WARNING

---



**Heater and engine exhaust can kill or poison you.**

**Close power plant access panel tight before you start engine.**

**Do not run heater or engine indoors without very good fresh air flow.**

**Keep power plant access cover closed when you run engine.**

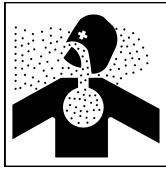
**Check for the smell of exhaust fumes. If you notice any fumes, open hatches and turn on vent fans.**

## WARNING SUMMARY (cont)

---

### WARNING

---



**Exhaust gases can make you ill or kill you. Signs of exhaust gas poison are dizziness, headache, loss of muscle control, sleepiness, coma, or death. If anyone shows signs of exhaust gas poisoning:**

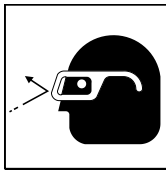
- (1) - Get all personnel out of carrier.
- (2) - Get medical help.
- (3) - Make sure personnel have lots of fresh air.
- (4) - Keep personnel warm.
- (5) - Do not let anyone do hard exercise.

**If anyone stops breathing, give artificial respiration.**

---

### WARNING

---



**Air pressure in excess of 30 psi (207 kpa) can injure personnel. Do not direct pressurized air at yourself or others. Always wear goggles.**

---

### WARNING

---



**If you work on a carrier that has been running, you could be burned. All tasks begin with a cooled down carrier. Allow carrier to cool, or use care if you work on a hot carrier.**

---

### WARNING

---



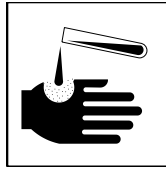
**Failure to set the parking brake and block the road wheels can allow the carrier to move and could result in injury or death. Always set the parking brake and block road wheels before working on the carrier.**

**WARNING SUMMARY (cont)**

---

**WARNING**

---



Unsafe use of chemical products can injure you. Read and follow warnings and instructions on labels of all chemical products. Follow all general shop safety procedures. See supervisor for further instructions on safety.

---

**WARNING**

---



Unsafe use of tools and equipment can injure you. Read and follow warnings and instructions on labels of all equipment. Follow all general shop safety procedures. See supervisor for further instructions on safety.

---

**WARNING**

---

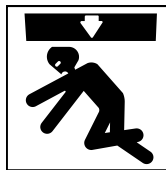


Fire extinguishers can discharge and injure you. Insert antirecoil plugs, lock pins, and cotter pins before you work on or near fire extinguishers.

---

**WARNING**

---



Hanging loads could kill or injure you. Keep away from hanging loads and overhead equipment. Keep hands out of engine compartment while power unit is being removed or installed.

**WARNING SUMMARY (cont)**

---

**WARNING**

---

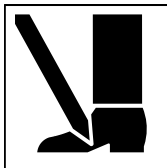


**Torsion springs or bars can fly out and injure you. Make sure spring tension is released before you start work.**

---

**WARNING**

---

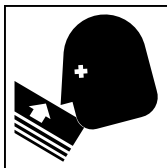


**If road wheel lifter slips while lowering road arm, it could injure you. Stand clear before you lower road arm.**

---

**WARNING**

---

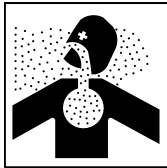


**Power plant door may spring open. Soldiers can be injured. When opening, stay out of door path.**

---

**WARNING**

---



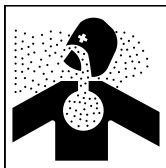
**NBC agents can kill you. Do not service air cleaner or vent system after NBC attack until carrier has been decontaminated.**

**WARNING SUMMARY (cont)****WARNING**

Starting engine right after a fire could restart the fire and kill or injure you. Do not turn MASTER SWITCH ON until cause of fire has been repaired or removed.

**WARNING**

Fire resistant hydraulic (FRH) fluid may contain Tricresyl Phosphate which, if taken internally, can produce paralysis. Hydraulic fluid may be absorbed through the skin. Wear long sleeves, gloves, goggles, and face shield. If FRH gets in eyes, wash them immediately and get medical aid immediately. If FRH gets on skin, thoroughly wash them with soap and water. Wash hands thoroughly prior to eating or smoking.

**WARNING**

Chemical agent resistant coating (CARC) paint contains isocyanate (HDI) which is highly irritating to skin and respiratory system. High concentrations of HDI can produce symptoms of itching and reddening of skin, a burning sensation in throat and nose, and watering of the eyes. In extreme concentrations, HDI can cause cough, shortness of breath, pain during respiration, increased sputum production, and chest tightness. The following precautions must be taken whenever using CARC paint:

- ALWAYS use air line respirators when using CARC paint unless air sampling shows exposure to be below standards. Use chemical cartridge respirator if air sampling is below standards.
- DO NOT let skin or eyes come in contact with CARC paint. Always wear protective equipment (gloves, ventilation mask, safety goggles, etc.)
- DO NOT use CARC paint without adequate ventilation.
- NEVER weld or cut CARC-coated materials.
- DO NOT grind or sand painted equipment without high-efficiency air purifying respirators in use.
- BE AWARE of CARC paint exposure symptoms; symptoms can occur a few days after initial exposure. Seek medical help immediately if symptoms are detected.

**WARNING SUMMARY (cont)**

---

**WARNING**

---



Mixing of CARC paint must be done in a well-ventilated mixing room or spraying area away from open flame with personnel wearing eye protection. Paint is flammable and can cause injury or death to personnel.

---

**WARNING**

---

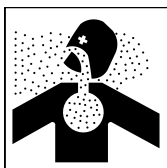


Protective equipment (gloves, goggles, ventilation mask) must be worn when using CARC paint. DO NOT leave any skin exposed. Contact with CARC paint can cause skin burns.

---

**WARNING**

---



High-efficiency air purifying respirators should be used when grinding or sanding CARC-coated equipment. Failure to do so may result in injury or death to personnel.

---

**WARNING**

---



Radiator is heavy and can cause back injury if handled improperly. Be sure to use a hoist and helper to remove radiator.

**WARNING SUMMARY (cont)**

---

**WARNING**

---



**Do not work under power plant. Power plant is heavy and may cause personnel and equipment damage if it falls. Lower power plant on wooden blocks before starting task.**

---

**WARNING**

---



**Damaged lifting slings can fail with load. Soldiers can be killed or injured. Inspect all slings before use. Do not use damaged slings.**

---

**WARNING**

---



**When adjusting track, ensure there are 63 track shoes on the left side track, and 64 track shoes on the right side track. Improper number of track shoes may prevent track from being properly adjusted, creating a safety hazard.**

---

**WARNING**

---



**Ramp assembly is very heavy. Use extreme caution when lifting, blocking, and lowering assembly. Allowing assembly to fall could cause injury or death.**

**WARNING SUMMARY (cont)**

**WARNING**

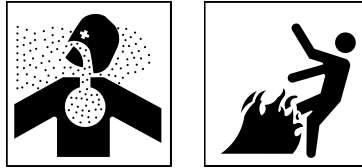


**Grille and access cover are very heavy. Use extreme caution when lifting, blocking, and lowering assembly. Allowing assembly to fall could cause death or injury.**

**HAZARDOUS MATERIALS WARNINGS**

The following are detailed WARNINGS for hazardous materials used during maintenance of equipment. When these materials are used in a procedure, a general warning will be provided with a reference to the detailed information in this section. All personnel maintaining this equipment must be familiar with the safety precautions related to these materials.

**WARNING**



**Cleaning solvent is mildly toxic. Solvent evaporates and both the fumes and liquid are flammable. Continued contact with solvent can cause skin problems.**

**Ensure there is good air flow when using solvent, and work area is away from heat and flames.**

**Keep fire extinguisher nearby.**

**Do not breathe solvent fumes.**

**Avoid skin contact. Use gloves or a brush if necessary.**

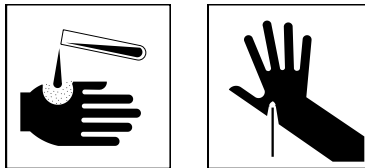
**Wash hands after using solvent.**

**Wear eye protection if solvent could splash into eyes.**

**If solvent gets in eyes, flush with fresh water for at least 15 minutes and get medical assistance.**

**Do not use P-D-680 solvent, dry cleaning solvent, benzene (benzol), paint thinner, gasoline, or diesel fuel oil as solvent replacements. These materials are all more flammable, more toxic, and can damage materials that approved solvent does not.**

**WARNING**



**Unsafe use of chemical products, tools, and equipment can injure you or soldiers near you. Read and follow WARNINGS and instructions on labels of all chemical products. Follow all general shop safety procedures. See unit commander for further instructions on safety.**

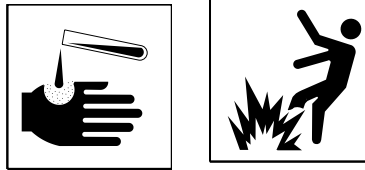


**WARNING SUMMARY (cont)**

---

**WARNING**

---



**Gas from batteries can explode and injure you. Do not allow sparks near batteries. Battery acid can burn or blind you. Do not get acid on your skin or eyes.**

---

**WARNING**

---

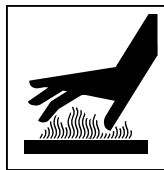


**Battery posts and cables touched by metal objects can short circuit and burn you or injure you. Use caution when you work with tools or other metal objects. Do not wear jewelry when you work on electrical system.**

---

**WARNING**

---



**Hot parts can burn you. Be sure that coupling, encoder, and slip ring assembly are cool before you start work.**

**WARNINGS IN WP PROCEDURES**

Read and understand WARNINGS in the WP procedures. Study these WARNINGS carefully. They can save your life and the lives of soldiers with whom you work.

**FIRST AID**

For first aid information, see FM 21-11.



INSERT LATEST UPDATED PAGES / WORK PACKAGES. DESTROY SUPERSEDED DATA.

**LIST OF EFFECTIVE PAGES / WORK PACKAGES**

NOTE: Updates to all portions of this TM are indicated by a vertical bar in the outer margin of the page.

Dates of issue for original and updated pages / work packages are:

Original 0 (2 January 2001)

**TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS 158 AND TOTAL NUMBER OF WORK PACKAGES IS 107 CONSISTING OF THE FOLLOWING:**

<b>Page / WP No.</b>	<b>* Change No.</b>	<b>Page / WP No.</b>	<b>* Change No.</b>	<b>Page / WP No.</b>	<b>* Change No.</b>
Title	0				
a-k/l	0				
A/B	0				
i-xxxv/xxxvi	0				
WP 0001 00 – 0107 00	0				
1-94	0				
Authentication	0				
Blank	0				
DA 2028-2/Back	0				
Metric Chart	0				
Back Cover	0				

\* Zero in this column indicates an original page or work package.



**TECHNICAL MANUAL**

**UNIT MAINTENANCE MANUAL**

**CARRIER, PERSONNEL, FULL TRACKED, ARMORED M113A3  
NSN 2350-01-219-7577  
(EIC AEY)**

**CARRIER, COMMAND POST, LIGHT TRACKED M577A3  
NSN 2350-01-369-6085  
(EIC AE7)**

**CARRIER, ANTI-TANK (TOW), FULL TRACKED, ARMORED M901A3  
NSN 2350-01-369-7253  
(EIC AFD)**

**CARRIER, FIRE SUPPORT PERSONNEL, FULL TRACKED, ARMORED M981A3  
NSN 2350-01-369-6079  
(EIC AFB)**

**CARRIER, SMOKE GENERATOR, FULL TRACKED M1059A3  
NSN 2350-01-369-6083  
(EIC AFA)**

**CARRIER, MORTAR, 120-MM M121, SELF-PROPELLED M1064A3  
NSN 2350-01-369-6082  
(EIC AE8)**

**CARRIER, STANDARDIZED INTEGRATED COMMAND POST SYSTEM (SICPS) M1068A3  
NSN 2350-01-369-6086  
(EIC AFC)**

**CARRIER, MECHANIZED SMOKE OBSCURANT M58  
NSN 2350-01-418-6654  
(EIC 5CG)**

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

You can help improve this publication. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Submit your DA Form 2028-2 (Recommended Changes to Equipment Technical Publications), through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is <http://aeprs.ria.army.mil>. If you need a password, scroll down and click on "ACCESS REQUEST FORM". The DA Form 2028 is located in the ONLINE FORMS PROCESSING section of the AEPS. Fill out the form and click on SUBMIT. Using this form on the AEPS will enable us to respond quicker to your comments and better manage the DA Form 2028 program. You may also mail, fax, or email your letter, DA Form 2028 or DA Form 2028-2 direct to: Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-LC-CIP-WT (Tech Pubs Control Point), Rock Island, IL 61299-7630. The email address is [TACOM-TECH-PUBS@ria.army.mil](mailto:TACOM-TECH-PUBS@ria.army.mil). The fax number is DSN 793-0726 or commercial (309) 782-0726.

**SUPERSEDURE NOTICE** — This manual supersedes TM 9-2350-277-20-1 dated 25 July 1994, including all changes.

**DISTRIBUTION STATEMENT A** — Approved for public release; distribution is unlimited.

**TABLE OF CONTENTS**

WP Sequence No.

**Volume 1**

WARNING SUMMARY

HOW TO USE THIS MANUAL

CHAPTER 1 — UNIT INTRODUCTORY INFORMATION WITH THEORY OF OPERATION

GENERAL INFORMATION.....0001 00  
 EQUIPMENT DESCRIPTION.....0002 00  
 THEORY OF OPERATION.....0003 00  
 REPAIR PARTS, SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT.....0004 00

CHAPTER 2 — UNIT TROUBLESHOOTING PROCEDURES

INTRODUCTION TO HOW TO USE TROUBLESHOOTING.....0005 00  
 MALFUNCTION/SYMPATOM INDEX WP.....0006 00  
 ENGINE CHARGING SYSTEM SCHEMATIC (ALL EXCEPT M981A3 ONLY).....0007 00  
 ENGINE CHARGING SYSTEM SCHEMATIC (M981A3 ONLY).....0008 00  
 ENGINE FUEL SYSTEM SCHEMATIC (ALL EXCEPT M577A3 AND M1068A3).....0009 00  
 ENGINE FUEL SYSTEM SCHEMATIC (M577A3 AND M1068A3 ONLY).....0010 00  
 ENGINE STARTER CIRCUIT SCHEMATIC (ALL EXCEPT M981A3).....0011 00  
 ENGINE STARTER CIRCUIT SCHEMATIC (M981A3 ONLY).....0012 00  
 ENGINE AIR BOX HEATER SCHEMATIC.....0013 00  
 ENGINE OVERHEATS.....0014 00  
 ENGINE OVERCOOLS.....0015 00  
 ENGINE DOES NOT CRANK.....0016 00  
 ENGINE DOES NOT START (COLD WEATHER ONLY).....0017 00  
 WAIT INDICATOR FLASHES DURING START ATTEMPTS (PREGLOW OR  
 AFTERGLOW).....0018 00  
 WAIT INDICATOR LIGHT DOESN'T LIGHT.....0019 00  
 ENGINE CRANKS SLOWLY.....0020 00  
 ENGINE CRANKS BUT WILL NOT START.....0021 00  
 ENGINE CRANKS BUT WON'T START BELOW 40° (AIR BOX HEATER IS USED).....0022 00  
 ENGINE CRANKS BUT WON'T START BELOW 40°F (GLOW PLUGS ARE USED).....0023 00  
 ENGINE RUNS ROUGH, STALLS, OR DOESN'T PUT OUT FULL POWER.....0024 00  
 GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR  
 INDICATOR.....0025 00  
 ENGINE OIL LOW PRESSURE INDICATOR COMES ON.....0026 00  
 ELECTRICAL SCHEMATIC (ALL EXCEPT M981A3).....0027 00  
 ELECTRICAL SCHEMATIC (M981A3 ONLY).....0028 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
NO EXTERIOR LIGHTS OPERATE.....	0029 00
BLACKOUT DRIVE LIGHT DOESN'T WORK.....	0030 00
SERVICE HEADLIGHTS DON'T WORK.....	0031 00
INFRARED HEADLIGHT(S) DON'T WORK.....	0032 00
SERVICE AND/OR BLACK OUT STOP LIGHTS MALFUNCTION.....	0033 00
BLACKOUT MARKER LIGHT(S) DON'T WORK.....	0034 00
SERVICE TAILLIGHT DOESN'T WORK.....	0035 00
TRAILER LIGHTS DON'T WORK.....	0036 00
HORN DOES NOT WORK.....	0037 00
INSTRUMENT PANEL AND/OR TRANS CONTROLLER ILLUMINATION LIGHTS MALFUNCTION.....	0038 00
DOME LIGHT(S) DO NOT WORK.....	0039 00
DOME LIGHT MALFUNCTION (M577A3 ONLY).....	0040 00
BLACKOUT DOME LIGHTS DO NOT WORK (M1068A3 ONLY).....	0041 00
RIGHT REAR UTILITY OUTLET/ADMITTANCE BUZZER WORKS IMPROPERLY (M577A3 AND M1068A3 ONLY).....	0042 00
LEFT REAR UTILITY OUTLET/BLOWER DOES NOT WORK (M577A3 AND M1068A3 ONLY).....	0043 00
RADIO(S) DON'T WORK.....	0044 00
SMOKE GRENADE LAUNCHER(S) MALFUNCTION (M113A3, M901A3, M981A3, AND M1059A3 ONLY).....	0045 00
INDICATORS SCHEMATIC (ALL EXCEPT M981A3).....	0046 00
INDICATORS SCHEMATIC (M981A3 ONLY).....	0047 00
MASTER SWITCH ON INDICATOR DOESN'T LIGHT.....	0048 00
FUEL LEVEL INDICATOR MALFUNCTIONS.....	0049 00
HIGH BEAM INDICATOR LIGHT DOESN'T WORK.....	0050 00
BATTERY/GENERATOR INDICATOR MALFUNCTIONS.....	0051 00
PARKING BRAKE INDICATOR MALFUNCTIONS.....	0052 00
COOLANT TEMP INDICATOR MALFUNCTIONS.....	0053 00
STEERING LOCKED INDICATOR MALFUNCTIONS.....	0054 00
ENGINE OIL LOW PRESSURE INDICATOR MALFUNCTIONS.....	0055 00
TRANSMISSION OIL LOW PRESSURE INDICATOR MALFUNCTIONS.....	0056 00
TRANS OIL HI TEMP INDICATOR MALFUNCTIONS.....	0057 00
ENGINE COOLANT LOW LEVEL INDICATOR MALFUNCTIONS.....	0058 00
TRANS FILTER CLOGGED INDICATOR MALFUNCTIONS.....	0059 00
TRANSMISSION SYSTEM SCHEMATIC.....	0060 00
CARRIER MOVES WITH TRANSMISSION IN SL.....	0061 00
CARRIER DOES NOT MOVE IN ANY SHIFT LEVER POSITION.....	0062 00
CARRIER DRIFTS OR DOES NOT STEER.....	0063 00
SERVICE AND/OR PARKING BRAKE WON'T HOLD CARRIER.....	0064 00
TRANSMISSION WON'T UPSHIFT OR SHIFTS ERRATICALLY IN 1-4 POSITION.....	0065 00
TRANSMISSION DOES NOT DOWNSHIFT IN 1-4 POSITION.....	0066 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
TRANSMISSION DOES NOT HOLD 1ST POSITION.....	0067 00
TRANSMISSION DOES NOT HOLD 2ND POSITION.....	0068 00
TRANSMISSION DOES NOT HOLD 3RD POSITION.....	0069 00
TRANSMISSION DOES NOT REVERSE.....	0070 00
TRANSMISSION DOES NOT PIVOT STEER.....	0071 00
TRANSMISSION HIGH TEMP INDICATOR COMES ON.....	0072 00
TRANSMISSION LOW LUBE INDICATOR COMES ON.....	0073 00
STEERING LOCK SCHEMATIC (SOLENOID-ACTIVATED LOCK).....	0074 00
STEERING LOCK SCHEMATIC (CABLE-ACTIVATED LOCK).....	0075 00
SOLENOID-ACTIVATED STEERING LOCK MALFUNCTIONS.....	0076 00
CABLE-ACTIVATED STEERING LOCK MALFUNCTIONS.....	0077 00
BILGE PUMP SCHEMATIC (ALL EXCEPT M981A3).....	0078 00
BILGE PUMP SCHEMATIC (M981A3 ONLY).....	0079 00
FRONT AND/OR REAR BILGE PUMP(S) AND/OR LIGHTS DON'T WORK.....	0080 00
RAMP SCHEMATIC.....	0081 00
RAMP WILL NOT LOWER.....	0082 00
RAMP OPERATION IS SLOW OR SLUGGISH.....	0083 00
RAMP WILL NOT RAISE OR FREE FALLS.....	0084 00
PERSONNEL HEATER SCHEMATIC.....	0085 00
PERSONNEL HEATER MALFUNCTIONS.....	0086 00
COOLANT HEATER SCHEMATIC (ALL EXCEPT M981A3).....	0087 00
COOLANT HEATER SCHEMATIC (M981A3 ONLY).....	0088 00
COOLANT HEATER MALFUNCTIONS.....	0089 00
POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY).....	0090 00
NO AC POWER FROM TENT INTERFACE PANEL A5 (M1068A3 ONLY).....	0091 00
NO DC POWER FROM TENT INTERFACE PANEL A5 (M1068A3 ONLY).....	0092 00
NO POWER FROM ROADSIDE AC POWER EXTENSION BOX A6 (M1068A3 ONLY).....	0093 00
NO POWER FROM CURBSIDE AC POWER EXTENSION BOX A7 (M1068A3 ONLY).....	0094 00
NO POWER FROM DC POWER EXTENSION BOX A9 (ALL EXCEPT JACK J23) (M1068A3 ONLY).....	0095 00
NO POWER FROM DC POWER EXTENSION BOX A9, JACK J23 (JTIDS) (M1068A3 ONLY).....	0096 00
NO DC POWER TO SINGLE POINT LAN GROUND BOX A15 (M1068A3 ONLY).....	0097 00
NO POWER FROM UPS POWER EXTENSION BOX A18 (M1068A3 ONLY).....	0098 00
NO POWER FROM CURBSIDE UPS POWER EXTENSION BOX A19 (M1068A3 ONLY).....	0099 00
NO AC/DC INPUT TO ATCCS UPS POWER BOX (M1068A3 ONLY).....	0100 00
IN BLACKOUT MODE, FLUORESCENT LIGHTS OPERATE INCORRECTLY (M1068A3 ONLY).....	0101 00
FLUORESCENT LIGHTS DO NOT OPERATE (M1068A3 ONLY).....	0102 00



**TABLE OF CONTENTS (cont)**

WP Sequence No.

VEHICLE BATTERIES DISCHARGE WITH EXTERNAL AC POWER APPLIED (M1068A3 ONLY).....	0103 00
VEHICLE WILL NOT ACCEPT EXTERNAL AC POWER (M1068A3 ONLY).....	0104 00
VEHICLE WILL NOT ACCEPT INVERTER AC POWER (M1068A3 ONLY).....	0105 00
NO POWER TO DC CIRCUITS (M1068A3 ONLY).....	0106 00
NO POWER TO AC CIRCUITS (M1068A3 ONLY).....	0107 00
NO DC OUTPUT FROM DC POWER SUPPLY (M1068A3 ONLY).....	0108 00
NO AC POWER FROM INVERTERS (M1068A3 ONLY).....	0109 00
NO DATA OUTPUT FROM DATA PANEL A12 (M1068A3 ONLY).....	0110 00
NO LAN OUTPUT FROM DATA PANEL A12 (M1068A3 ONLY).....	0111 00
NO DATA OUTPUT FROM DATA PANEL A13 (M1068A3 ONLY).....	0112 00
NO LAN OUTPUT FROM DATA PANEL A13 (M1068A3 ONLY).....	0113 00
PHONE EXTENSION BOX A14 POST(S) INOPERATIVE (M1068A3 ONLY).....	0114 00
SPEEDOMETER MALFUNCTIONS.....	0115 00
TACHOMETER MALFUNCTIONS.....	0116 00
HOOK UP/REMOVE STE/ICE TEST SET TO DCA 6.....	0117 00
STE/ICE TEST 10 ENGINE RPM.....	0118 00
STE/ICE TEST 24 FUEL SUPPLY PRESSURE.....	0119 00
STE/ICE TEST 25 FUEL RETURN PRESSURE.....	0120 00
STE/ICE TEST 26 FUEL FILTER PRESSURE DROP.....	0121 00
STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE.....	0122 00
STE/ICE TEST 32 AIR BOX PRESSURE.....	0123 00
STE/ICE TEST 67 BATTERY VOLTAGE.....	0124 00
STE/ICE TEST 68 STARTER MOTOR VOLTAGE.....	0125 00
STE/ICE TEST 69 STARTER NEGATIVE CABLE VOLTAGE DROP.....	0126 00
STE/ICE TEST 70 STARTER SOLENOID VOLTAGE.....	0127 00
STE/ICE TEST 71 STARTER CURRENT (AVERAGE).....	0128 00
STE/ICE TEST 72 STARTER CURRENT (FIRST PEAK).....	0129 00
STE/ICE TEST 73 BATTERY RESISTANCE AND STE/ICE TEST 75 BATTERY RESISTANCE CHANGE (PACK).....	0130 00
STE/ICE TEST 74 STARTER CIRCUIT RESISTANCE.....	0131 00
STE/ICE TEST 80 BATTERY CURRENT.....	0132 00
STE/ICE TEST 82 GENERATOR OUTPUT VOLTAGE.....	0133 00
STE/ICE TEST 83 GENERATOR FIELD VOLTAGE.....	0134 00
STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP.....	0135 00
STE/ICE SCHEMATIC (ALL EXCEPT M981A3).....	0136 00
STE/ICE SCHEMATIC (M981A3 ONLY).....	0137 00
STE/ICE BLANK DISPLAY DIAGNOSTIC TROUBLESHOOTING.....	0138 00
STE/ICE CONFIDENCE TEST DIAGNOSTIC TROUBLESHOOTING.....	0139 00
STE/ICE TEST 10, 11, 12 AND 13 DIAGNOSTIC TROUBLESHOOTING.....	0140 00
DCA BATTERY VOLTAGE DIAGNOSTIC TROUBLESHOOTING.....	0141 00
DCA CURRENT SHUNT DIAGNOSTIC TROUBLESHOOTING.....	0142 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
STE/ICE TEST 24 FUEL SUPPLY PRESSURE DIAGNOSTIC TROUBLESHOOTING.....	0143 00
STE/ICE TEST 25 FUEL RETURN PRESSURE DIAGNOSTIC TROUBLESHOOTING.....	0144 00
STE/ICE TEST 26 FUEL FILTER PRESSURE DROP DIAGNOSTIC TROUBLESHOOTING.....	0145 00
STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE DIAGNOSTIC TROUBLESHOOTING.....	0146 00
STE/ICE TEST 32 AIR BOX PRESSURE DIAGNOSTIC TROUBLESHOOTING.....	0147 00
STE/ICE TEST 68 STARTER MOTOR VOLTAGE DIAGNOSTIC TROUBLESHOOTING.....	0148 00
STE/ICE TEST 69 STARTER NEGATIVE CABLE VOLTAGE DROP DIAGNOSTIC TROUBLESHOOTING.....	0149 00
STE/ICE TEST 70 STARTER SOLENOID VOLTAGE DIAGNOSTIC TROUBLESHOOTING.....	0150 00
STE/ICE TEST 82 GENERATOR OUTPUT VOLTAGE DIAGNOSTIC TROUBLESHOOTING.....	0151 00
STE/ICE TEST 83 GENERATOR FIELD VOLTAGE DIAGNOSTIC TROUBLESHOOTING.....	0152 00
STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP DIAGNOSTIC TROUBLESHOOTING.....	0153 00

**Volume 2**

CHAPTER 3 — UNIT MAINTENANCE INSTRUCTIONS FOR CARRIER

SERVICE UPON RECEIPT.....	0154 00
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS), INCLUDING LUBRICATION INSTRUCTIONS.....	0155 00
.....	0155 00

CHAPTER 4 — UNIT MAINTENANCE INSTRUCTIONS FOR ENGINE

REMOVE/INSTALL POWER PLANT ASSEMBLY.....	0156 00
BLOCK POWER PLANT.....	0157 00
REPLACE ENGINE MOUNTS .....	0158 00
REPLACE LEFT AIR BOX DRAIN CHECK VALVE AND TUBES.....	0159 00
REPLACE RIGHT AIR BOX DRAIN CHECK VALVE AND TUBES.....	0160 00
REPLACE ENGINE LIFTING BRACKET.....	0161 00
REPLACE ENGINE OIL FILLER CAP.....	0162 00
REPLACE ENGINE OIL SAMPLING VALVE AND HOSE.....	0163 00
REPLACE OIL GAUGE ROD AND TUBE.....	0164 00
REPLACE OIL FILTER ELEMENT.....	0165 00

CHAPTER 5 — UNIT MAINTENANCE INSTRUCTIONS FOR FUEL SYSTEM

REPLACE ENGINE FUEL PUMP.....	0166 00
SERVICE AIR CLEANER FILTER ELEMENT.....	0167 00
REPLACE AIR CLEANER AND ELBOW.....	0168 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPAIR AIR CLEANER ASSEMBLY.....	0169 00
REPAIR AIR CLEANER RETAINER.....	0170 00
REPLACE AIR CLEANER RESTRICTION INDICATOR.....	0171 00
REPLACE AIR CLEANER RESTRICTION INDICATOR HOSE.....	0172 00
REMOVE/INSTALL AIR INTAKE ELBOW.....	0173 00
REPLACE GRILL AIR INTAKE ELBOW AND HOSE.....	0174 00
REPLACE EXHAUST EVACUATOR VALVE AND CONNECTOR.....	0175 00
CLEAN FUEL CAP VENT AND FILTER SCREEN.....	0176 00
DRAIN TANKS (ALL EXCEPT M577A3 AND M1068A3).....	0177 00
DRAIN FUEL TANKS (M577A3 AND M1068A3 ONLY).....	0178 00
REPLACE EXTERNAL FUEL TANKS (ALL EXCEPT M577A3 AND M1068A3).....	0179 00
REPLACE FUEL TANKS (M577A3 AND M1068A3 ONLY).....	0180 00
TEMPORARY FUEL TANK REPAIR (M577A3 AND M1068A3 ONLY).....	0181 00
REPLACE FUEL TANK FILLER COVER AND LOCK (ALL EXCEPT M577A3 AND M1068A3).....	0182 00
REPLACE FUEL TANK FILLER COVER AND LOCK (M577A3 AND M1068A3 ONLY).....	0183 00
REPLACE FILLER CAP AND STRAINER PARTS (ALL EXCEPT M577A3 AND M1068A3).....	0184 00
REPLACE FILLER CAP AND STRAINER PARTS (M577A3 AND M1068A3 ONLY).....	0185 00
REPLACE FUEL FILLER AND STRAINER PARTS (M577A3 AND M1068A3 ONLY) .....	0186 00
REPLACE FUEL TANK ACCESS COVERS AND DRAIN PLUGS (ALL EXCEPT M577A3 AND M1068A3).....	0187 00
REPLACE FUEL TANK ACCESS COVERS (M577A3 AND M1068A3 ONLY).....	0188 00
REPLACE FUEL TANK FILLER FLANGE (M577A3 AND M1068A3 ONLY).....	0189 00
REPLACE FUEL QUANTITY TRANSMITTER (ALL EXCEPT M577A3 AND M1068A3).....	0190 00
REPLACE FUEL QUANTITY TRANSMITTER (M577A3 AND M1068A3 ONLY).....	0191 00
REPLACE FUEL SUPPLY HOSES, TUBES, AND FITTINGS (M113A3, M901A3, M981A3, M1059A3, AND M58 ONLY).....	0192 00
REPLACE FUEL SUPPLY HOSES, TUBES AND FITTINGS (M577A3 AND M1068A3 ONLY).....	0193 00
REPLACE FUEL SUPPLY HOSES, TUBES, AND FITTINGS (M1064A3 ONLY).....	0194 00
REPLACE FUEL RETURN HOSES, TUBES, AND FITTINGS (M113A3, M901A3, M981A3, M1059A3, AND M58 ONLY).....	0195 00
REPLACE FUEL RETURN HOSES, TUBES, AND FITTINGS (M577A3 AND M1068A3 ONLY).....	0196 00
REPLACE FUEL RETURN HOSES, TUBES, AND FITTINGS (M1064A3 ONLY).....	0197 00
REPLACE FUEL VENT HOSES, TUBES, AND FITTINGS (M577A3 AND M1068A3 ONLY).....	0198 00
REPLACE FUEL VALVE MOUNTING BLOCKS (ALL EXCEPT M577A3 AND M1068A3).....	0199 00
REPLACE ENGINE FUEL SUPPLY HOSE.....	0200 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE ENGINE FUEL RETURN HOSE.....	0201 00
REPLACE PRIMARY AND SECONDARY FUEL FILTER ELEMENTS.....	0202 00
REPLACE PRIMARY AND SECONDARY FUEL FILTERS AND BRACKET.....	0203 00
REPLACE AIR BOX HEATER IGNITION WIRE.....	0204 00
REPLACE AIR BOX HEATER WIRING HARNESS.....	0205 00
REPLACE AIR BOX HEATER LOWER FUEL LINE.....	0206 00
REPLACE AIR HEATER IGNITER.....	0207 00
REPLACE AIR BOX IGNITION COIL.....	0208 00
REPLACE GLOW PLUG HARNESS AND GLOW PLUGS.....	0209 00
REPLACE GLOW PLUG CONTROLLER.....	0210 00
REPLACE GLOW PLUG POWER HARNESS.....	0211 00
REPLACE GLOW PLUG CONTROLLER MOUNTING BRACKET.....	0212 00
ADJUST THROTTLE VALVE (TV) MODULATOR.....	0213 00
ADJUST ACCELERATOR LINKAGE.....	0214 00
REPLACE LOWER ACCELERATOR PEDAL.....	0215 00
REPLACE UPPER ACCELERATOR PEDAL ASSEMBLY.....	0216 00
REPLACE FUEL CONTROL SHAFT AND LINKAGE.....	0217 00
REPLACE THROTTLE VALVE (TV) MODULATOR AND LEVER.....	0218 00
REPLACE HAND THROTTLE CONTROL CABLE ASSEMBLY.....	0219 00
REPLACE FUEL CUTOFF CONTROL CABLE ASSEMBLY.....	0220 00
 CHAPTER 6 — UNIT MAINTENANCE INSTRUCTIONS FOR EXHAUST SYSTEM	
REPLACE ENGINE EXHAUST ELBOWS AND DOUBLE FLEX JOINT.....	0221 00
REPAIR DOUBLE FLEX EXHAUST JOINT.....	0222 00
REPLACE MUFFLER EXTENSION AND CAP.....	0223 00
REPLACE EXHAUST MUFFLER AND BRACKET.....	0224 00
REPLACE ENGINE LEFT/RIGHT EXHAUST ELBOWS.....	0225 00
REPLACE LEFT/RIGHT TURBO EXHAUST PIPE HEAT SHIELD.....	0226 00
 CHAPTER 7 — UNIT MAINTENANCE INSTRUCTIONS FOR COOLING SYSTEM	
DRAIN AND FILL COOLING SYSTEM.....	0227 00
CLEAN RADIATOR.....	0228 00
REPLACE RADIATOR AND PARTS.....	0229 00
REPLACE AUXILIARY TANK.....	0230 00
REPLACE THERMOSTATIC FAN SPEED SWITCH.....	0231 00
REPLACE UPPER COOLANT HOSE AND TUBE.....	0232 00
REPLACE RADIATOR OUTLET TUBE AND HOSES.....	0233 00
REPLACE BALANCE HOSE.....	0234 00
REPLACE DRAIN COCK AND HOSE.....	0235 00
REPLACE COOLANT AIR SEPARATOR.....	0236 00
REPLACE THERMOSTAT/COVER.....	0237 00
REPLACE THERMOSTAT TUBE/HOSES.....	0238 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
ADJUST COOLANT PUMP BELTS.....	0239 00
REPLACE COOLANT PUMP IDLER PULLEY/BELTS.....	0240 00
REPLACE ENGINE COOLANT PUMP.....	0241 00
ADJUST VENTILATING FAN DRIVE BELT.....	0242 00
REPLACE VENTILATING FAN DRIVE BELT.....	0243 00
REPLACE VENTILATING FAN DRIVE PULLEY.....	0244 00
REPLACE FLAT PULLEYS AND BEARINGS.....	0245 00
REPLACE IDLER ARM AND SPRING TENSIONER.....	0246 00
REPLACE VENTILATING FAN ASSEMBLY.....	0247 00
REPLACE FAN DRIVE SHAFT AND BEARING HOUSING.....	0248 00
REPLACE FAN AND GENERATOR VARIABLE SPEED DRIVE.....	0249 00
REPLACE HOSES FROM THERMOSTAT TO VARIABLE SPEED DRIVE.....	0250 00
REPLACE TRANSMISSION OIL SUPPLY AND RETURN HOSES.....	0251 00

**Volume 3**

CHAPTER 8 — UNIT MAINTENANCE INSTRUCTIONS FOR ELECTRICAL SYSTEM

ADJUST GENERATOR DRIVE BELT.....	0252 00
REPLACE GENERATOR DRIVE BELT.....	0253 00
REPLACE GENERATOR TURNBUCKLE PARTS.....	0254 00
REPLACE GENERATOR/BRACKET.....	0255 00
ADJUST VOLTAGE REGULATOR.....	0256 00
REPLACE REGULATOR ASSEMBLY.....	0257 00
REPLACE STARTER RELAY SWITCH.....	0258 00
REPLACE STARTER.....	0259 00
REPLACE MASTER SWITCH PANEL ASSEMBLY (M113A3, M901A3, M1059A3, M1064A3, AND M58 ONLY).....	0260 00
REPLACE MASTER SWITCH PANEL ASSEMBLY (M577A3 AND M1068A3 ONLY).....	0261 00
REPLACE MASTER SWITCH (M113A3, M901A3, M1059A3, M1064A3, AND M58 ONLY).....	0262 00
REPLACE AUXILIARY POWER (SLAVE) RECEPTACLE (M113A3, M901A3, M1059A3, M1064A3, AND M58 ONLY).....	0263 00
REPLACE NATO AUXILIARY POWER (SLAVE) RECEPTACLE (M577A3 AND M1068A3 ONLY).....	0264 00
REPLACE UTILITY OUTLET RECEPTACLE (ALL EXCEPT M981A3).....	0265 00
REPLACE MASTER SWITCH TO DISTRIBUTION BOX LEAD (CIRCUIT 49) (M113A3, M901A3, M1059A3, M1064A3, AND M58 ONLY).....	0266 00
REPLACE MASTER SWITCH TO DISTRIBUTION BOX LEAD (CIRCUIT 49) (M577A3 AND M1068A3 ONLY).....	0267 00
REPLACE MASTER SWITCH TO AUXILIARY POWER RECEPTACLE LEAD (CIRCUIT 50) (M113A3, M901A3, M1059A3, M1064A3, AND M58).....	0268 00
REPLACE DISTRIBUTION BOX (M113A3, M901A3, M1059A3, M1064A3, AND M58 ONLY).....	0269 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPAIR DISTRIBUTION BOX (M113A3, M901A3, M1059A3, M1064A3, AND M58 ONLY).....	0270 00
REPLACE DISTRIBUTION BOX ASSEMBLY (M577A3 AND M1068A3 ONLY).....	0271 00
REPLACE DISTRIBUTION BOX ASSEMBLY (M901A3 ONLY).....	0272 00
REPLACE/REPAIR DISTRIBUTION BOX (M981A3 ONLY).....	0273 00
REPLACE DISTRIBUTION BOX CATCH AND STRIKE (M981A3 ONLY).....	0274 00
REPLACE BILGE PUMP CIRCUIT BREAKERS (ALL EXCEPT M981A3).....	0275 00
REPLACE REAR UTILITY RECEPTACLE CIRCUIT BREAKERS (M577A3 AND M1068A3 ONLY).....	0276 00
REPLACE FUEL SELECTOR SWITCH (M577A3 AND M1068A3 ONLY).....	0277 00
REPLACE BLOWER SWITCH (M577A3 AND M1068A3 ONLY).....	0278 00
REPLACE INSTRUMENT PANEL ASSEMBLY.....	0279 00
REPLACE CIRCUIT BREAKER.....	0280 00
REPLACE FUEL SELECT SWITCH TO GAUGE LEAD (ALL EXCEPT M577A3 AND M1068A3).....	0281 00
REPLACE INSTRUMENT PANEL ON-OFF SWITCHES.....	0282 00
REPLACE MAIN LIGHT SWITCH.....	0283 00
REPLACE ENGINE START SWITCH.....	0284 00
REPLACE INSTRUMENT PANEL GAUGES.....	0285 00
REPLACE PANEL LIGHTS AND INDICATOR LIGHTS.....	0286 00
REPLACE INSTRUMENT PANEL WARNING LIGHTS.....	0287 00
REPLACE INSTRUMENT WARNING LIGHT PANEL.....	0288 00
REPLACE INSTRUMENT PANEL BATTERY-GENERATOR GAUGE WIRING HARNESS (ALL EXCEPT M981A3).....	0289 00
REPLACE INSTRUMENT PANEL SPECIAL PURPOSE CABLE.....	0290 00
REPLACE WARNING LIGHT PANEL ASSEMBLY.....	0291 00
REPLACE WARNING LIGHT PANEL.....	0292 00
REPLACE HORN SWITCH.....	0293 00
REPLACE WARNING PANEL LIGHTS.....	0294 00
REPLACE INSTRUMENT PANEL MOUNTS AND GROUND LEAD.....	0295 00
REPLACE TELEPOSTS AND COVER.....	0296 00
REPLACE SOLID STATE INFRARED POWER SUPPLY.....	0297 00
REPLACE STOP LIGHT-TAIL LIGHT AND GUARDS (ALL EXCEPT M577A3 AND M1068A3).....	0298 00
REPLACE LEFT STOP LIGHT-TAIL LIGHT (M577A3 AND M1068A3 ONLY).....	0299 00
REPAIR LEFT STOP LIGHT-TAIL LIGHT.....	0300 00
REPLACE RIGHT STOP LIGHT-TAIL LIGHT (M577A3 ONLY).....	0301 00
REPAIR RIGHT STOP LIGHT-TAIL LIGHT.....	0302 00
REPLACE SERVICE AND INFRARED HEADLIGHTS.....	0303 00
REPAIR SERVICE AND INFRARED HEADLIGHTS.....	0304 00
REPLACE BLACKOUT HEADLIGHT.....	0305 00
REPAIR BLACKOUT HEADLIGHT.....	0306 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE BLACKOUT MARKER LIGHT.....	0307 00
REPAIR BLACKOUT MARKER LIGHT.....	0308 00
REPLACE DOME LIGHT (ALL EXCEPT M577A3 AND M1068A3).....	0309 00
REPAIR DOME LIGHT (ALL EXCEPT M577A3 AND M1068A3).....	0310 00
REPLACE DOME LIGHT (M577A3 AND M1068A3 ONLY).....	0311 00
REPAIR DOME LIGHT AND MOUNT (M577A3 AND M1068A3 ONLY).....	0312 00
REPLACE DOME LIGHT LENS (ALL EXCEPT M577A3 AND M1068A3).....	0313 00
REPLACE FRONT DOME LIGHT SWITCH (M577A3 AND M1068A3 ONLY).....	0314 00
REPLACE REAR DOME LIGHT SWITCH (M577A3 AND M1068A3 ONLY).....	0315 00
REPLACE DOME LIGHT CIRCUIT BREAKER (M577A3 AND M1068A3 ONLY).....	0316 00
REPLACE DOME BLACKOUT LIGHT BYPASS SWITCH (M577A3 AND M1068A3 ONLY).....	0317 00
REPLACE TENT LIGHT ASSEMBLY (M577A3 AND M1068A3 ONLY).....	0318 00
REPLACE UTILITY LIGHT (M981A3 ONLY).....	0319 00
REPLACE ENGINE OIL LOW PRESSURE TRANSMITTER AND HARDWARE.....	0320 00
REPLACE COOLANT TEMPERATURE TRANSMITTER.....	0321 00
REPLACE TRANSMISSION OIL HIGH TEMPERATURE SWITCH.....	0322 00
REPLACE GENERATOR FIELD PRESSURE SWITCH.....	0323 00
REPLACE FUEL SUPPLY PRESSURE TRANSDUCER.....	0324 00
REPLACE FUEL RETURN PRESSURE TRANSDUCER.....	0325 00
REPLACE TURBO OUTLET PRESSURE TRANSDUCER.....	0326 00
REPLACE AIR BOX PRESSURE TRANSDUCER.....	0327 00
REPLACE FUEL FILTER DIFFERENTIAL PRESSURE SWITCH.....	0328 00
REPLACE AUXILIARY TANK FLUID LEVEL DETECTOR.....	0329 00
REPLACE STEERING LOCK SWITCH.....	0330 00
REPLACE PARKING BRAKE SWITCH/BRACKET.....	0331 00
REPLACE STOP SWITCH.....	0332 00
REPLACE HEADLIGHT HIGH BEAM SELECTOR SWITCH.....	0333 00
REPLACE ADMITTANCE BUZZER AND SWITCH (M577A3 AND M1068A3 ONLY).....	0334 00
REPLACE RAMP DOOR SWITCH AND MOUNT (M577A3 AND M1068A3 ONLY).....	0335 00
REPLACE HORN AND GROUND LEAD.....	0336 00
DISCONNECT/CONNECT BATTERY GROUND STRAP (M113A3, M901A3, M1059A3, M1064A3, AND M58 ONLY).....	0337 00
DISCONNECT/CONNECT BATTERY GROUND LEAD (M577A3 AND M1068A3 ONLY).....	0338 00
DISCONNECT/CONNECT BATTERY GROUND LEAD (M981A3 ONLY).....	0339 00
REPLACE BATTERY LEADS AND TERMINALS (M113A3, M901A3, AND M1059A3 ONLY).....	0340 00
REPLACE BATTERY LEADS AND TERMINALS (M577A3 AND M1068A3 ONLY).....	0341 00
REPLACE BATTERY LEADS AND TERMINALS (M981A3 ONLY).....	0342 00
REPLACE BATTERY LEADS AND TERMINALS (LEFT SIDE) (M1064A3 ONLY).....	0343 00
REPLACE BATTERY LEADS AND TERMINALS (RIGHT SIDE) (M1064A3 ONLY).....	0344 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE BATTERY LEADS AND TERMINALS (M58 ONLY).....	0345 00
REPLACE BATTERIES AND RETAINERS (M113A3, M901A3, AND M1059A3 ONLY).....	0346 00
REPLACE BATTERIES AND RETAINERS (M577A3 AND M1068A3 ONLY).....	0347 00
REPLACE BATTERIES AND BATTERY BOX (M981A3 AND M58 ONLY).....	0348 00
REPLACE BATTERIES AND RETAINERS (LEFT SIDE) (M1064A3 ONLY) .....	0349 00
REPAIR BATTERY BOX (M113A3, M901A3, AND M1059A3 ONLY).....	0350 00
REPAIR BATTERY BOX (M577A3 AND M1068A3 ONLY).....	0351 00
REPAIR BATTERY BOX ACCESS COVER (M577A3 AND M1068A3 ONLY).....	0352 00
REPAIR BATTERY DRAWER (M1064A3 ONLY).....	0353 00
REPAIR BATTERY BOX (RIGHT SIDE) (M1064A3).....	0354 00
REPLACE BATTERY BOX VENT FITTING (M981A3 AND M58 ONLY).....	0355 00
REPLACE BATTERY TO MASTER SWITCH LEAD (CIRCUIT 6) (M113A3, M901A3, AND M1059A3 ONLY).....	0356 00
REPLACE BATTERY TO MASTER SWITCH LEAD (CIRCUIT 6) (M577A3 AND M1068A3 ONLY).....	0357 00
REPLACE BATTERY TO MASTER SWITCH LEAD (CIRCUIT 6) (M1064A3 ONLY) .....	0358 00
REPLACE ENGINE WIRING HARNESS.....	0359 00
REPLACE TRANSMISSION WIRING HARNESS .....	0360 00
REPLACE TRANSMISSION CONTROLLER WIRING HARNESS.....	0361 00
REPLACE REAR MAIN WIRING HARNESS (M113A3, M901A3, M981A3, M1059A3, AND M58 ).....	0362 00
REPLACE REAR MAIN WIRING HARNESS (M577A3 ONLY).....	0363 00
REPLACE REAR MAIN WIRING HARNESS (M1064A3 ONLY) .....	0364 00
REPLACE REAR MAIN WIRING HARNESS (M1068A3 ONLY).....	0365 00
REPLACE SMOKE GRENADE LAUNCHER WIRING HARNESS (M113A3, M901A3, M981A3, M1059A3, AND M58 ONLY).....	0366 00
REPLACE STEERING LOCK SWITCH WIRING HARNESS.....	0367 00
REPLACE DRIVER'S NIGHT VISION (DNV) (AN/VVS-2) POWER SUPPLY CABLE ASSEMBLY (ALL EXCEPT M58).....	0368 00
REPLACE BATTERY-TO-RADIO WIRING HARNESS (LEFT SIDE) (M113A3, M901A3, AND M1059A3 ONLY).....	0369 00
REPLACE BATTERY-TO-RADIO WIRING HARNESS (RIGHT SIDE) (M113A3 ONLY).....	0370 00
REPLACE BATTERY-TO-RADIO WIRING HARNESS (CKT 48) (M981A3 ONLY).....	0371 00
REPLACE CAPACITOR COVER (M981A3 ONLY).....	0372 00
REPLACE RIGHT HEADLIGHT WIRING HARNESS.....	0373 00
REPLACE WARNING PANEL WIRING HARNESS.....	0374 00
REPLACE TRAILER HARNESS.....	0375 00
REPLACE RADIAC WIRE HARNESS (M113A3, M577A3, AND M1068A3 ONLY).....	0376 00
REPLACE UTILITY OUTLET LEAD ASSEMBLY (M577A3 AND M1068A3 ONLY).....	0377 00
REPLACE REAR UTILITY OUTLET RECEPTACLES (M577A3 AND M1068A3 ONLY).....	0378 00



**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE AUXILIARY POWER (SLAVE) RECEPTACLE GROUND LEAD (M113A3, M901A3, M1059A3, M1064A3, AND M58 ONLY).....	0379 00
REPLACE MASTER SWITCH PANEL DOME LIGHTS LEAD ASSEMBLY (M577A3 AND M1068A3 ONLY).....	0380 00
REPAIR INTERVEHICLE POWER CABLE (M577A3 AND M1068A3 ONLY).....	0381 00
REPAIR WIRING HARNESS.....	0382 00
REPLACE VENTILATION FAN (M577A3 AND M1068A3 ONLY).....	0383 00
 CHAPTER 9 — UNIT MAINTENANCE INSTRUCTIONS FOR TRANSMISSION	
REPLACE TRANSMISSION OIL DRAIN TUBES AND BRACKET.....	0384 00
REPLACE TRANSMISSION MOUNTS.....	038500
REPLACE TRANSMISSION RANGE CONTROLLER/BRACKET (USED WITH SOLENOID-ACTIVATED STEERING LOCK).....	0386 00
REPLACE TRANSMISSION RANGE CONTROLLER/BRACKET (USED WITH CABLE-ACTIVATED STEERING LOCK).....	0387 00
REPLACE TRANSMISSION RANGE CONTROLLER LAMP.....	0388 00
REPLACE TRANSMISSION RANGE CONTROLLER SWITCH.....	0389 00
ADJUST TOW START CONTROL CABLE ASSEMBLY.....	0390 00
REPLACE TOW START CONTROL ASSEMBLY AND BEARING.....	0391 00
REPLACE TOW START CONTROL ASSEMBLY COVER.....	0392 00
ADJUST TRANSMISSION STEERING.....	0393 00
ADJUST TRANSMISSION BRAKES.....	0394 00
REPLACE TRANSMISSION OIL LEVEL DIPSTICK, FILLER TUBE, AND ADAPTER (X200-4 ONLY).....	0395 00
REPLACE TRANSMISSION OIL LEVEL DIPSTICK, FILLER TUBE, AND ADAPTER (X200-4A ONLY).....	0396 00
REPLACE GOVERNOR ASSEMBLY.....	0397 00
REPLACE TRANSMISSION OIL AND OIL FILTER ELEMENT.....	0398 00
REPLACE TRANSMISSION OIL COOLER HOSES, FITTINGS, AND MOUNTING.....	0399 00
REPLACE TRANSMISSION OIL SAMPLING VALVE AND PRESSURE SWITCH.....	0400 00
REPLACE DIFFERENTIAL PRESSURE SWITCH AND BYPASS PLUG.....	0401 00
 CHAPTER 10 — UNIT MAINTENANCE INSTRUCTIONS FOR TRANSFER AND FINAL DRIVE ASSEMBLIES	
REPLACE FINAL DRIVE FILLER TUBE AND DIPSTICK.....	0402 00
REPLACE FINAL DRIVE.....	0403 00
REPLACE FINAL DRIVE DIFFERENTIAL OIL SEAL.....	040400
 CHAPTER 11 — UNIT MAINTENANCE INSTRUCTIONS FOR PROPELLER SHAFTS AND UNIVERSAL JOINTS	
REPLACE PROPELLER SHAFT AND UNIVERSAL JOINTS.....	0405 00
 CHAPTER 12 — UNIT MAINTENANCE INSTRUCTIONS FOR BRAKES	
CHECK TRANSMISSION BRAKE ADJUSTMENT.....	0406 00
ADJUST SERVICE BRAKE CONTROL LINKAGE.....	0407 00

**TABLE OF CONTENTS (cont)**

WP Sequence No.

ADJUST PARKING BRAKE .....	0408 00
REPLACE UPPER AND LOWER SERVICE BRAKE PEDAL.....	0409 00
REPLACE SERVICE BRAKE CONTROL LINKAGE .....	0410 00
REPLACE PARKING BRAKE CONTROL CABLE ASSEMBLY.....	0411 00
REPLACE PARKING BRAKE CONTROL LEVER ASSEMBLY .....	0412 00

**Volume 4**

CHAPTER 13 — UNIT MAINTENANCE INSTRUCTIONS FOR WHEELS AND TRACKS

REPLACE TORSION BAR.....	0413 00
REPLACE TORSION BAR ANCHOR.....	0414 00
REPLACE ROAD WHEEL SUPPORT ARM, BEARINGS, AND SEALS.....	0415 00
REPLACE ROAD WHEEL HUB.....	0416 00
REPLACE IDLER WHEEL ARM ASSEMBLY.....	0417 00
REPLACE IDLER WHEEL ARM BEARINGS AND SEALS.....	0418 00
REPLACE TRACK TENSION ADJUSTER AND MOUNT.....	0419 00
REPLACE DRIVE SPROCKET AND CARRIER ASSEMBLY .....	0420 00
REPAIR DRIVE SPROCKET CARRIER ASSEMBLY.....	0421 00
REPLACE TRACK.....	0422 00
REPLACE TRACK SHOE ASSEMBLY.....	0423 00
REPLACE TRACK SHOE PAD.....	0424 00
REPLACE IDLER WHEEL.....	0425 00
REPLACE ROAD WHEEL.....	0426 00

CHAPTER 14 — UNIT MAINTENANCE INSTRUCTIONS FOR STEERING

ADJUST STEERING WHEEL LINKAGE.....	0427 00
REPLACE STEERING LOCK SOLENOID, BRACKET, LINKS, AND PINS (SOLENOID-ACTIVATED LOCK).....	0428 00
REPLACE PUSH-PULL CONTROL ASSEMBLY, BRACKET, LINKS, AND PINS (CABLE-ACTIVATED LOCK).....	0429 00
REPLACE STEERING WHEEL LINKAGE.....	0430 00
REPLACE QUICK RELEASE PIN AND LANYARD.....	0431 00
REPLACE STEERING SUPPORT, BRACKETS, AND SHAFT.....	0432 00

CHAPTER 15 — UNIT MAINTENANCE INSTRUCTIONS FOR TOWING ATTACHMENTS

REPLACE TOWING PINTLE.....	0433 00
REPAIR TOWING PINTLE.....	0434 00

CHAPTER 16 — UNIT MAINTENANCE INSTRUCTIONS FOR SHOCK ABSORBERS

REPLACE SHOCK ABSORBER.....	0435 00
REPLACE SHOCK ABSORBER MOUNT.....	0436 00
REPLACE SHOCK ABSORBER PIN.....	0437 00

CHAPTER 17 — UNIT MAINTENANCE INSTRUCTIONS FOR HULL

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE TRACK SHROUD AND COVERS.....	0438 00
REPAIR/REPLACE POWER PLANT REAR ACCESS PANELS.....	0439 00
REMOVE/INSTALL FAN DRIVE PULLEY ACCESS COVER.....	0440 00
REPLACE DRIVER'S POWER PLANT ACCESS PANEL.....	0441 00
REPAIR PAMPHLET BAG MOUNTING.....	0442 00
REPLACE TOWING HOOK AND EYE.....	0443 00
REPLACE LIFTING EYE.....	0444 00
REPLACE REAR TIEDOWN PLATES.....	0445 00
REPLACE HEADLIGHT GUARD.....	0446 00
REPLACE LEFT FRONT ARMOR PLATE.....	0447 00
REPLACE RIGHT FRONT ARMOR PLATE.....	0448 00
REPLACE HULL FRONT ACCESS COVER.....	0449 00
REPLACE POWER PLANT BOTTOM ACCESS COVER.....	0450 00
REPLACE HULL DRAIN PLUG.....	0451 00
REPLACE FINAL DRIVE HULL DRAIN PLUGS.....	0452 00
REPLACE DRIVER'S COMPARTMENT FLOOR PLATES.....	0453 00
REPLACE REAR COMPARTMENT AIR VENTILATOR.....	0454 00
REPLACE SMOKE GRENADE LAUNCHER GUARD, PLATE, AND BASE (M113A3, M901A3, M981A3, AND M1059A3 ONLY).....	0455 00
REPLACE WATER BARRIER (M113A3, M577A3, AND M1068A3 ONLY).....	0456 00
REPLACE WATER BARRIER LOOP AND STRAP (M113A3, M577A3, AND M1068A3 ONLY).....	0457 00
REPLACE TRIM VANE.....	0458 00
REPAIR TRIM VANE (ALL EXCEPT M58).....	0459 00
REPAIR TRIM VANE (M58 ONLY).....	0460 00
REPAIR TRIM VANE CONTROL LINKAGE.....	0461 00
REPLACE TRIM VANE RELEASE.....	0462 00
REPAIR TRIM VANE RELEASE.....	0463 00
RAISE AND LOWER POWER PLANT GRILLE.....	0464 00
REMOVE/INSTALL POWER PLANT GRILLE.....	0465 00
REPLACE COMBAT FILLER COVER AND LOCK.....	0466 00
REPLACE POWER PLANT GRILL SUPPORT ARM.....	0467 00
REPLACE POWER PLANT GRILL SCREEN.....	0468 00
REPLACE RADIATOR ACCESS DOOR.....	0469 00
REPLACE POWER PLANT DOOR (M113A3 ONLY).....	0470 00
REPLACE POWER PLANT DOOR (ALL EXCEPT M113A3).....	0471 00
REPAIR POWER PLANT DOOR.....	0472 00
REPLACE POWER PLANT DOOR COMBAT LOCK.....	0473 00
REPLACE CARGO HATCH HOLD-OPEN HOOK AND BUMPERS (M113A3, M901A3, M981A3, AND M1059A3 ONLY).....	0474 00
REPLACE CARGO HATCH INTERIOR LATCH (M113A3, M901A3, M981A3, AND M1059A3 ONLY).....	0475 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPAIR CARGO HATCH LATCH (M901A3 ONLY).....	0476 00
REPLACE CARGO HATCH SUPPORT (M901A3 ONLY).....	0477 00
REPLACE CARGO HATCH SEALS (M113A3, M901A3, M981A3, AND M1059A3 ONLY).....	0478 00
REPLACE CARGO HATCH COVER (M113A3, M901A3, M981A3, AND M1059A3 ONLY).....	0479 00
REPLACE MORTAR HATCH EXTERIOR CATCHES AND BUMPERS (M1064A3 ONLY).....	0480 00
REPLACE MORTAR HATCH INTERIOR RELEASE MECHANISMS (M1064A3 ONLY).....	0481 00
REPLACE MORTAR HATCH COVERS (M1064A3 ONLY).....	0482 00
REPLACE HOPPER HATCH LOCK ASSEMBLY (M58 ONLY).....	0483 00
REPLACE HOPPER HATCH (M58 ONLY).....	0484 00
REPLACE TURBINE ACCESS DOOR (M58 ONLY).....	0485 00
REPLACE TURBINE ACCESS DOOR GASKET (M58 ONLY).....	0486 00
REPLACE TURBINE ACCESS DOOR HINGES (M58 ONLY).....	0487 00
REPLACE COMMANDER'S CUPOLA CUSHIONING PAD AND HANDLE (M113A3, M1059A3, M58, AND M1064A3 ONLY).....	0488 00
REPLACE COMMANDER'S CUPOLA AZIMUTH LOCK (M113A3, M1059A3, M58 AND M1064A3 ONLY).....	0489 00
REPLACE COMMANDER'S CUPOLA VISION BLOCK LOCKS AND SEALS (M113A3 AND M1059A3, M58 ONLY).....	0490 00
REPLACE COMMANDER'S CUPOLA VISION BLOCK LOCKS AND SEALS (M1064A3 ONLY).....	0491 00
REPLACE COMMANDER'S CUPOLA BRAKE ASSEMBLY (M113A3, M1059A3, M58, AND M1064A3 ONLY).....	0492 00
REPLACE COMMANDER'S CUPOLA COVER (M113A3, M1059A3, M58, AND M1064A3 ONLY).....	0493 00
REPLACE COMMANDER'S CUPOLA HOLD-OPEN HOOK AND BUMPER (M113A3, M1059A3, M58, AND M1064A3 ONLY).....	0494 00
REPLACE COMMANDER'S CUPOLA SAFETY PIN STOWAGE BLOCK (M113A3, M1059A3, M58, AND M1064A3 ONLY).....	0495 00
REPLACE COMMANDER'S CUPOLA INTERIOR LATCH (M113A3, M1059A3, M58, AND M1064A3 ONLY).....	0496 00
REPLACE COMMANDER'S CUPOLA MACHINE GUN MOUNT (M113A3, M1059A3, M58, AND M1064A3 ONLY).....	0497 00
REPAIR COMMANDER'S CUPOLA MACHINE GUN MOUNT (M113A3, M1059A3, M58, AND M1064A3 ONLY).....	0498 00
REPLACE COMMANDER'S CUPOLA MACHINE GUN MOUNT STOPS (M1059A3 ONLY).....	0499 00
REPLACE COMMANDER'S HATCH CUSHIONING PAD AND HANDLE (M577A3 AND M1068A3 ONLY).....	0500 00
REPLACE COMMANDER'S HATCH HOOK AND BUMPER (M577A3 AND M1068A3 ONLY).....	0501 00
REPLACE COMMANDER'S HATCH INTERIOR LATCH (M577A3 AND M1068A3 ONLY).....	0502 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE COMMANDER'S HATCH COVER (M577A3 AND M1068A3 ONLY) .....	0503 00
REPLACE RIGHT SIDE SPALL LINERS (M113A3 ONLY).....	0504 00
REPLACE LEFT SIDE SPALL LINERS (M113A3 ONLY).....	0505 00
REPAIR SPALL LINER QUICK RELEASE PINS AND PLATES (M113A3 ONLY).....	0506 00
REPLACE FORWARD SPALL LINER AND BRACKET (M113A3 ONLY).....	0507 00
REPLACE FORWARD UPPER RIGHT AND LEFT SIDE SPALL LINERS (M113A3 ONLY).....	0508 00
REPLACE SPALL LINER ON CARGO HATCH COVER (M113A3 ONLY).....	0509 00
REPLACE REAR UPPER HULL SPALL LINER (M113A3 ONLY).....	0510 00
REPLACE SPALL LINER ON RAMP DOOR (M113A3 ONLY).....	0511 00
REPLACE SPALL LINER ON RAMP (M113A3 ONLY).....	0512 00
RAISE/LOWER INOPERABLE/UNSAFE RAMP.....	0513 00
REPLACE RAMP SEAL.....	0514 00
REPLACE RAMP DRAIN PLUGS.....	0515 00
REPLACE RAMP BRACKET (M113A3, M577A3, AND M1068A3 ONLY).....	0516 00
REPLACE RAMP DOOR STOP BRACKET.....	0517 00
REPLACE RAMP DOOR HOOK AND SPRING.....	0518 00
REPLACE RAMP DOOR HANDLES AND SHAFT.....	0519 00
REPLACE RAMP DOOR SEAL.....	0520 00
ADJUST RAMP LOCK (M113A3, M901A3, M981A3, AND M1059A3 ONLY).....	0521 00
ADJUST RAMP LOCK (M577A3 AND M1068A3 ONLY).....	0522 00
ADJUST RAMP LOCK (M1064A3 ONLY).....	0523 00
REPLACE RAMP LOCK HANDLE AND ARMS (ALL EXCEPT M577A3 AND M1068A3).....	0524 00
REPLACE RAMP LOCK LEVER AND CABLE (M577A3 AND M1068A3 ONLY).....	0525 00
REPLACE RAMP LINKAGE (M113A3, M901A3, M981A3, AND M1059A3 ONLY).....	0526 00
REPLACE RAMP LINKAGE (M577A3 AND M1068A3 ONLY).....	0527 00
REPLACE RAMP LINKAGE (M1064A3 ONLY).....	0528 00
REPAIR HULL BY WELDING.....	0529 00
REPLACE DRIVER'S HATCH CUSHIONING PAD.....	0530 00
REPLACE DRIVER'S HATCH COVER AND EXTERIOR LOCK (ALL EXCEPT M901A3 AND M981A3).....	0531 00
REPLACE DRIVER'S HATCH HOLD-OPEN HOOK AND BUMPER (M113A3, M1059A3, M1064A3, AND M58 ONLY).....	0532 00
REPLACE DRIVER'S HATCH HOLD-OPEN HOOK AND BUMPER (M577A3 AND M1068A3 ONLY).....	0533 00
REPLACE DRIVER'S HATCH INTERIOR LOCK AND LATCH.....	0534 00
REPLACE DRIVER'S HATCH VISION BLOCK LOCKS AND SEALS.....	0535 00
REPLACE DRIVER'S HATCH AN/VVS-2 DRIVER'S NIGHT VISION GUARD (ALL EXCEPT M58).....	0536 00
REPLACE AN/VVS-2 DRIVER'S NIGHT VISION MOUNT (ALL EXCEPT M58).....	0537 00
REPAIR DRIVER'S HATCH (M901A3 AND M981A3 ONLY).....	0538 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE FLOOR PLATES (M113A3 AND M577A3 ONLY).....	0539 00
REPLACE FLOOR PLATES (M901A3 ONLY).....	0540 00
REPLACE FLOOR PLATES (M981A3 ONLY).....	0541 00
REPLACE FLOOR PLATES (M1059A3 ONLY).....	0542 00
REPLACE FLOOR PLATES (M1064A3 ONLY).....	0543 00
REPLACE FLOOR PLATES (M1068A3 ONLY).....	0544 00
REPLACE FLOOR PLATES (M58 ONLY).....	0545 00
REPLACE PERSONNEL SEATS, CUSHIONS, AND BELTS (M113A3 ONLY).....	0546 00
REPLACE PERSONNEL SEATS, CUSHIONS, AND BELTS (M577A3 ONLY).....	0547 00
REPLACE PERSONNEL SEAT, CUSHION, AND BELTS (M981A3 ONLY).....	0548 00
REPLACE PERSONNEL SEATS, BACKRESTS, CUSHIONS, AND BELTS (M1059A3 ONLY).....	0549 00
REPLACE PERSONNEL SEATS, BACKRESTS, CUSHIONS, AND BELTS (M1064A3 ONLY).....	0550 00
REPLACE DRIVER'S SEAT ASSEMBLY.....	0551 00
REPAIR DRIVER'S SEAT.....	0552 00
REPLACE DRIVER'S SEAT BACK ASSEMBLY.....	0553 00
REPAIR DRIVER'S SEAT BACK ASSEMBLY.....	0554 00
REPLACE DRIVER'S SEAT IMPACT ABSORBER.....	0555 00
REPLACE DRIVER'S SEAT POST ASSEMBLY.....	0556 00
REPAIR DRIVER'S SEAT POST ASSEMBLY.....	0557 00
REPLACE DRIVER'S FOOTREST.....	0558 00
REPLACE/REPAIR COMMANDER'S PLATFORM (M113A3, M1059A3, M1064A3, AND M58 ONLY).....	0559 00
REPLACE COMMANDER'S SEAT AND POST (M113A3, M1059A3, AND M58 ONLY).....	0560 00
REPLACE COMMANDER'S SEAT AND POST (M1064A3 ONLY).....	0561 00
REPAIR COMMANDER'S SEAT (M113A3, M1059A3, M1064A3, AND M58 ONLY).....	0562 00
REPLACE COMMANDER'S JUMP SEAT (M113A3 ONLY).....	0563 00
REPLACE/REPAIR COMMANDER'S PLATFORM AND POST (M577A3 AND M1068A3 ONLY).....	0564 00
REPLACE COMMANDER'S SEAT (OBSERVATION PERISCOPE) (M901A3 AND M981A3 ONLY).....	0565 00
REPLACE/REPAIR COMMANDER'S SEAT (M1068A3 ONLY).....	0566 00
REPLACE/REPAIR OPERATOR'S SEAT (M1059A3 ONLY).....	0567 00
REPLACE/REPAIR RADIO OPERATOR'S SEAT (M981A3, M1068A3, AND M58 ONLY).....	0568 00
REPLACE WEBBING STRAPS.....	0569 00
REPLACE CUSHIONING PADS.....	0570 00
REPLACE TOOL BOX LOOPS.....	0571 00
REPLACE AN/VVS-2 DRIVER'S NIGHT VISION STOWAGE MOUNT (ALL EXCEPT M58).....	0572 00
REPLACE RIFLE BRACKETS.....	0573 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE OIL CAN BRACKET.....	0574 00
REPLACE ANTENNA GUARDS (ALL EXCEPT M981A3).....	0575 00
REPLACE ANTENNA COVERS (ALL EXCEPT M981A3).....	0576 00
REPLACE LEFT BULKHEAD RADIO STOWAGE RACKS (M577A3 AND M1068A3 ONLY).....	0577 00
REPLACE LEFT TABLE (M577A3 ONLY).....	0578 00
REPLACE RIGHT FRONT RADIO STOWAGE RACK (M577A3 ONLY).....	0579 00
REPLACE MAP BOARD (M577A3 ONLY).....	0580 00
REPLACE RIGHT FORWARD TABLE (M577A3 ONLY).....	0581 00
REPLACE RIGHT REARWARD TABLE (M577A3 ONLY).....	0582 00
REPLACE M26 PERISCOPE/MOUNT (M901A3 AND M981A3 ONLY).....	0583 00
REPAIR M26 PERISCOPE MOUNT (M901A3 AND M981A3 ONLY).....	0584 00
REPLACE PERISCOPE MOUNTING BRACKET (M901A3 AND M981A3 ONLY).....	0585 00
REPLACE/REPAIR RAMP VISION PORT AND SHIELD (M901A3, M981A3, AND M58 ONLY).....	0586 00
REPLACE AMMUNITION STOWAGE RACK (M901A3 ONLY).....	0587 00
REPLACE MISSILE RACK (M901A3 ONLY).....	0588 00
REPLACE MISSILE RACK RETAINERS (M901A3 ONLY).....	0589 00
REPLACE LAUNCH TUBE STOWAGE BRACKET (M901A3 ONLY).....	0590 00
REPLACE TRAVERSING UNIT MOUNT AND SPACER (M901A3 ONLY).....	0591 00
REPLACE TRIPOD STOWAGE BRACKETS (M901A3 ONLY).....	0592 00
REPLACE VEHICLE ACCESS BOX (M901A3 AND M981A3 ONLY).....	0593 00
REPLACE SIDE ARMOR (M901A3 ONLY).....	0594 00
REPLACE LAUNCHER LOW-STOW STOWAGE BRACKET(M901A3 ONLY).....	0595 00
REPLACE LOW-STOW CUSHION BASE (M901A3 ONLY).....	0596 00
REPLACE/REPAIR ELECTRICAL EQUIPMENT RACK ASSEMBLY (M981A3 ONLY).....	0597 00
REPAIR SMALL ITEMS STORAGE DRAWER (M981A3 ONLY).....	0598 00
REPLACE/REPAIR BACKPACK STOWAGE RACK (M981A3 ONLY).....	0599 00
REPLACE ANTENNA GUARD (M981A3 ONLY).....	0600 00
REPLACE ANTENNA COVERS (M981A3 ONLY).....	0601 00
REPLACE ANTENNA SUPPORT (M981A3 AND M58 ONLY).....	0602 00
REPLACE CABLE REEL HOLDER ASSEMBLY (M981A3 AND M1064A3 ONLY).....	0603 00
REPAIR CABLE REEL HOLDER ASSEMBLY (M981A3 AND M1064A3 ONLY).....	0604 00
REPAIR NONSKID SURFACES (M981A3 ONLY).....	0605 00
REPLACE HORIZONTAL AMMUNITION RACK (M1064A3 ONLY) .....	0606 00
REPAIR HORIZONTAL AMMUNITION RACK (M1064A3 ONLY).....	0607 00
REPLACE VERTICAL AMMUNITION RACK (M1064A3 ONLY).....	0608 00
REPLACE RADIO STOWAGE RACK (M1064A3 ONLY).....	0609 00
REPLACE GRENADE STOWAGE BOX (M1064A3 ONLY).....	0610 00
REPLACE PERISCOPE STOWAGE BOX (M1064A3 ONLY).....	0611 00
REPLACE RIFLE RACK (M1064A3 ONLY).....	0612 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE SIGHT EXTENSION ARM STOWAGE BRACKETS (M1064A3 ONLY).....	0613 00
REPLACE WINDSHIELD STOWAGE BRACKET (M1064A3 ONLY).....	0614 00
REPLACE MORTAR BASE STOWAGE BRACKET (M1064A3 ONLY).....	0615 00
REPLACE LEFT SIDE RACK BASE (M1068A3 ONLY).....	0616 00
REPLACE PERSONNEL HEATER CONTROL BOX AND INTERCOM BOX BRACKET (M1068A3 ONLY).....	0617 00
REPLACE/REPAIR MAP BOARD (M1068A3 ONLY).....	0618 00
REPLACE MAP STORAGE BOX (M1068A3 ONLY).....	0619 00
REPAIR MAP STORAGE BOX (M1068A3 ONLY).....	0620 00
REPLACE RIGHT SIDE SHELF ASSEMBLY (M1068A3 ONLY).....	0621 00
REPLACE RIGHT SIDE RACK BASE (M1068A3 ONLY).....	0622 00
REPLACE RIGHT SIDE BASE EXTENSION (M1068A3 ONLY).....	0623 00
REPLACE RIGHT SIDE BASE EXTENSION SUPPORTS (M1068A3 ONLY).....	0624 00
REPLACE/REPAIR ANTENNA MAST BRACKET ASSEMBLY, TAILLIGHT WIRING HARNESS, AND BRACKET (M1068A3 ONLY).....	0625 00
REPLACE REAR EXTERNAL STOWAGE FRAME (M1068A3 ONLY).....	0626 00

**Volume 5**

CHAPTER 18 — UNIT MAINTENANCE INSTRUCTIONS FOR HULL ACCESSORY ITEMS

REPLACE TENT AND TENT CLAMPS (M577A3 ONLY).....	0627 00
REPLACE TENT AND FRAME MOUNTS (M577A3 ONLY).....	0628 00
REPLACE BLACKOUT CURTAIN AND FRAME (M577A3 AND M1068A3 ONLY).....	0629 00
REPLACE/REPAIR DRIVER'S LEVEL INDICATOR (M901A3 AND M981A3 ONLY) .....	0630 00
REPLACE FRONT BILGE PUMP PIPES.....	0631 00
REPLACE FRONT BILGE PUMP AND STRAINER.....	0632 00
REPLACE FRONT BILGE VALVE.....	0633 00
REPLACE REAR BILGE PUMP PIPES.....	0634 00
REPLACE REAR BILGE PUMP AND STRAINER.....	0635 00
STENCILS (M113A3 ONLY).....	0636 00
STENCILS (M577A3 ONLY).....	0637 00
STENCILS (M901A3 ONLY).....	0638 00
STENCILS (M981A3 ONLY).....	0639 00
STENCILS (M1059A3 ONLY).....	0640 00
STENCILS (M1064A3 ONLY).....	0641 00
STENCILS (M1068A3 ONLY).....	0642 00
STENCILS (M58 ONLY).....	0643 00
DATAPLATES, DECALS, AND MARKERS (ALL MODELS).....	0644 00
DATAPLATES, DECALS, AND MARKERS (M113A3, M901A3, M981A3, M1059A3 ONLY).....	0645 00
DATAPLATES, DECALS, AND MARKERS (M113A3, M901A3, M1059A3, M58 ONLY).....	0646 00



**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
DATAPLATES, DECALS, AND MARKERS (M113A3, M1059A3 ONLY).....	0647 00
DATAPLATES, DECALS, AND MARKERS (M577A3, M1068A3 ONLY).....	0648 00
DATAPLATES, DECALS, AND MARKERS (M901A3 ONLY).....	0649 00
DATAPLATES, DECALS, AND MARKERS (M981A3 ONLY).....	0650 00
DATAPLATES, DECALS, AND MARKERS (M1059A3 ONLY).....	0651 00
DATAPLATES, DECALS, AND MARKERS (M1064A3 ONLY).....	0652 00
DATAPLATES, DECALS, AND MARKERS (M58 ONLY).....	0653 00
REPLACE DATAPLATES, STENCILS, MARKERS, AND DECALS.....	0654 00
 CHAPTER 19 — UNIT MAINTENANCE INSTRUCTIONS FOR HYDRAULIC SYSTEM	
REPLACE RAMP HYDRAULIC PUMP.....	0655 00
REPLACE RAMP CYLINDER.....	0656 00
REPLACE WIRE ROPE AND PULLEYS (ALL EXCEPT M1064A3).....	0657 00
REPLACE WIRE ROPE AND PULLEYS (M1064A3 ONLY).....	0658 00
REPLACE RAMP CONTROL VALVE (WITH EXTERNAL RELIEF VALVE) AND FITTINGS.....	0659 00
REPLACE RAMP CONTROL VALVE, EXTERNAL RELIEF VALVE, AND FITTINGS WITH RAMP CONTROL VALVE (INTERNAL RELIEF VALVE).....	0660 00
REPLACE RAMP CONTROL VALVE (WITH INTERNAL RELIEF VALVE) AND FITTINGS.....	0661 00
REPLACE SAFETY RELIEF VALVE, TUBE, HOSE, AND FITTINGS.....	0662 00
REPLACE RAMP CONTROL VALVE HOSE AND ELBOW.....	0663 00
REPLACE TUBE FROM RAMP CONTROL VALVE TO BULKHEAD.....	0664 00
REPLACE HOSE FROM BULKHEAD CONNECTION TO RAMP CYLINDER.....	0665 00
REPLACE RAMP CYLINDER BREATHER HOSE (ALL EXCEPT M1064A3).....	0666 00
REPLACE RAMP CYLINDER BREATHER HOSE (M1064A3 ONLY).....	0667 00
REPLACE POWER PLANT HYDRAULIC HOSES.....	0668 00
SERVICE HYDRAULIC RESERVOIR.....	0669 00
SERVICE HYDRAULIC RESERVOIR BREATHER.....	0670 00
REPLACE HYDRAULIC RESERVOIR.....	0671 00
REPAIR HYDRAULIC RESERVOIR.....	0672 00
 CHAPTER 20 — UNIT MAINTENANCE INSTRUCTIONS FOR TOOLS AND TEST EQUIPMENT	
INSPECT POWER PLANT SLING.....	0673 00
 CHAPTER 21 — UNIT MAINTENANCE INSTRUCTIONS FOR AUXILIARY GENERATOR	
REPLACE GENERATOR SET ENCLOSURE (M577A3 AND M1068A3 ONLY).....	0674 00
REPLACE 5.0 KW AUXILIARY POWER UNIT (M577A3 AND M1068A3 ONLY).....	0675 00
REPLACE AUXILIARY POWER UNIT FUEL SHUTOFF VALVE (M577A3 AND M1068A3 ONLY).....	0676 00
REPLACE AUXILIARY POWER UNIT VALVE-TO-BULKHEAD FUEL SUPPLY HOSES (M577A3 AND M1068A3 ONLY).....	0677 00

**TABLE OF CONTENTS (cont)**

WP Sequence No.

REPLACE AUXILIARY POWER UNIT BULKHEAD-TO-HULL FUEL SUPPLY HOSES (M577A3 AND M1068A3 ONLY).....	0678 00
CHAPTER 22 — UNIT MAINTENANCE INSTRUCTIONS FOR SPECIAL PURPOSE KITS	
BLEED AIR FROM PERSONNEL HEATER FUEL LINES.....	0679 00
SERVICE PERSONNEL HEATER FUEL FILTER.....	0680 00
SERVICE PERSONNEL HEATER FUEL PUMP.....	0681 00
REPLACE HEATER AIR INTAKE AND EXHAUST PIPES (ALL EXCEPT M1064A3).....	0682 00
REPLACE HEATER AIR INTAKE AND EXHAUST PIPES(M1064A3 ONLY).....	0683 00
REPLACE FUEL SHUT-OFF VALVE ASSEMBLY (M113A3, M981A3, M1059A3, AND M58 ONLY).....	0684 00
REPLACE HEATER/FILTER FUEL SUPPLY HOSES (M113A3, M981A3, M1059A3, AND M58 ONLY).....	0685 00
REPLACE PERSONNEL HEATER FUEL TUBE (ALL EXCEPT M1064A3).....	0686 00
REPLACE BULKHEAD CONNECTION TO PERSONNEL HEATER TUBE (M577A3 AND M1068A3 ONLY).....	0687 00
REPLACE PERSONNEL HEATER FUEL FILTER, HOSES, AND FITTINGS (M1064A3 ONLY).....	0688 00
REPLACE PERSONNEL HEATER FUEL PUMP HOSE (M113A3, M981A3, M1059A3, AND M58 ONLY).....	0689 00
REPLACE FUEL TANK TO FUEL PUMP HOSE (M577A3 AND M1068A3 ONLY).....	0690 00
REPLACE FUEL PUMP TO BULKHEAD CONNECTION HOSE (M113A3, M981A3, M1059A3, AND M58 ONLY).....	0691 00
REPLACE FUEL PUMP TO BULKHEAD CONNECTION HOSE (M577A3 AND M1068A3 ONLY).....	0692 00
REPLACE PERSONNEL HEATER FUEL PUMP TO BULKHEAD CONNECTION HOSE (M901A3 ONLY).....	0693 00
REPLACE FUEL PUMP HOSE TO HEATER FUEL SHUTOFF VALVE (M901A3 AND M1064A3 ONLY).....	0694 00
REPLACE PERSONNEL HEATER FUEL PUMP (M113A3, M1059A3, AND M58 ONLY).....	0695 00
REPLACE PERSONNEL HEATER FUEL PUMP (M577A3 AND M1068A3 ONLY).....	0696 00
REPLACE HEATER FUEL PUMP (M1064A3 ONLY).....	0697 00
REPLACE PERSONNEL HEATER FUEL FILTER/BRACKET (M113A3, M1059A3, AND M58 ONLY).....	0698 00
REPLACE PERSONNEL HEATER FUEL FILTER/BRACKET (M981A3 ONLY).....	0699 00
REPLACE PERSONNEL HEATER FUEL FILTER, HOSE, TUBE, AND FITTINGS (M577A3, M901A3, AND M1068A3 ONLY).....	0700 00
REPLACE PERSONNEL HEATER CONTROL BOX.....	0701 00
REPAIR PERSONNEL HEATER CONTROL BOX.....	0702 00
REPLACE PERSONNEL HEATER ASSEMBLY (ALL EXCEPT M1064A3).....	0703 00
REPLACE PERSONNEL HEATER ASSEMBLY (M1064A3 ONLY).....	0704 00
REPAIR PERSONNEL HEATER ASSEMBLY.....	0705 00
REPLACE PERSONNEL HEATER DUCT AND HOSES.....	0706 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPAIR PERSONNEL HEATER DUCT.....	0707 00
SERVICE COOLANT HEATER FUEL FILTER.....	0708 00
SERVICE COOLANT HEATER FUEL PUMP.....	0709 00
DRAIN AND FILL ENGINE COOLANT HEATER SYSTEM.....	0710 00
REPLACE COOLANT HEATER FUEL PUMP HOSE.....	0711 00
REPLACE COOLANT HEATER FUEL INLET HOSE AND FITTINGS.....	0712 00
REPLACE COOLANT PUMP TO BATTERY BOX HOSES.....	0713 00
REPLACE ENGINE TO BATTERY BOX HOSE.....	0714 00
REPLACE COOLANT HEATER TO ENGINE ELBOW HOSE.....	0715 00
REPLACE COOLANT HEATER FILTER VALVE HOSE.....	0716 00
REPLACE ENGINE BLOCK FITTING AND HARDWARE.....	0717 00
REPLACE BATTERY BOX INSULATION AND HEAT EXCHANGER.....	0718 00
REPLACE BATTERY DRAWER INSULATION AND HEAT EXCHANGER (M1064A3 ONLY).....	0719 00
REPLACE COOLANT HEATER FUEL SHUTOFF VALVE.....	0720 00
REPLACE FUEL PUMP TEE TO ELBOW HOSE.....	0721 00
REPLACE BATTERY PLATE TO BATTERY PLATE HOSE.....	0722 00
REPLACE COOLANT HEATER FUEL PUMP.....	0723 00
REPLACE COOLANT HEATER EXHAUST ELBOW AND PIPES.....	0724 00
REPLACE HEATER TO SURGE TANK HOSE.....	0725 00
REPLACE FUEL FILTER.....	0726 00
ADJUST FLAME DETECTOR SWITCH.....	0727 00
REPLACE COOLANT HEATER AND PUMP UNIT.....	0728 00
REPLACE COOLANT HEATER.....	0729 00
REPLACE IGNITER.....	0730 00
REPLACE COOLANT HEATER PUMP.....	0731 00
REPLACE COOLANT HEATER AND COOLANT PUMP BRACKET.....	0732 00
REPLACE COOLANT PUMP TO HEATER WIRING HARNESS.....	0733 00
REPLACE FLAME DETECTOR SWITCH.....	0734 00
REPLACE COOLANT HEATER WIRING HARNESS.....	0735 00
REPLACE COOLANT HEATER CONTROL BOX.....	0736 00
REPAIR COOLANT HEATER CONTROL BOX.....	0737 00
REPLACE NON-SKID PLATES (M1064A3 ONLY).....	0738 00
REPLACE DRIVER'S WINDSHIELD.....	0739 00
REPLACE DRIVER'S WINDSHIELD STOWAGE BAG, STRAPS, AND DECAL.....	0740 00
INITIAL INSTALLATION OF LITTER KIT (M113A3 ONLY).....	0741 00
REPLACE POST ASSEMBLY (M113A3 ONLY).....	0742 00
REPAIR POST ASSEMBLY (M113A3 ONLY).....	0743 00
REPLACE CHAIN ASSEMBLY (M113A3 ONLY).....	0744 00
REPAIR CHAIN ASSEMBLY (M113A3 ONLY).....	0745 00
REPLACE ARTILLERY COMMUNICATION INSIDE CABLE (M577A3 ONLY).....	0746 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE COMMANDER'S CUPOLA ARMOR SHIELDS (M113A3 AND M1064A3 ONLY).....	0747 00
INSTALL ARMOR KIT (M113A3 ONLY).....	0748 00
REPLACE FRONT ARMOR (M113A3 ONLY).....	0749 00
REPLACE SIDE ARMOR/STOWAGE BOX (M113A3 ONLY).....	0750 00
REPLACE REAR ARMOR (M113A3 ONLY).....	0751 00
INSTALL/REMOVE MINE ARMOR KIT (M113A3 ONLY).....	0752 00
REPLACE FOG OIL TANK MODULE (M1059A3 ONLY).....	0753 00
REPLACE SMOKE GENERATOR BREATHER HOSE ASSEMBLY (M1059A3 ONLY).....	0754 00
REPLACE SMOKE GENERATOR ASSEMBLY AND SUPPORT BRACKET (M1059A3 ONLY).....	0755 00
REPLACE SMOKE GENERATOR CONTROL PANEL ASSEMBLY (M1059A3 ONLY).....	0756 00
REPLACE SMOKE GENERATOR SYSTEM POWER SUPPLY CABLE ASSEMBLY (M1059A3 ONLY).....	0757 00
REPLACE AIR COMPRESSOR ELECTRICAL CABLE ASSEMBLY (M1059A3 ONLY).....	0758 00
REPLACE FOG OIL PUMP ELECTRICAL CABLE ASSEMBLY.....	0759 00
REPLACE SMOKE GENERATOR INTERNAL CABLE ASSEMBLY (M1059A3 ONLY).....	0760 00
REPLACE ADAPTER ACCESS PLATE TO GENERATOR ELECTRICAL CABLE ASSEMBLY (M1059A3 ONLY).....	0761 00
REPLACE AIR COMPRESSOR ASSEMBLY (M1059A3 ONLY).....	0762 00
REPLACE FOG OIL PUMP ASSEMBLY (M1059A3 ONLY).....	0763 00
REPLACE SMOKE GENERATOR FUEL CAN LID ASSEMBLY (M1059A3 ONLY).....	0764 00
REPLACE SMOKE GENERATOR FUEL LINES AND GUARDS (M1059A3 ONLY).....	0765 00
REPLACE SMOKE GENERATOR ADAPTER ACCESS PLATE AND GASKET (M1059A3 ONLY).....	0766 00
REPLACE SMOKE GENERATOR COMPRESSOR RESERVOIR TO ADAPTER ACCESS PLATE AIR HOSE (M1059A3 ONLY).....	0767 00
REPLACE SMOKE GENERATOR ADAPTER ACCESS PLATE TO COVER ASSEMBLY AIR HOSE (M1059A3 ONLY).....	0768 00
REPLACE FOG OIL TANK QUICK DISCONNECT TO ADAPTER ACCESS PLATE HOSE (M1059A3 ONLY).....	0769 00
REPLACE COVER ASSEMBLY FOG OIL QUICK DISCONNECT TO ADAPTER ACCESS PLATE HOSE (M1059A3 ONLY).....	0770 00
REPLACE SMOKE GENERATOR ARMOR (M1059A3 ONLY).....	0771 00
REPLACE SMOKE GENERATOR GLOW PLUG CABLE ASSEMBLIES (M1059A3 ONLY).....	0772 00
REPLACE/REPAIR SMOKE GENERATOR FUEL FILTER/WATER SEPARATOR (M1059A3 ONLY).....	0773 00
REPLACE M14 AIR PURIFIER AND FRAME (M113A3 ONLY).....	0774 00
REPLACE NBC AIR PURIFIER AND FRAME (M113A3 ONLY).....	0775 00
REPLACE M8A3/M13 AIR PURIFIER AND FRAME (M577A3 ONLY).....	0776 00
REPLACE M8A3 NBC AIR PURIFIER AND FRAME (M1059A3 ONLY).....	0777 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE M8A3 AIR PURIFIER AND FRAME (M1059A3 ONLY).....	0778 00
REPLACE M13 AIR PURIFIER AND FRAME (M1068A3 ONLY).....	0779 00
REPLACE M8A3/M14 ORIFICE CONNECTOR ASSEMBLY, SUPPORT, AND QUICK COUPLING HALF (M113A3, M1059A3, AND M577A3 ONLY).....	0780 00
REPLACE M13 ORIFICE CONNECTOR ASSEMBLY, BRACKET, AND QUICK COUPLING HALF (M1068A3 ONLY).....	0781 00
REPLACE M3 NBC HEATER HOSES AND FITTINGS (M113A3 ONLY).....	0782 00
REPLACE M14 NBC HOSES AND BRACKETS (M113A3 AMBULANCE ONLY).....	0783 00
REPLACE M3 NBC HEATER HOSES AND FITTINGS (M113A3 AMBULANCE ONLY).....	0784 00
REPLACE M8A3 NBC HOSES AND BRACKETS (M577A3 ONLY).....	0785 00
REPLACE M13 NBC FILTERS AND HOSES (M577A3 ONLY).....	0786 00
REPLACE M8A3 NBC HOSES AND BRACKETS (M1059A3 ONLY).....	0787 00
REPLACE M3 NBC HOSES AND FITTINGS (M1059A3 ONLY).....	0788 00
REPLACE M13 NBC FILTERS AND HOSES (M1068A3 ONLY).....	0789 00
REPLACE M13 NBC HEATER HOSES (M1068A3 ONLY).....	0790 00
REPLACE M3 NBC HEATER CONTROL BOX, REGULATOR, AND BRACKET (M113A3 ONLY).....	0791 00
REPLACE M3 NBC HEATER CONTROL BOX (M577A3 ONLY).....	0792 00
REPLACE M3 NBC HEATER CONTROL BOX (M1068A3 ONLY).....	0793 00
REPLACE M3 NBC HEATERS AND CONTROLLERS (M113A3 ONLY).....	0794 00
REPLACE M3 NBC HEATERS AND CONTROLLERS (M113A3 AMBULANCES ONLY).....	0795 00
REPLACE M13 NBC HEATERS AND MOUNTS (M577A3 ONLY).....	0796 00
REPLACE M3 NBC HEATERS AND CONTROLLERS (M1059A3 ONLY).....	0797 00
REPLACE M13 NBC HEATERS (M1068A3 ONLY).....	0798 00
REPLACE M14 NBC CABLES AND SWITCH ASSEMBLY (M1059A3 ONLY).....	0799 00
REPLACE NBC CABLE TO HEATERS, AIR PURIFIER, AND SWITCH ASSEMBLY (M113A3 ONLY).....	0800 00
REPLACE M8A3 NBC CABLES, SWITCH ASSEMBLY, AND BRACKETS (M577A3 ONLY).....	0801 00
REPLACE NBC FILTER SWITCH ASSEMBLY (M113A3 AND M113A3 AMBULANCE ONLY).....	0802 00
REPLACE M13 NBC FILTER SWITCH AND MOUNT BRACKET (M577A3 ONLY).....	0803 00
REPLACE M8A3/M3 NBC FILTER SWITCH ASSEMBLY (M1059A3 ONLY).....	0804 00
REPLACE M13 NBC FILTER SWITCH (M1068A3 ONLY).....	0805 00
REPLACE M3 NBC HEATER WIRING HARNESS (M1059A3 ONLY).....	0806 00
REPLACE M14 NBC HEATER WIRING HARNESS (M113A3 AMBULANCE ONLY).....	0807 00
REPLACE M13 NBC HEATER WIRING HARNESS (M577A3 ONLY).....	0808 00
REPLACE M13 NBC HEATER WIRING HARNESS (M1068A3 ONLY).....	0809 00
REPLACE WATER/RATION HEATER POWER CABLE (M113A3 ONLY).....	0810 00
REPLACE WATER/RATION HEATER MOUNT BRACKET (M113A3 ONLY).....	0811 00

**TABLE OF CONTENTS (cont)**

WP Sequence No.

CHAPTER 23 — UNIT MAINTENANCE INSTRUCTIONS FOR SIGHTING MATERIEL  
(M901A3 AND M981A3 ONLY)

SIGHTING MATERIEL (M901A3 AND M981A3).....0812 00

**Volume 6**

CHAPTER 24 — UNIT MAINTENANCE INSTRUCTIONS FOR ELECTRICAL EQUIPMENT  
(M1068A3 ONLY)

REPLACE APIU RACK MOUNT AND BRACKET (M1068A3 ONLY).....0813 00

REPLACE RIGHT EQUIPMENT RACK BRACKETS AND MOUNTS (M1068A3  
ONLY).....0814 00

REPLACE A.C. POWER EXTENSION BOX A7 (M1068A3 ONLY).....0815 00

REPLACE SIGNAL PATCH PANEL BOX A10 (M1068A3 ONLY).....0816 00

REPLACE EXTERNAL COMMUNICATION BOX A11 (M1068A3 ONLY).....0817 00

REPLACE EXTERNAL COMMUNICATION BOX A11 LID AND LATCHES  
(M1068A3 ONLY).....0818 00

REPLACE CURBSIDE DATA PANEL ASSEMBLY A12 (M1068A3 ONLY).....0819 00

REPLACE LAN GROUND BOX ASSEMBLY A15 (M1068A3 ONLY).....0820 00

REPAIR LAN GROUND BOX ASSEMBLY A15 (M1068A3 ONLY).....0821 00

REPLACE A.C. POWER EXTENSION BOX A19 (M1068A3 ONLY).....0822 00

REPLACE/REPAIR PRINTER MOUNT (M1068A3 ONLY).....0823 00

REPLACE/REPAIR POWER SUPPLY STORAGE BOX ASSEMBLY (M1068A3  
ONLY).....0824 00

REPLACE FLUORESCENT LIGHT ASSEMBLIES (M1068A3 ONLY).....0825 00

REPLACE POWER CONTROL ENCLOSURE ASSEMBLY A1 (M1068A3 ONLY).....0826 00

REPLACE POWER CONTROL ENCLOSURE AC AND DC METERS AND LIGHT  
INDICATORS (M1068A3 ONLY).....0827 00

REPAIR POWER CONTROL ENCLOSURE FACEPLATE AND BRACKET (M1068A3  
ONLY).....0828 00

REPLACE POWER CONTROL ENCLOSURE CIRCUIT 44A LEAD (M1068A3  
ONLY).....0829 00

REPLACE INVERTER HOUSING A2 TERMINAL BLOCKS TB1 AND TB2  
(M1068A3 ONLY).....0830 00

REPLACE/REPAIR POWER DISTRIBUTION BOX A3 (M1068A3 ONLY).....0831 00

REPLACE POWER ENTRY BOX ASSEMBLY A4 (M1068A3 ONLY).....0832 00

REPLACE TENT INTERFACE PANEL BOX ASSEMBLY A5 (M1068A3 ONLY).....0833 00

REPLACE AC POWER EXTENSION BOX A6 AND DC POWER EXTENSION BOX  
A9 AND MOUNT (M1068A3 ONLY).....0834 00

REPLACE ROADSIDE DATA PANEL ASSEMBLY A13 AND BRACKET (M1068A3  
ONLY).....0835 00

REPLACE POWER EXTENSION BOX A18 AND BRACKET (M1068A3 ONLY).....0836 00

REPLACE POWER DISTRIBUTION CABLE (W3) (M1068A3 ONLY).....0837 00

REPLACE DC BATTERY CABLE (W4) (M1068A3 ONLY).....0838 00

REPLACE/REPAIR INVERTER AC CABLE (W5) (M1068A3 ONLY).....0839 00

**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE INVERTER DC CABLE (W6) (M1068A3 ONLY).....	0840 00
REPAIR CABLE ASSEMBLY (W4/W6) (M1068A3 ONLY).....	0841 00
REPLACE AC POWER EXTENSION CABLE (W7) (M1068A3 ONLY).....	0842 00
REPLACE AC POWER EXTENSION CABLE (W8) (M1068A3 ONLY).....	0843 00
REPLACE DC POWER EXTENSION CABLE (W10) (M1068A3 ONLY).....	0844 00
REPLACE AC LIGHT CABLE (W11) (M1068A3 ONLY).....	0845 00
REPLACE GROUND STRAP (W12) (M1068A3 ONLY).....	0846 00
REPLACE CASCADE REMOTE HARNESS (M1068A3 ONLY).....	0847 00
REPLACE HARNESS W32 (M1068A3 ONLY).....	0848 00
REPLACE CABLE W35, CABLE W28, AND CABLE ADAPTER (M1068A3 ONLY).....	0849 00
REPLACE CABLE W38, CABLE W29, AND CABLE ADAPTER (M1068A3 ONLY).....	0850 00
REPLACE SINGLE POINT LAN CABLE (W40) (M1068A3 ONLY).....	0851 00
REPLACE CABLES W42, W43, AND W251 (M1068A3 ONLY).....	0852 00
REPLACE CABLE W45 (M1068A3 ONLY).....	0853 00
REPLACE LAN A OR B CABLE (W103/W104) (M1068A3 ONLY).....	0854 00
REPLACE CABLE W124 (M1068A3 ONLY).....	0855 00
REPLACE CABLE W126 (M1068A3 ONLY).....	0856 00
REPLACE AC CABLE ASSEMBLY (W252) (M1068A3 ONLY).....	0857 00
 CHAPTER 25 — UNIT MAINTENANCE INSTRUCTIONS FOR GAUGES	
SERVICE SPEEDOMETER/TACHOMETER CABLE FLEXIBLE CORE.....	0858 00
REPLACE SPEEDOMETER.....	0859 00
REPLACE SPEEDOMETER CABLE AND ADAPTER.....	0860 00
REPAIR SPEEDOMETER CABLE.....	0861 00
REPLACE TACHOMETER.....	0862 00
REPLACE TACHOMETER ENGINE ADAPTER.....	0863 00
REPLACE TACHOMETER CABLE.....	0864 00
REPAIR TACHOMETER CABLE.....	0865 00
 CHAPTER 26 — UNIT MAINTENANCE INSTRUCTIONS FOR VENTILATING FANS AND BLOWERS (M901A3 AND M981A3 ONLY)	
REPLACE VENTILATING FAN ASSEMBLY (M901A3 AND M981A3 ONLY).....	0866 00
 CHAPTER 27 — UNIT MAINTENANCE INSTRUCTIONS FOR PRECISION INSTRUMENTS AND SYSTEMS	
REPLACE STE/ICE PULSE TACHOMETER.....	0867 00
REPLACE STE/ICE SHUNT GUARD (M113A3, M901A3, AND M1059A3 ONLY).....	0868 00
REPLACE STE/ICE SHUNT GUARD (M981A3 ONLY).....	0869 00
REPLACE STE/ICE SHUNT (M113A3, M901A3, AND M1059A3 ONLY).....	0870 00
REPLACE STE/ICE SHUNT (M577A3 AND M1068A3 ONLY).....	0871 00
REPLACE STE/ICE SHUNT (M981A3 ONLY).....	0872 00
REPLACE STE/ICE SHUNT (M1064A3 ONLY).....	0873 00

**TABLE OF CONTENTS (cont)**

WP Sequence No.

REPLACE STE/ICE DISTRIBUTION BOX (M113A3, M901A3, AND M1059A3 ONLY).....	0874 00
REPLACE STE/ICE DISTRIBUTION BOX (M577A3 AND M1068A3 ONLY).....	0875 00
REPLACE STE/ICE DISTRIBUTION BOX (M981A3 ONLY).....	0876 00
REPLACE STE/ICE DISTRIBUTION BOX (M1064A3 ONLY).....	0877 00
REPLACE STE/ICE CREW WIRING HARNESS (M113A3, M901A3, AND M1059A3 ONLY).....	0878 00
REPLACE STE/ICE CREW WIRING HARNESS (M577A3 AND M1068A3 ONLY).....	0879 00
REPLACE STE/ICE CREW WIRING HARNESS (M981A3 ONLY).....	0880 00
REPLACE STE/ICE CREW WIRING HARNESS (M1064A3 ONLY).....	0881 00
REPLACE STE/ICE ENGINE WIRING HARNESS.....	0882 00
 CHAPTER 28 — UNIT MAINTENANCE INSTRUCTIONS FOR COMMUNICATION SYSTEM (M901A3 AND M58 ONLY)	
COMMUNICATION CABLING DIAGRAM (M901A3 ONLY).....	0883 00
COMMUNICATION CABLING DIAGRAM (M58 ONLY).....	0884 00
REPLACE INTERCOMMUNICATIONS SET CONTROL (M901A3 AND M58 ONLY).....	0885 00
REPLACE ANTENNA (M901A3 ONLY).....	0886 00
REPLACE AS3916/VRC ANTENNA (M58 ONLY).....	0887 00
REPLACE INTERCOM AMPLIFIER (M901A3 AND M58 ONLY).....	0888 00
REPLACE TRANSIENT SUPPRESSOR (M901A3 ONLY).....	0889 00
REPLACE RADIO SET AND MOUNT (M901A3 ONLY) .....	0890 00
REPLACE RADIO RACK (M58 ONLY).....	0891 00
REPLACE DRIVER’S INTERCOMMUNICATION SET CABLE (M58 ONLY).....	0892 00
REPLACE COMMANDER’S INTERCOMMUNICATION SET CABLE (M58 ONLY).....	0893 00
REPLACE OPERATOR’S INTERCOMMUNICATION SET CABLE (M58 ONLY).....	0894 00
 CHAPTER 29 — UNIT MAINTENANCE INSTRUCTIONS FOR FIRE FIGHTING EQUIPMENT	
REPLACE PORTABLE FIRE EXTINGUISHER MOUNT (ALL EXCEPT M1068A3).....	0895 00
REPLACE FIRE EXTINGUISHER AND MOUNT (M1059A3 ONLY).....	0896 00
REPLACE/REPAIR PORTABLE FIRE EXTINGUISHER MOUNT (M1068A3 ONLY).....	0897 00
REPLACE FIXED FIRE EXTINGUISHER CYLINDER AND MOUNT.....	0898 00
REPLACE CYLINDER DISCHARGE TUBES.....	0899 00
REPLACE TURBINE CYLINDER DISCHARGE TUBES (M58 ONLY).....	0900 00
REPLACE EXTERNAL HANDLE SHIELD (M113A3, M901A3, M981A3, AND M1059A3 ONLY).....	0901 00
REPLACE EXTERNAL HANDLE SHIELD (M577A3 AND M1068A3 ONLY).....	0902 00
REPLACE EXTERNAL HANDLE SHIELD (M1064A3 ONLY).....	0903 00
REPLACE FIRE EXTINGUISHER CONTROL VALVE AND EXTERNAL HANDLE.....	0904 00
REPLACE EXTERNAL CABLE TUBE.....	0905 00
 CHAPTER 30 — UNIT MAINTENANCE INSTRUCTIONS FOR NUCLEAR, BIOLOGICAL, AND CHEMICAL (NBC) EQUIPMENT	



**TABLE OF CONTENTS (cont)**

	<u>WP Sequence No.</u>
REPLACE M25/M25A1 VFM GAS FILTER (M981A3 ONLY).....	0906 00
REPLACE M25/M25A1 HOSE ASSEMBLY (M981A3 ONLY).....	0907 00
REPLACE M25/M25A1 VFM ORIFICE CONNECTOR ASSEMBLY (M981A3 ONLY) .....	0908 00
REPLACE PRECLEANER/PARTICULATE FILTER ASSEMBLY (M981A3 ONLY).....	0909 00
REPLACE VFM COUPLING (M981A3 ONLY).....	0910 00
REPLACE M25/M25A1 VFM HEATER (M981A3 ONLY).....	0911 00
REPLACE M25/M25A1 VFM HEATER BRACKETS (M981A3 ONLY).....	0912 00
REPLACE/REPAIR VFM POWER DISTRIBUTION PANEL ASSEMBLY (M981A3 ONLY).....	0913 00
REPLACE NBC AIR PURIFIER AND FRAME (M58 ONLY).....	0914 00
REMOVE/INSTALL NBC HOSE ASSEMBLIES (M58 ONLY).....	0915 00
REPLACE NBC ORIFICE CONNECTOR ASSEMBLY, MOUNTING BRACKET, AND SWITCH (M58 ONLY).....	0916 00
REMOVE/INSTALL NBC CABLE ASSEMBLY (M58 ONLY).....	0917 00
INSTALL/REMOVE CHEMICAL AGENT AUTOMATIC ALARM KIT (M113A3 ONLY).....	0918 00
REPLACE CHEMICAL ALARM JUNCTION BOX/POWER CABLE/ALARM CABLE (M113A3 ONLY).....	0919 00
REPAIR CHEMICAL ALARM JUNCTION BOX (M113A3 ONLY).....	0920 00
REPLACE/REPAIR CHEMICAL ALARM SPARE BATTERY BRACKET (M113A3 ONLY).....	0921 00
REPLACE CHEMICAL ALARM REFILL TRAY BRACKET (M113A3 ONLY).....	0922 00
REPLACE CHEMICAL ALARM M43 UNIT INTERFACE WIRING HARNESSSES (M113A3 ONLY).....	0923 00
 CHAPTER 31 — UNIT SUPPORTING INFORMATION	
REFERENCES.....	0924 00
MAINTENANCE ALLOCATION CHART (MAC).....	0925 00
COMMON TOOLS AND SUPPLEMENTS AND SPECIAL TOOLS/FIXTURES LIST.....	0926 00
FABRICATED TOOLS.....	0927 00
EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST.....	0928 00



## HOW TO USE THIS MANUAL

### HOW TO USE THIS MANUAL

This manual tells you how to perform unit maintenance for the M113A3, M577A3, M901A3, M981A3, M1059A3, M1064A3, M58, and M1068A3 carriers.

Before starting a task or procedure, make sure you have read this HOW TO USE section and the General Maintenance Procedures Work Package.

### WHAT'S IN THE MANUAL — FRONT TO BACK

This TM is divided into chapters and front and rear matter. The chapters are further divided into Work Packages (WPs) for ease of use.

The WARNING SUMMARY section provides safety and first aid information. This section includes general warnings not found in the TM text and a list of the most important detailed warnings extracted from the WPs. All of these warnings cover hazards that could kill or injure personnel.

The TABLE OF CONTENTS lists the WPs in each chapter.

CHAPTER 1 covers General Information, Equipment Description and Data, Theory of Operation, and Repair Parts, Special Tools, TMDE, and Support Equipment. The Equipment Description WP gives a brief description of major parts and features of the vehicle. The Theory of Operation WP provides information that will help you understand how the vehicle components work.

CHAPTER 2 contains the troubleshooting WPs, which are used to find the cause of vehicle malfunctions.

CHAPTERS 3 through 30 includes the Preventive Maintenance Checks and Services (PMCS) and other maintenance WPs. These WPs contain all the maintenance procedures authorized at the unit level.

CHAPTER 31 provides supporting information for the TM. It includes the following WPs:

The REFERENCES WP lists references to be used by personnel in operating and maintaining the carrier. These references include technical manuals and other publications.

The MAINTENANCE ALLOCATION CHART (MAC) WP contains a listing for the hull.

The EXPENDABLE/DURABLE SUPPLIES AND MATERIALS WP lists expendable supplies and materials used to maintain or repair the carrier.

The COMMON TOOLS AND SUPPLEMENTS AND SPECIAL TOOLS/FIXTURES WP lists the common tools, supplements, and special tools used to maintain or repair the carrier.

The FABRICATED TOOLS WP lists fabricated tools used to maintain or repair the carrier.

The INDEX is an alphabetical listing of all the major controls, procedures, indicators, systems, and subsystems covered in this manual. Each entry is cross-referenced to the WP number and page number.

ELECTRICAL WIRING DIAGRAMS for each carrier are at the end of the manual

DA FORM 2028-2 is used to report errors and to recommend improvements for procedures in this manual. Three blank DA Forms 2028-2 are in the back of this manual. A sample is provided to show you how to fill out the DA Form 2028-2.

The back cover includes a METRIC CONVERSION CHART that can be used to convert U.S. customary measurements to their metric equivalents. Measurements in this manual are given in U.S. customary unit with metric units in parentheses.

### USING YOUR MANUAL ON THE JOB

The best way to learn about this manual is to practice using it. Knowing how to use this manual will save both time and energy.

### HOW TO USE THE WORK PACKAGES

#### How to find the WP you need

Pick a key word from the vehicle part or system to be used. Look in the INDEX for this key word or the name of the action you will perform. Turn to the WP and page indicated.

## HOW TO USE THIS MANUAL (cont)

The INDEX lists each WP under one or more headings. For example, the WP titled REPLACE TOWING PINTLE could be found under the two headings “Pintle”, and “Towing”.

### How to read the WP

Pay attention to all **warnings**, **cautions** and **notes**. These can appear in all types of procedures. They help you avoid harm to yourself, other personnel, and equipment. They also tell you things you should know about the procedure.

Before you start a procedure, get all the tools, supplies, and personnel you need to do the procedure. These items will be listed in the INITIAL SETUP of the WP.

Start with step 1 and do each step in the order given. Numbered primary steps tell you WHAT to do. Alpha substeps tell you HOW to do it.

### Maintenance Procedures WPs

Maintenance Procedures WPs keep the carrier in shape to operate. Maintenance Procedures are used to present maintenance instructions. Each maintenance procedure details steps which you need to perform. If the vehicle and parts need maintenance that is not included in any procedure in the manual, notify your supervisor.

Read the INITIAL SETUP section carefully before you start any procedure. Get the tools and supplies listed and the personnel needed. Be sure the equipment is in the condition required.

Read all of the WP before starting. Follow the steps in the order given.

FOLLOW-THROUGH STEPS tell you what to do after the maintenance task is done. The words END OF TASK will tell you when you have finished the procedure.

### Troubleshooting WPs

Troubleshooting WPs help you locate faulty parts. They direct you to the maintenance procedure to correct these faults. Chapter 2, Troubleshooting contains detailed information on how to perform troubleshooting procedures. Read HOW TO USE TROUBLESHOOTING WP 0005 00 before performing the troubleshooting procedures in the chapter.

### Preventive Maintenance Checks and Services (PMCS) WP

Preventive maintenance is required to keep your carrier in good running condition. The PMCS procedures for unit maintenance are performed on a periodic basis.

There are two types of PMCS for the vehicle, as follows:

The SEMI—ANNUAL PMCS must be done every 6 months or every 1,500 miles.

The ANNUAL PMCS must be done annually.

If anything seems wrong with the vehicle systems and you cannot fix it yourself, notify unit maintenance. Common things to watch for are loose bolts or damaged welds. Watch for worn insulation, loose clamps, and loose connectors when checking wiring harnesses.

## DEFINITION OF WP TERMS

### Warnings, Cautions, And Notes

Pay attention to all warnings and cautions within the WP. Ignoring a warning could cause death or injury to yourself or other personnel. Ignoring a caution could cause damage to equipment. Notes contain facts to make the procedure easier. Warnings, cautions, and notes always appear just above the step to which they apply.

#### **WARNINGS**

Call attention to things that could kill or injure personnel. Warnings are also listed in the Warning Summary section (page a).

#### **CAUTIONS**

Call attention to actions or materials that could damage equipment.

## HOW TO USE THIS MANUAL (cont)

### NOTES

Contain important facts to make the procedure easier.

### Helper

Helpers are needed in procedures that require more than one person. A helper may be needed to help lift objects or act as an outside observer.

If a helper is needed to perform a procedure, the INITIAL SETUP will list “Helper (H)” under the PERSONNEL REQUIRED heading.

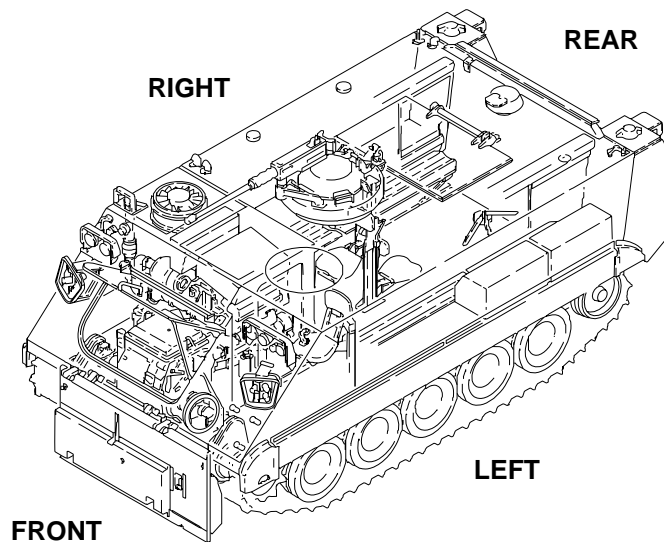
If a helper assists with a step or substep, the step or substep will include: “Have helper assist”.

If a helper performs the action alone, the step will start with “(H):”.

### Locational Terms

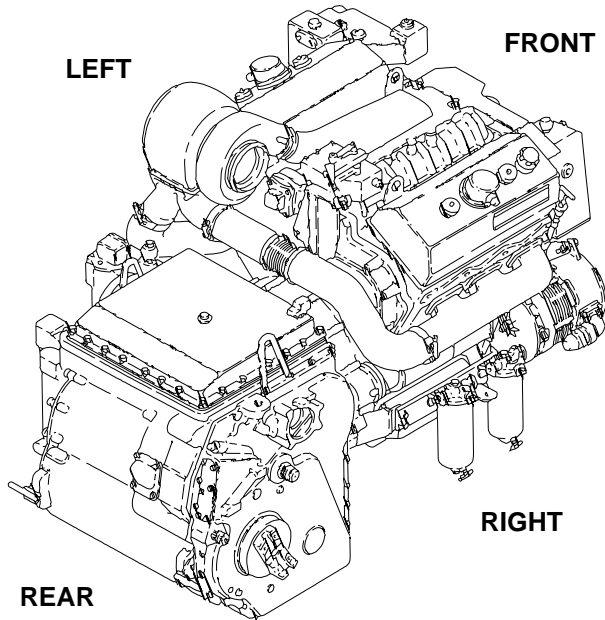
The terms “front”, “rear”, “left”, and “right” are used to indicate where items are located on the vehicle. The point of reference for these terms is different for *Carrier* items and *Power Unit* items. (Carrier items are items which are not on the power unit. Power unit items are items on the engine or transmission.)

If you are working with carrier items, use this point of reference. Think of the location as if you were sitting in the driver’s seat looking out the hatch.



## HOW TO USE THIS MANUAL (cont)

If you are working with power unit items, use this point of reference. Think of the location as if you were standing at the transmission end of the power unit and facing the flywheel. This rule applies whether the power unit is IN or OUT of the carrier.



### REFERENCES

References within a procedure refer to a different manual or to another procedure in the same manual. They are found in the INITIAL SETUP and in the FOLLOW-THROUGH steps. For example:

MASTER SWITCH OFF (see your -10)

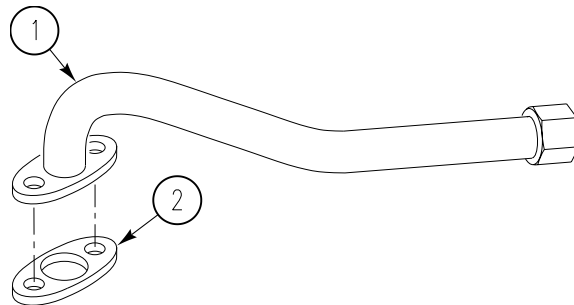
Battery ground lead disconnected (WP 0337 00, WP 0338 00, or WP 0339 00)

For all procedures, the following comments apply:

- Parts which are discarded when removed will be referred to as “new” in the procedure step when installed. Examples are: gaskets, lockwashers, some preformed packings, and some retaining rings.
- These and other new parts are listed under MATERIALS/PARTS in the INITIAL SETUP.

### GENERAL MAINTENANCE

Cleaning, inspecting, checking for leaks, and similar procedures which apply to most procedures are found under PMCS and GENERAL MAINTENANCE INSTRUCTIONS (WP 0155 00). Use these steps to clean and inspect any part being removed, repaired, or installed. Special cleaning will be covered in the procedure step. Below is a step that would require general cleaning.



5. Remove gasket (2) from upper tube flange (1). Discard gasket.

## HOW TO USE THIS MANUAL (cont)

After performing this step, you would clean the mating surface with cleaning compound and a wiping rag according to the general cleaning procedures. In other procedures, hoses or rubber hatch seals will need to be checked for leaks. Refer to PMCS and GENERAL MAINTENANCE INSTRUCTIONS (WP 0155 00) for general procedures.

### HOW TO USE THE REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) WITH THIS MANUAL

The RPSTL, TM 9-2350-277-24P, gives the National Stock Number (NSN) required to order parts used in the maintenance procedure. To use the RPSTL to identify and order a part, do the following:

1. In this manual, turn to the first page of the procedure to be performed.
2. Find Materials/Parts under INITIAL SETUP and read the part(s) that need replacement. If required, find the illustrated part in the procedure steps.
3. Go to the RPSTL and find the same illustrated part. That part will have an item number assigned to it. Look this item number up in the listing for that figure. Use the figure and item number index to find the NSN.
4. If you inspect an item and find that it is damaged, go to the RPSTL and find the SMR code for the item. If the SMR code does not authorize you to repair the item, reassemble it and send it to the authorized level of maintenance.
5. The usable on code in the RPSTL appears in the lower left corner of the Description column heading. Usable on codes are shown as 'UOC.... ...' in the Description column (justified left) on the first line following the item description/nomenclature. Uncoded items are applicable to all models. Identification of the usable on codes in the RPSTL are:

#### RPSTL Usable Codes

Code	Used on
APC	M113A3 Carrier, Personnel
AP5	M577A3 Carrier, Command Post
AP7	M901A3 Carrier, Anti-Tank (TOW)
AP1	M981A3 Carrier, Fire Support Team
AP2	M1064A3 Carrier, 120mm Mortar
AP6	M1059A3 Carrier, Smoke Generator
AP3	M1068A3 Carrier, Standardized Integrated Command Post System (SICPS)
AP8	M58 Carrier, Mechanized Smoke Obscurant





CHAPTER 1

UNIT INTRODUCTORY INFORMATION WITH THEORY OF OPERATION

---

**WORK PACKAGE INDEX**

---

<u>Title</u>	<u>Sequence No.</u>
GENERAL INFORMATION.....	0001 00
EQUIPMENT DESCRIPTION.....	0002 00
THEORY OF OPERATION.....	0003 00
REPAIR PARTS, SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT.....	0004 00



---

**GENERAL INFORMATION**

---

**0001 00**

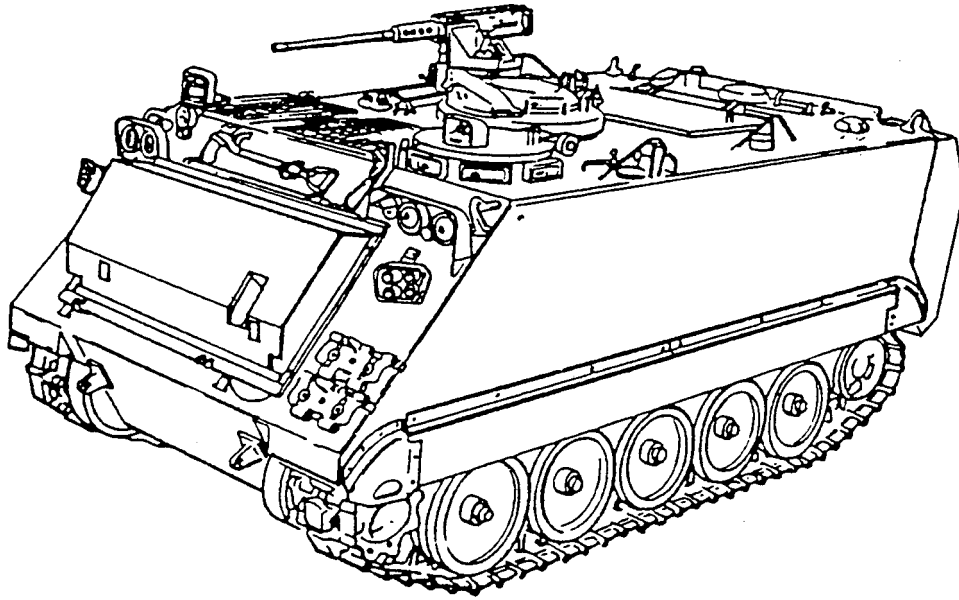
**SCOPE**

**Type of Manual:** Unit Maintenance

**Equipment Model Number, Name, and Purpose:**

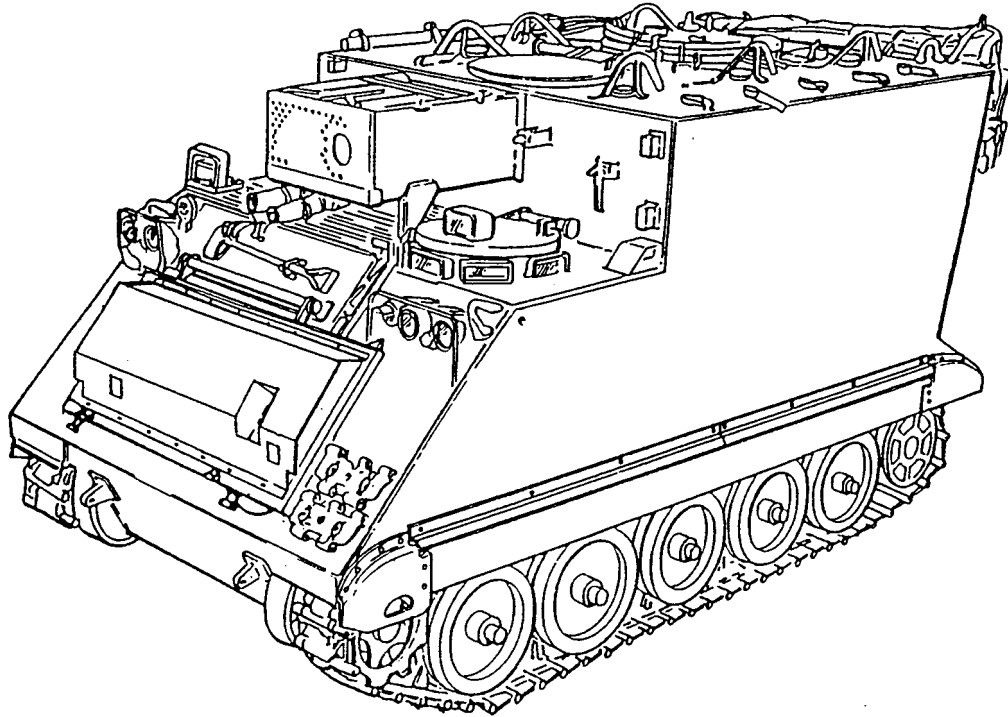
**M113A3** – Armored Full Tracked Personnel Carrier

Purpose: Transportation and positioning combat troops and supplies.



**M577A3** – Light Tracked Command Post Carrier

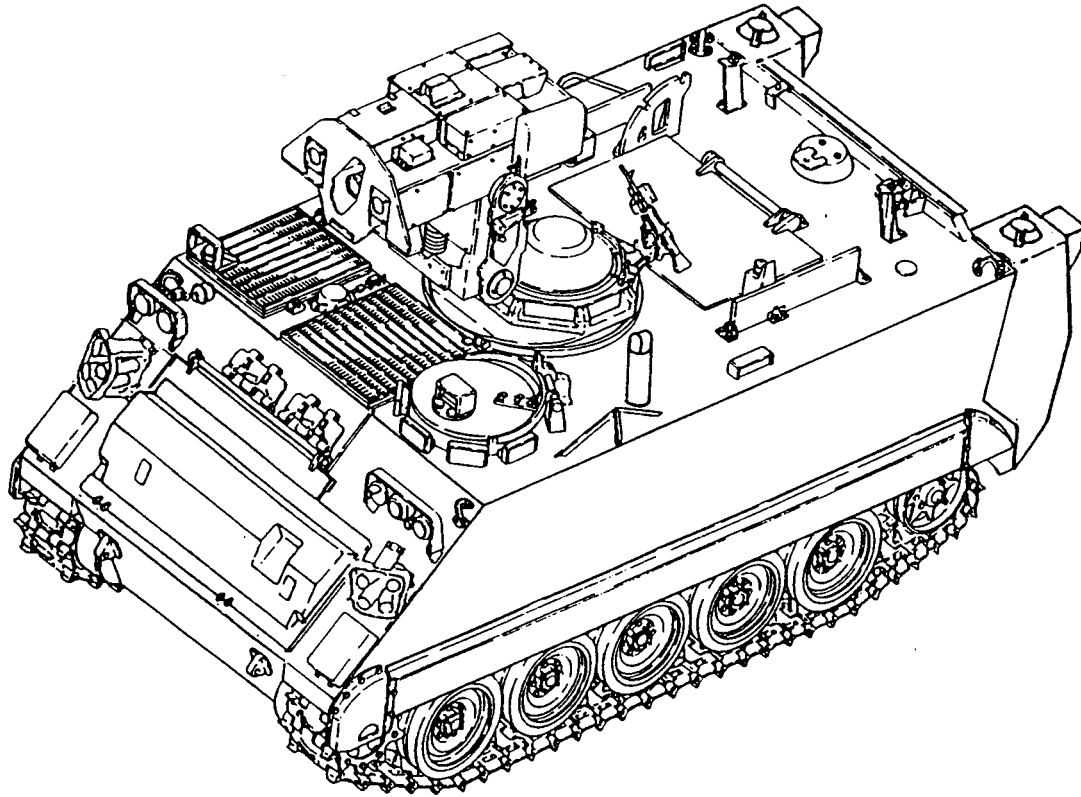
Purpose: Provides protection and mobility for field commanders in a tactical environment.



**M901A3** – Armored Full Tracked Anti-Tank (TOW) Carrier

Purpose: Provides mobility for heavy anti-tank weapon designed and built to attack and defeat armored vehicles and other targets such as field fortifications.

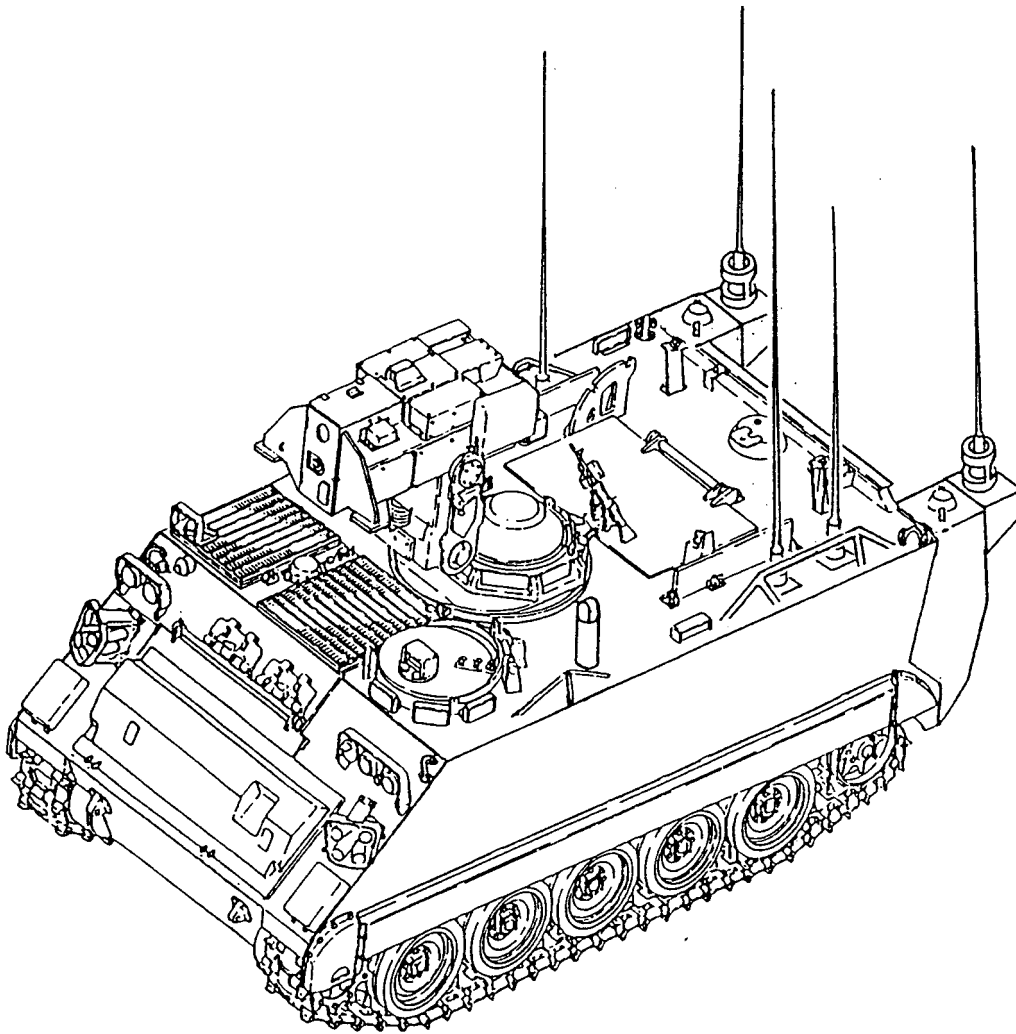
Other Applicable Manuals: See TM 9-2350-259-10, TM 9-2350-259-20, and TM 9-2350-259-24P for Operator's instructions, Unit maintenance, and repair parts for the turret and related parts.



**M981A3** – Armored Full Tracked Fire Support Personnel Carrier

Purpose: Provides mobile operating base for target location, designation, and communication by a Fire Support Team in support of a maneuver company.

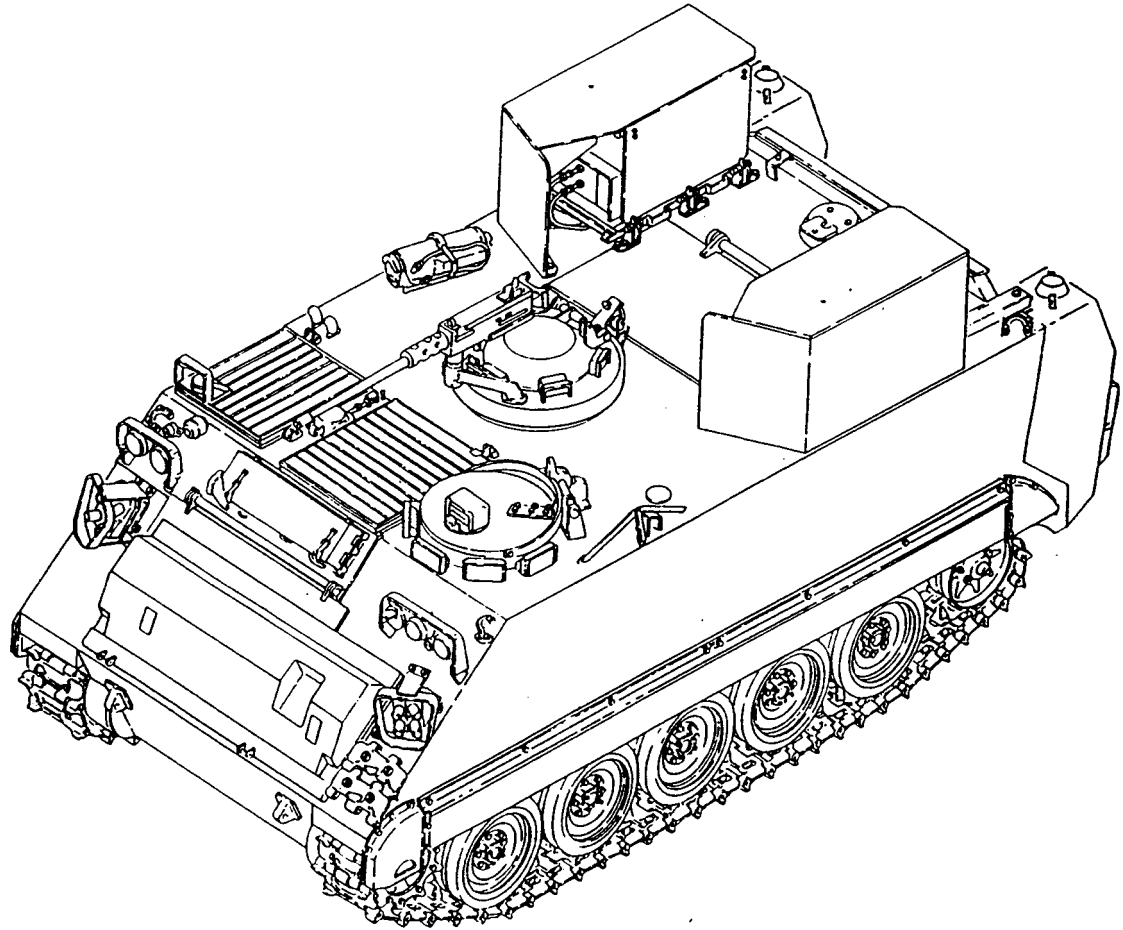
Other Applicable Manuals: See TM 9-2350-266-10, TM 9-2350-266-20, and TM 9-2350-266-24P for Operator's instructions, Unit maintenance, and repair parts for the turret and related parts.



**M1059A3** – Full Tracked Smoke Generator Carrier

Purpose: Designed to generate a smoke screen in the battlefield environment.

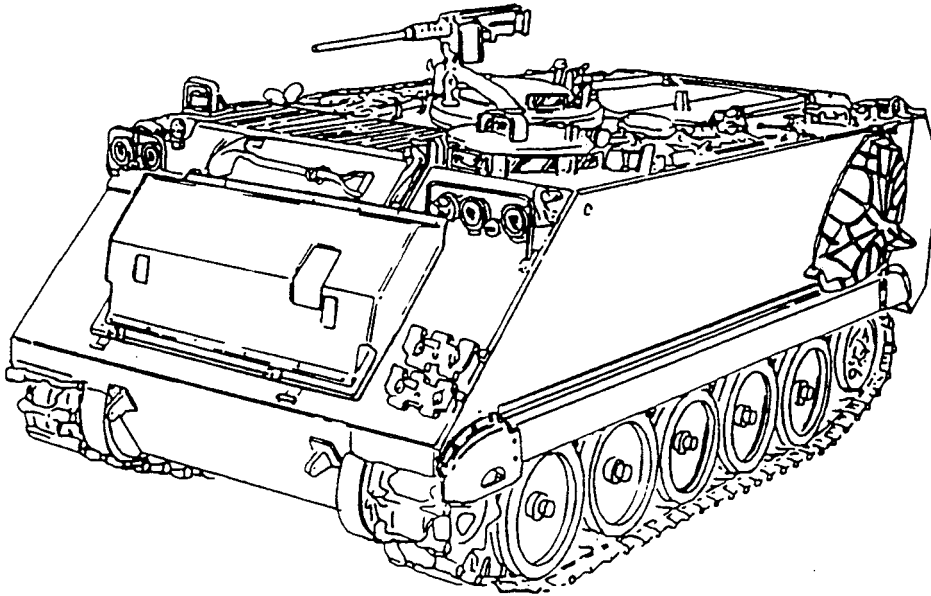
Other Applicable Manuals: See TM 3-1040-279-12&P for Operator's instructions, Unit maintenance, and repair parts for Smoke Generator Set M157A2.



**M1064A3** – Self-propelled 120-mm M121 Mortar Carrier

Purpose: Provides mobility for the 4.7-inch (120-mm) Mortar M121 or M120. The M121 can be fired from a turntable mounted in the carrier. The M120 can be fired from a portable mount off the carrier.

Other Applicable Manuals: See TM 9-1015-250-23 and TM 9-1015-250-23P for Unit and DS maintenance and repair parts for the 4.7-inch (120-mm) Mortar M121 or M120.



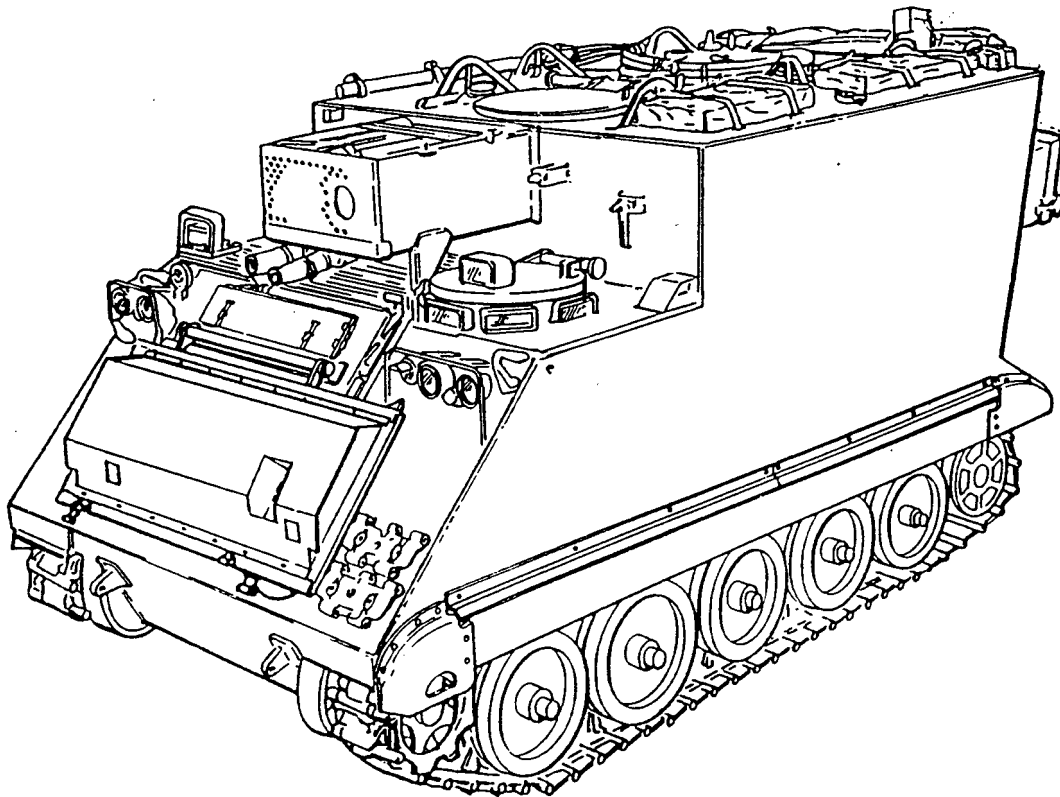


**M1068A3** – Standardized Integrated Command Post System (SICPS) Carrier

Purpose: Designed as a command post and field office to support the various configurations and installation layouts of the Army Tactical Command and Control System (ATCCS) and provide protection for field commanders in a tactical environment.

Other Applicable Manuals: See TM 11-7010-256-12&P for Operator's instructions, Unit maintenance, and repair parts for SICPS Equipment.

See TM 10-5410-229-13&P for Operator's instructions, Unit and DS maintenance, and repair parts for the Modular Command Post System (MCPS) tent and related parts.

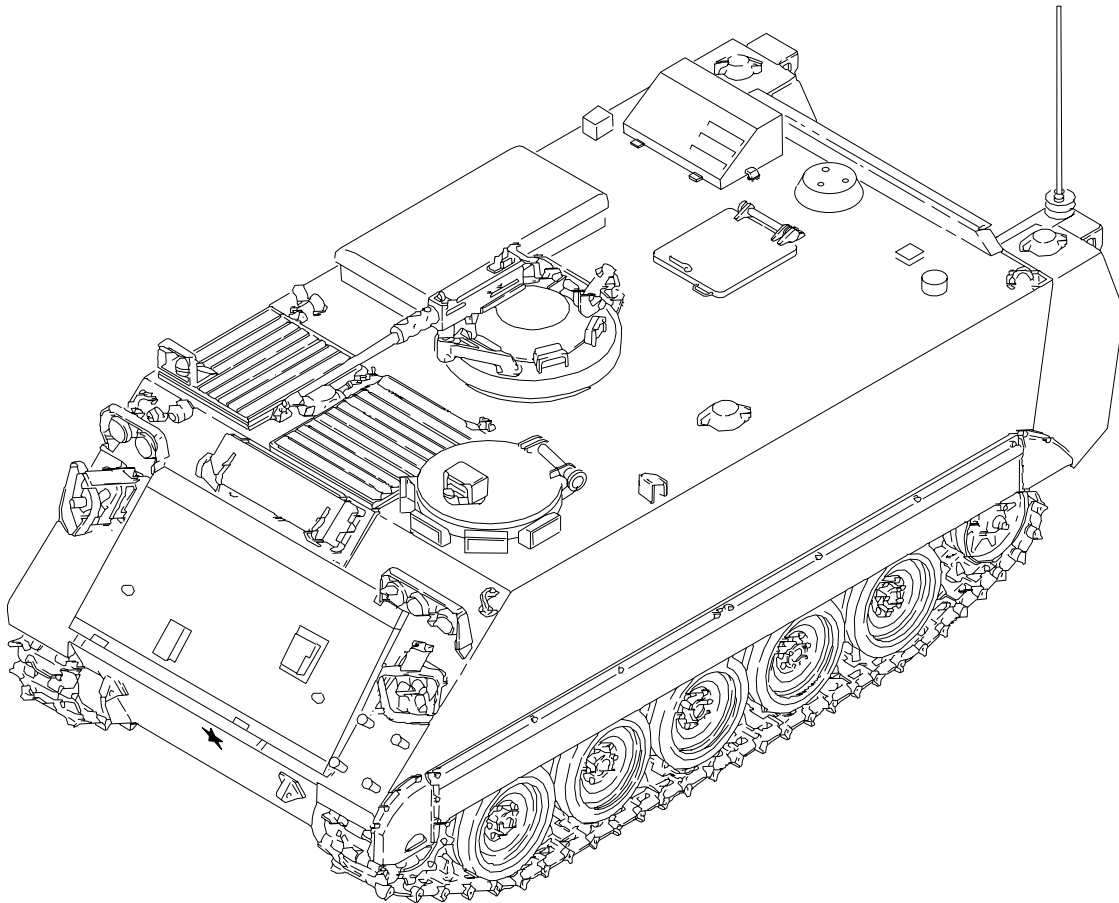


**M58** – Mechanized Smoke Obscurant Chassis

Purpose: Designed to provide large area smoke screens in support of various tactical situations. Smoke can be generated in a static position or on the move.

Other Applicable Manuals: See TM 3-1040-285-10 for Operator's instructions for the Mechanized Smoke Obscurant System Smoke Generator.

See TM 3-1040-285-20 for Unit Maintenance for the Mechanized Smoke Obscurant System Smoke Generator.



**MAINTENANCE FORMS, RECORDS, AND REPORTS**

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pamphlet 738-750, The Army Maintenance Management System (TAMMS).

**REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)**

If your carrier 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. Tell us why a procedure is hard to perform. Put your ideas on an SF 368 (Quality Deficiency Report). Mail it to us at: Commander, US Army Tank and Automotive Armaments Command, ATTN: AMSTA-AC-NML, Rock Island, IL 61299-7360. We will send you a reply.

**DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE**

See the following technical manuals for information on destruction of Army materiel:

- TM 750-244-2
- TM 750-244-5-1
- TM 750-244-6
- TM 750-244-7

**PREPARATION FOR STORAGE OR SHIPMENT**

For information about administrative storage or shipment, see the following documents:

**Preparation for Storage or Shipment**

Specification	Applicable Carriers
MIL-DTL-45360	M113A3, M1064A3, M1059A3, M58
MIL-C-46746E(AT)	M577A3 & M1068A3
MIL-C-62327B(AT)	M901A3 (Less TOW Weapon) & M981A3

**NOMENCLATURE CROSS-REFERENCE**

This listing includes nomenclature cross references used in this manual.

<b>Adapter</b>	Nipple, pipe, union
<b>Battery clamp</b>	Battery terminal adapter
<b>Battery clamp</b>	Terminal lug
<b>Bilge pump</b>	Rotary pump
<b>Breather</b>	Air filter intake
<b>Bulb</b>	Incandescent lamp
<b>Coolant gauge</b>	Temp indicator
<b>Detector</b>	Liquid transmitter
<b>Dipstick</b>	Liquid level gauge rod
<b>Drain plug</b>	Pipe plug
<b>Engine oil filter</b>	Fluid pressure filter
<b>Engine oil gauge</b>	Dial pressure gauge
<b>Exhaust collector</b>	Exhaust connection
<b>Fastener</b>	Toggle pin
<b>Fire bottle</b>	Compression gas cylinder
<b>Fluid level detector</b>	Liquid transmitter
<b>Fuel control cable</b>	Fuel control
<b>Fuel filter</b>	Fluid filter
<b>Fuel gauge</b>	Liquid quantity gauge
<b>Gear box</b>	Mechanical housing
<b>Grease fitting</b>	Lubrication fitting
<b>Hand brake</b>	Parking brake lever

<b>Hatch</b>	Hatch cover
<b>Hinge pin</b>	Headless straight pin
<b>Hinge pin</b>	Machine bolt
<b>Horn switch</b>	Push switch
<b>Hub</b>	Support
<b>Hydraulic power unit</b>	Ramp power unit
<b>Indicator light</b>	Indicator lamp
<b>Inlet grill</b>	Intake grill
<b>Jack</b>	Receptacle
<b>Jamnut</b>	Hexagonal nut
<b>Key washers</b>	Locking plates
<b>Link</b>	Plain rod bearing
<b>Locknut</b>	Self-locking nut
<b>Lockscrew</b>	Self-locking bolt
<b>Parking brake lever</b>	Manual control lever
<b>Plug</b>	Connector
<b>Propeller shaft</b>	Flexible drive shaft
<b>Quick disconnect</b>	Quick coupling half
<b>Road wheel</b>	Solid rubber wheel
<b>Rod</b>	Connecting link
<b>Screen</b>	Metal grill
<b>Screw</b>	Machine bolt
<b>Shim</b>	Spacer
<b>Shim pack</b>	Spacer assortment
<b>Splined shaft</b>	Output carrier
<b>Starter switch</b>	Interlock switch
<b>Stop light</b>	Taillight
<b>Stowage box</b>	Vehicular accessory box
<b>Tie strap</b>	Electric tiedown strap
<b>Switch</b>	Circuit breaker
<b>Throttle control cable</b>	Throttle control
<b>Towing pintle</b>	Pintle hook latch
<b>Turn signal assembly</b>	Vehicle directional light
<b>Universal joint</b>	Universal joint spider

**METRIC EQUIVALENTS**

Metric equivalents are used throughout this manual. Metric symbols and units are:

**Metric Equivalents**

<b>SYMBOL</b>	<b>UNIT</b>
C	Celsius
cc	cubic centimeter
cm	centimeter
j	joule
kg	kilogram
kg/min	kilogram per minute
km	kilometer
km/h	kilometer per hour
kPa	kilopascal
kw hr	kilowatt hour
l	liter
m	meter
mm	millimeter
N·m	Newton-meters

**SAFETY, CARE, AND HANDLING**

Read warnings in WARNING SUMMARY.

---

**EQUIPMENT DESCRIPTION**

---

**0002 00****CAPABILITIES AND FEATURES**

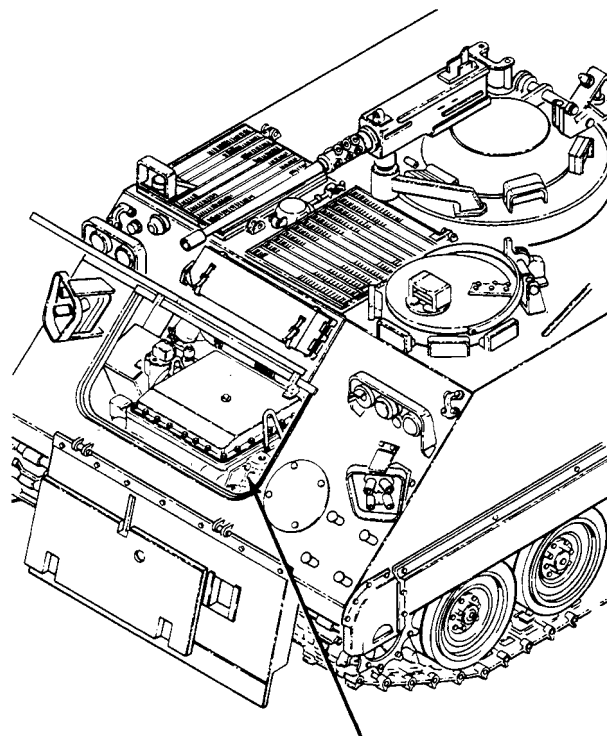
For equipment characteristics, capabilities, and features, see your -10.

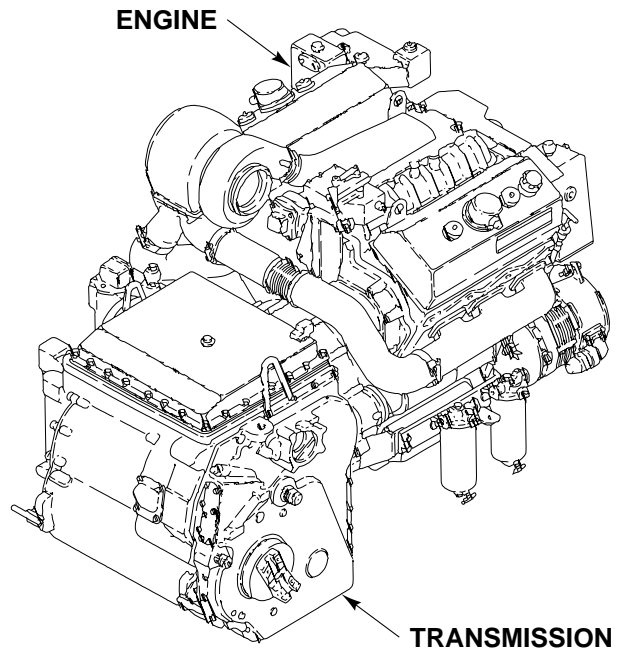
**LOCATION AND DESCRIPTIONS OF MAJOR COMPONENTS****ENGINE**

A six-cylinder, turbocharged diesel engine (6V53T) is located in the power plant compartment.

**TRANSMISSION**

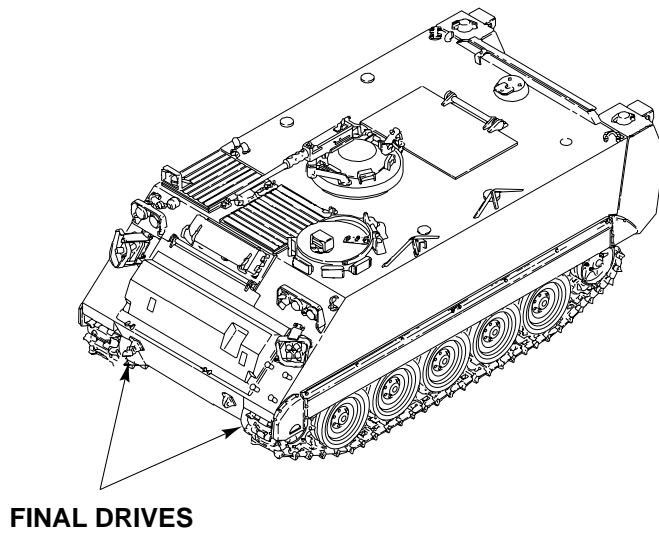
A hydrostatic transmission (X200-4) connects to the engine and powers the final drives.

**POWER PLANT COMPARTMENT**



**FINAL DRIVES**

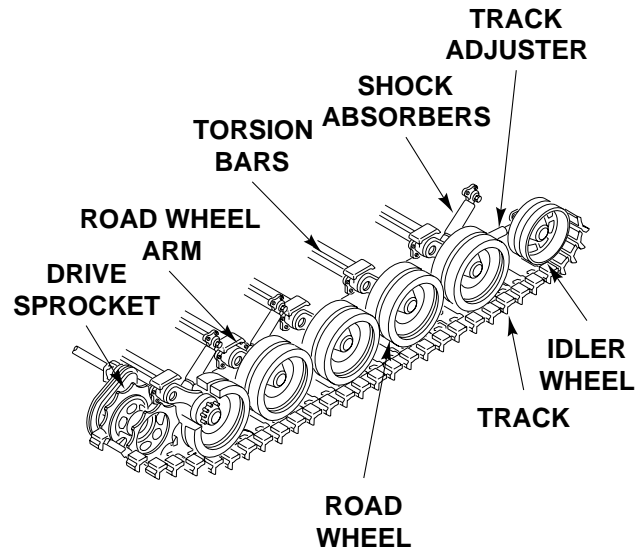
Final drives attach to the transmission by propeller shafts. They deliver power to drive sprockets at the front of the carrier.





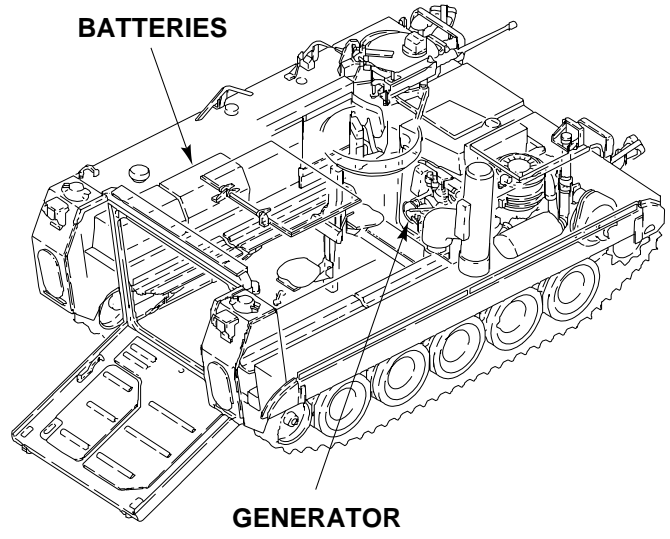
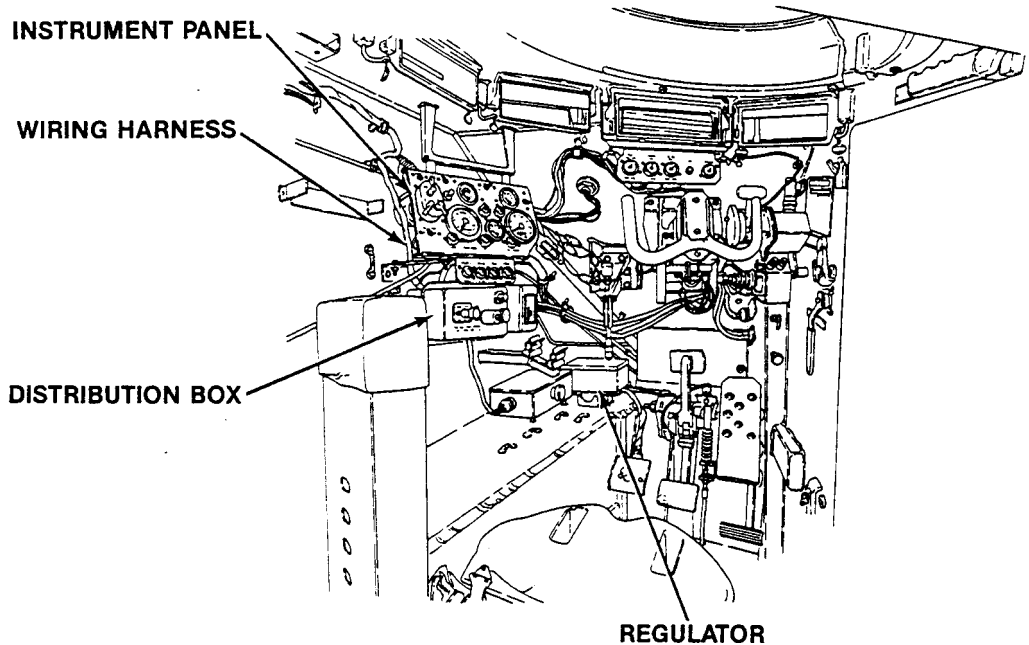
**TRACKS AND SUSPENSION**

Drive sprockets at the front of the carrier drive the two tracks. Torsion bars and shock absorbers attach to road wheels and provide suspension.



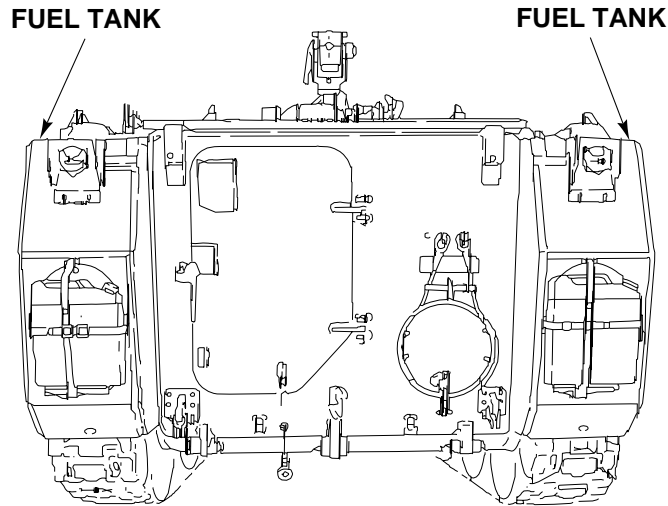
**ELECTRICAL**

Four 12-volt batteries supply electricity through the distribution box to the carrier. On the M113A3, M901A3, M981A3, and M1059A3 carriers, the four batteries are located on the left sponson. On the M577A3 and M1068A3 carriers, the four batteries are located on the right sponson next to the personnel heater. On the M1064A3 carrier, two batteries are located in a drawer on the left sponson behind the driver and two batteries are located under the right personnel seat.



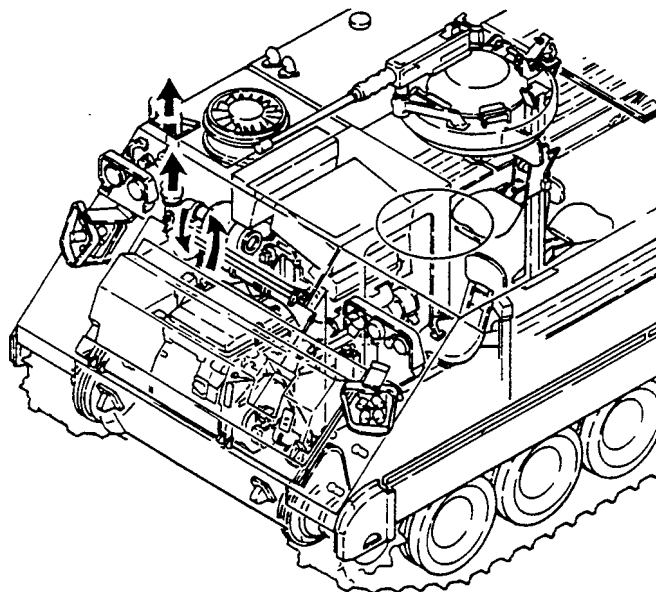
**FUEL SYSTEM**

The M113A3, M901A3, M981A3, M1059A3, and M1064A3 carriers have two external fuel tanks located at the rear of the carrier on each side of the ramp. Total capacity is 95 gallons. The M577A3 and M1068A3 carriers have two internal fuel tanks located on the rear left and right sponsons. Total capacity is 120 gallons.



**EXHAUST SYSTEM**

The exhaust system drives the turbocharger and carries exhaust gases through manifolds and the muffler.



**DIFFERENCES BETWEEN CARRIERS**

This manual covers seven different carriers. The major differences can be determined from the chart below. Minor differences are described under SCOPE in each chapter or section.

**Table 1.**

DIFFERENCES BETWEEN CARRIERS								
Equipment	M113A3	M577A3	M901A3	M981A3	M1059A3	M1064A3	M1068A3	M58
Fuel Tanks:								
External	X	—	X	X	X	X	—	X
Internal	—	X	—	—	—	—	X	—
Turret	—	—	X	X	—	—	—	—
Commander's Cupola	X	—	—	—	X	X	—	X
Cargo Hatch	X	—	X	X	X	—	—	—
Armament:								
50 Caliber Machine Gun	X	—	—	—	X	X	—	X
7.62-mm Machine Gun	—	—	X	X	—	—	—	—
120-mm Mortar	—	—	—	—	—	X	—	—
TOW2 Missile LCHR	—	—	X	—	—	—	—	—
Sighting Materiel:								
Periscope M17	X	X	X	X	X	X	X	X
Periscope, Squad LDR	—	—	X	X	—	—	—	—
Nightstand AN/TAS-4	—	—	X	—	—	—	—	—
Missile Launcher Sight	—	—	X	—	—	—	—	—
Driver's Night Vision AN/VVS-2	X	X	X	X	X	X	X	—
Smoke Generator	—	—	—	—	X	—	—	X
ATCCS Common Hardware	—	—	—	—	—	—	X	—
Fiber Optics	—	—	—	—	—	—	X	—
Tent/Covered Ext.	—	X	—	—	—	—	X	—
5.0 KW Auxiliary Power Unit	—	X	—	—	—	—	X	—

**EQUIPMENT DESCRIPTION — Continued**

**0002 00**

DIFFERENCES BETWEEN CARRIERS								
Equipment	M113A3	M577A3	M901A3	M981A3	M1059A3	M1064A3	M1068A3	M58
4.2 KW Generator Set and Cover	—	X	—	—	—	—	X	—
Air Grille Curtain	—	—	—	—	—	X	—	—
Standard Personnel Heater	—	X	—	—	—	—	X	—
Kits:								
Personnel Heater	X	—	X	X	X	X	—	X
Engine Coolant Heater	X	X	X	X	X	X	X	X
Artillery	—	X	—	—	—	—	X	—
Communication	—	—	—	—	X	—	—	—
Capstan & Anchors	—	—	—	—	—	—	—	—
Chemical Agent Auto Alarm	X	—	—	—	—	—	—	—
Driver's Windshield	X	X	X	X	X	X	X	X
Litter	X	—	—	—	—	—	—	—
Machine Gun Armor Shield	X	—	—	—	—	X	—	—
NBC Mounting	X	X	—	—	—	X	X	X
Non-Skid Ramp	—	—	—	—	—	X	—	—
Smoke Grenade Launcher	X	—	X	X	X	—	—	X

**EQUIPMENT DATA**

For equipment data, see your -10.



---

**THEORY OF OPERATION**

---

**0003 00****SCOPE**

This section describes how major systems and components of the carrier operate. An understanding of how each part functions in a system and how components relate to each other will help solve possible maintenance problems with the carrier.

**POWER PLANT**

The power plant consists of the diesel engine and transmission. The fuel, exhaust, cooling, starter, generator, and engine air systems are support systems for the power plant.

**DIESEL ENGINE**

The diesel engine is the primary source of power for the carrier. The engine converts air and diesel fuel into energy and delivers this power to the transmission.

**STARTER**

The engine is equipped with a heavy duty starter. The starter, with built-in solenoid, is used to crank the engine for starting.

**GENERATOR**

The generator is part of the carrier electrical system. It is driven directly by engine power. The generator charges the batteries in the carrier when the engine is running. A regulator mounted in the driver's compartment keeps the voltage at correct levels.

**OIL SYSTEM**

Oil system provides lubrication for the engine. Oil is cycled throughout the engine by a pump. The pump is located under the front of the engine. An oil filter cleans the oil, and an oil cooler reduces oil temperature.

**FUEL SYSTEM**

Diesel fuel is stored in two fuel tanks located at the rear of the carrier. Fuel is drawn from fuel tanks by the fuel pump which pumps fuel through filters to the engine injectors. The injectors force fuel into combustion cylinders where it is mixed with air and changed into energy.

**TRANSMISSION**

The carrier uses hydromechanical transmission with hydrostatic steering. The transmission has its own oil system with filters and separately mounted oil cooler. This transmission oil system is separate from the engine oil system.

The transmission delivers power from the engine to the left and right final drives. The left and right final drives are driven by propeller shafts. The final drives deliver power to drive sprockets in the suspension system.

**EXHAUST SYSTEM**

Major exhaust system parts are the turbocharger, exhaust manifolds, muffler, and exhaust pipes.

The turbocharger is driven by exhaust gases from the engine. The turbocharger helps the engine develop more power and operate more efficiently. The exhaust manifolds carry the exhaust gases to the turbocharger from the engine. The muffler cuts down engine noise and allows exhaust to escape through the exhaust pipes to outside of the carrier.

**COOLING SYSTEM**

The cooling system cools the engine and transmission. It consists of a fan, fan drive, fan speed control assembly, radiator, coolant pump, auxiliary tank, transmission oil cooler, engine oil cooler, and thermostats. The cooling system contains

approximately 14.8 gallons of liquid coolant. The liquid coolant is cycled through the engine and transmission oil cooler by the coolant pump. This process keeps the engine and transmission temperature in a safe operation range.

As coolant flows through the engine, it absorbs heat from the engine and transmission. The heated coolant then flows to the radiator to remove coolant heat. The coolant fan pulls outside air in and through the radiator to remove heat. The fan is powered by the engine through a fan drive.

The radiator auxiliary tank acts as an overflow tank to keep the cooling system from overpressurizing. It also removes air from the engine coolant. There is a low coolant level transmitter to signal the operator if more coolant is needed.

## **ENGINE AIR SYSTEM**

The engine air system allows air to enter the engine. The air cleaner cleans air that enters the engine. Dust is drawn out through a scavenge outlet. Air is filtered through a reusable filter element before delivery to the engine. An air filter indicator shows when the element is clogged and needs cleaning or replacing. After being filtered, the air moves through the turbocharger and into the engine cylinders.

## **AUXILIARY AUTOMOTIVE SYSTEM**

The auxiliary automotive system includes driver controls, fuel cells, personnel heater, bilge pumps, crew ventilation system, and fire suppression system.

## **DRIVER CONTROLS**

The driver controls regulate the engine, transmission, and steering braking systems of the carrier.

The fuel shutoff control is used to stop the supply of fuel to the engine injectors. To start the engine, the driver must open the valve. The throttle linkages are used to control the engine speed. The gear selector allows the driver to choose the proper gear for the carrier. The steering system controls the direction of the carrier. The steering control consists of a steering wheel and linkage connected to the transmission.

The brake system allows the driver to stop a moving carrier and hold the carrier in position. The braking system consists of the service brake and the parking brake. The service brakes are hydraulic and applied by pedal. The parking brake mechanically locks the transmission brakes to prevent carrier movement. Also, the system has levers, rods, shafts, and linkages connecting to the brake shaft of the transmission.

## **PERSONNEL HEATER**

The personnel heater system provides heat inside the carrier. Major parts are the combination combustion chamber/heat exchanger, blowers, a fuel pump, and an electrical control and safety system. The heater operates using diesel fuel drawn from the fuel tanks. Fuel is delivered to the combustion chamber from the fuel pump. Outside air is drawn into the combustion chamber by one of the blowers. A blower draws air from the crew compartment into the combustion chamber. The air is warmed by heat by the combustion process and then returned to the crew compartment.

## **BILGE PUMPS**

Two electrically driven bilge pumps remove water and other liquids from the hull. Water enters the pumps through a screened inlet. The pumps force water out of the carrier through outlet tubes. The bilge pumps are controlled by a switch on the driver's instrument panel.

## **HYDRAULIC SYSTEM**

The ramp is raised or lowered by an hydraulic system which consists of a pump, a cylinder, a control valve, and an hydraulic tank. This system is controlled by a three position valve located near the driver. Moving the valve to either RAISE or LOWER position directs fluid to the appropriate port on the ramp cylinder.



## FIRE EXTINGUISHER SYSTEM

The fire extinguisher system consists of two CO<sub>2</sub> (Carbon Dioxide) cylinders, one fixed and one portable. Carbon Dioxide can put out fires quickly and effectively. The fixed cylinder only extinguishes fires in the power plant compartment. It is located behind the driver and is actuated manually by a handle/knob on the cylinder or by an external handle connected to the cylinder by a cable. The portable fire extinguisher is located in the crew compartment and is manually discharged.

## SUSPENSION SYSTEM

The suspension system supports the carrier and delivers engine power to the road. It allows the carrier to maneuver and be stable. Suspension system parts are the drive sprockets, tracks, idler wheels, track tension adjuster, road wheels, and support arms. Also, there are torsion bars and shock absorbers.

The drive sprockets drive the tracks. They are powered by left and right final drives from the transmission. The tracks consist of two flexible chains of track shoes. The tracks ride on the drive sprockets and are guided by idler wheels. The idler wheels can be adjusted to maintain correct track tension.

There are five pairs of road wheels per side. Track centerguides fit between each pair of road wheels. Road wheels and torsion bars are connected to support arms. The torsion bars act as springs to keep the road wheels on the ground and from hitting the bottom of the carrier.

## ELECTRICAL SYSTEM

The electrical system provides power for the carrier. The system operates on wet cell batteries and includes charging, regulating and monitoring equipment. The batteries provide a normal operating 24 volts with an amperage capability of 200 amps per hour.

The batteries supply the carrier with electricity when the engine is off. All electrical power is delivered through the distribution box. Electrical power flows from the batteries through the distribution box, cables, and wiring assemblies to the electrical equipment. The hull is a ground for the electrical system.

The generator recharges the batteries and supplies electricity while the engine is running. The generator has 200 amps per hour capability.

There are several electrical subsystems within the hull. Each subsystem contains at least one wiring assembly. Major electrical subsystems and assemblies are:

*Interior and Exterior Lights.* Exterior lights include standard headlights, infrared headlights, taillights/stoplights, and blackout lights. Interior lights include domelights and panel lights.

*Starting and Charging.* A generator with a regulator keeps the batteries charged to operating voltage. A starter with a built-in solenoid is used to crank the engine for starting.

*Ventilation and Heating.* All carriers have a manual open-close ventilator located at the rear of the crew compartment. The M577A3, M981A3, and M1068A3 carriers also include an electric ventilation fan controlled by a switch on the master switch panel (M577A3 and M1068A3) or by a switch on the fan housing (M981A3). The personnel heater is controlled by a heater control box which provides electric power for starting and operating the heater. The control box is connected to the carrier batteries so that the heater can be operated without turning the MASTER SWITCH ON.

*Bilge Pumps.* Two pumps, one in the front and one in the rear of the carrier, remove any water that may have entered the carrier. Both pumps are controlled by a switch on the driver's instrument panel.

## SPECIAL EQUIPMENT

For information on special purpose kits, refer to Chapter 22.

## WINTERIZATION EQUIPMENT

Personnel heaters are standard equipment on M577A3, M901A3, M981A3, M1068A3, and M58 carriers. Since maintenance of heater components is the same for both standard heaters and kit heaters, they are only covered in one place in this manual. See Chapter 22 for maintenance of heater components.



---

**REPAIR PARTS, SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT**

---

**0004 00**

**COMMON TOOLS AND EQUIPMENT**

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

**SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT**

Special tools and support equipment are needed for unit maintenance. They are listed in Repair Parts and Special Tools List (RPSTL) TM 9-2350-277-24P. Common tools and supplements and special tools and fixtures are listed in WP 0926 00.

**REPAIR PARTS**

Repair parts are listed and illustrated in the Repair Parts and Special Tools List (RPSTL) TM 9-2350-277-24P, covering unit maintenance for this equipment.



CHAPTER 2

UNIT TROUBLESHOOTING PROCEDURES

**WORK PACKAGE INDEX**

<u>Title</u>	<u>Sequence No.</u>
INTRODUCTION TO HOW TO USE TROUBLESHOOTING.....	0005 00
MALFUNCTION/SYMPTOM INDEX WP.....	0006 00
ENGINE CHARGING SYSTEM SCHEMATIC (ALL EXCEPT M981A3 ONLY).....	0007 00
ENGINE CHARGING SYSTEM SCHEMATIC (M981A3 ONLY).....	0008 00
ENGINE FUEL SYSTEM SCHEMATIC (ALL EXCEPT M577A3 AND M1068A3).....	0009 00
ENGINE FUEL SYSTEM SCHEMATIC (M577A3 AND M1068A3 ONLY).....	0010 00
ENGINE STARTER CIRCUIT SCHEMATIC (ALL EXCEPT M981A3).....	0011 00
ENGINE STARTER CIRCUIT SCHEMATIC (M981A3 ONLY).....	0012 00
ENGINE AIR BOX HEATER SCHEMATIC.....	0013 00
ENGINE OVERHEATS.....	0014 00
ENGINE OVERCOOLS.....	0015 00
ENGINE DOES NOT CRANK.....	0016 00
ENGINE DOES NOT START (COLD WEATHER ONLY).....	0017 00
WAIT INDICATOR FLASHES DURING START ATTEMPTS (PREGLOW OR AFTERGLOW).....	0018 00
WAIT INDICATOR LIGHT DOESN'T LIGHT.....	0019 00
ENGINE CRANKS SLOWLY.....	0020 00
ENGINE CRANKS BUT WILL NOT START.....	0021 00
ENGINE CRANKS BUT WON'T START BELOW 40° (AIR BOX HEATER IS USED).....	0022 00
ENGINE CRANKS BUT WON'T START BELOW 40°F (GLOW PLUGS ARE USED).....	0023 00
ENGINE RUNS ROUGH, STALLS, OR DOESN'T PUT OUT FULL POWER.....	0024 00
GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR INDICATOR.....	0025 00
ENGINE OIL LOW PRESSURE INDICATOR COMES ON.....	0026 00
ELECTRICAL SCHEMATIC (ALL EXCEPT M981A3).....	0027 00
ELECTRICAL SCHEMATIC (M981A3 ONLY).....	0028 00
NO EXTERIOR LIGHTS OPERATE.....	0029 00
BLACKOUT DRIVE LIGHT DOESN'T WORK.....	0030 00
SERVICE HEADLIGHTS DON'T WORK.....	0031 00
INFRARED HEADLIGHT(S) DON'T WORK.....	0032 00
SERVICE AND/OR BLACK OUT STOP LIGHTS MALFUNCTION.....	0033 00
BLACKOUT MARKER LIGHT(S) DON'T WORK.....	0034 00
SERVICE TAILLIGHT DOESN'T WORK.....	0035 00
TRAILER LIGHTS DON'T WORK.....	0036 00
HORN DOES NOT WORK.....	0037 00
INSTRUMENT PANEL AND/OR TRANS CONTROLLER ILLUMINATION LIGHTS MALFUNCTION.....	0038 00
DOME LIGHT(S) DO NOT WORK.....	0039 00
DOME LIGHT MALFUNCTION (M577A3 ONLY).....	0040 00
BLACKOUT DOME LIGHTS DO NOT WORK (M1068A3 ONLY).....	0041 00

CHAPTER 2

UNIT TROUBLESHOOTING PROCEDURES

**WORK PACKAGE INDEX (Continued)**

<u>Title</u>	<u>Sequence No.</u>
RIGHT REAR UTILITY OUTLET/ADMITTANCE BUZZER WORKS IMPROPERLY (M577A3 AND M1068A3 ONLY).....	0042 00
LEFT REAR UTILITY OUTLET/BLOWER DOES NOT WORK (M577A3 AND M1068A3 ONLY).....	0043 00
RADIO(S) DON'T WORK.....	0044 00
SMOKE GRENADE LAUNCHER(S) MALFUNCTION (M113A3, M901A3, M981A3, AND M1059A3 ONLY).....	0045 00
INDICATORS SCHEMATIC (ALL EXCEPT M981A3).....	0046 00
INDICATORS SCHEMATIC (M981A3 ONLY).....	0047 00
MASTER SWITCH ON INDICATOR DOESN'T LIGHT.....	0048 00
FUEL LEVEL INDICATOR MALFUNCTIONS.....	0049 00
HIGH BEAM INDICATOR LIGHT DOESN'T WORK.....	0050 00
BATTERY/GENERATOR INDICATOR MALFUNCTIONS.....	0051 00
PARKING BRAKE INDICATOR MALFUNCTIONS.....	0052 00
COOLANT TEMP INDICATOR MALFUNCTIONS.....	0053 00
STEERING LOCKED INDICATOR MALFUNCTIONS.....	0054 00
ENGINE OIL LOW PRESSURE INDICATOR MALFUNCTIONS.....	0055 00
TRANSMISSION OIL LOW PRESSURE INDICATOR MALFUNCTIONS.....	0056 00
TRANS OIL HI TEMP INDICATOR MALFUNCTIONS.....	0057 00
ENGINE COOLANT LOW LEVEL INDICATOR MALFUNCTIONS.....	0058 00
TRANS FILTER CLOGGED INDICATOR MALFUNCTIONS.....	0059 00
TRANSMISSION SYSTEM SCHEMATIC.....	0060 00
CARRIER MOVES WITH TRANSMISSION IN SL.....	0061 00
CARRIER DOES NOT MOVE IN ANY SHIFT LEVER POSITION.....	0062 00
CARRIER DRIFTS OR DOES NOT STEER.....	0063 00
SERVICE AND/OR PARKING BRAKE WON'T HOLD CARRIER.....	0064 00
TRANSMISSION WON'T UPSHIFT OR SHIFTS ERRATICALLY IN 1-4 POSITION.....	0065 00
TRANSMISSION DOES NOT DOWNSHIFT IN 1-4 POSITION.....	0066 00
TRANSMISSION DOES NOT HOLD 1ST POSITION.....	0067 00
TRANSMISSION DOES NOT HOLD 2ND POSITION.....	0068 00
TRANSMISSION DOES NOT HOLD 3RD POSITION.....	0069 00
TRANSMISSION DOES NOT REVERSE.....	0070 00
TRANSMISSION DOES NOT PIVOT STEER.....	0071 00
TRANSMISSION HIGH TEMP INDICATOR COMES ON.....	0072 00
TRANSMISSION LOW LUBE INDICATOR COMES ON.....	0073 00
STEERING LOCK SCHEMATIC (SOLENOID-ACTIVATED LOCK).....	0074 00
STEERING LOCK SCHEMATIC (CABLE-ACTIVATED LOCK).....	0075 00
SOLENOID-ACTIVATED STEERING LOCK MALFUNCTIONS.....	0076 00
CABLE-ACTIVATED STEERING LOCK MALFUNCTIONS.....	0077 00

CHAPTER 2

UNIT TROUBLESHOOTING PROCEDURES

**WORK PACKAGE INDEX (Continued)**

<u>Title</u>	<u>Sequence No.</u>
BILGE PUMP SCHEMATIC (ALL EXCEPT M981A3).....	0078 00
BILGE PUMP SCHEMATIC (M981A3 ONLY).....	0079 00
FRONT AND/OR REAR BILGE PUMP(S) AND/OR LIGHTS DON'T WORK.....	0080 00
RAMP SCHEMATIC.....	0081 00
RAMP WILL NOT LOWER.....	0082 00
RAMP OPERATION IS SLOW OR SLUGGISH.....	0083 00
RAMP WILL NOT RAISE OR FREE FALLS.....	0084 00
PERSONNEL HEATER SCHEMATIC.....	0085 00
PERSONNEL HEATER MALFUNCTIONS.....	0086 00
COOLANT HEATER SCHEMATIC (ALL EXCEPT M981A3).....	0087 00
COOLANT HEATER SCHEMATIC (M981A3 ONLY).....	0088 00
COOLANT HEATER MALFUNCTIONS.....	0089 00
POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY).....	0090 00
NO AC POWER FROM TENT INTERFACE PANEL A5 (M1068A3 ONLY).....	0091 00
NO DC POWER FROM TENT INTERFACE PANEL A5 (M1068A3 ONLY).....	0092 00
NO POWER FROM ROADSIDE AC POWER EXTENSION BOX A6 (M1068A3 ONLY).....	0093 00
NO POWER FROM CURBSIDE AC POWER EXTENSION BOX A7 (M1068A3 ONLY).....	0094 00
NO POWER FROM DC POWER EXTENSION BOX A9 (ALL EXCEPT JACK J23) (M1068A3 ONLY).....	0095 00
NO POWER FROM DC POWER EXTENSION BOX A9, JACK J23 (JTIDS) (M1068A3 ONLY).....	0096 00
NO DC POWER TO SINGLE POINT LAN GROUND BOX A15 (M1068A3 ONLY).....	0097 00
NO POWER FROM UPS POWER EXTENSION BOX A18 (M1068A3 ONLY).....	0098 00
NO POWER FROM CURBSIDE UPS POWER EXTENSION BOX A19 (M1068A3 ONLY).....	0099 00
NO AC/DC INPUT TO ATCCS UPS POWER BOX (M1068A3 ONLY).....	0100 00
IN BLACKOUT MODE, FLUORESCENT LIGHTS OPERATE INCORRECTLY (M1068A3 ONLY).....	0101 00
FLUORESCENT LIGHTS DO NOT OPERATE (M1068A3 ONLY).....	0102 00
VEHICLE BATTERIES DISCHARGE WITH EXTERNAL AC POWER APPLIED (M1068A3 ONLY).....	0103 00
VEHICLE WILL NOT ACCEPT EXTERNAL AC POWER (M1068A3 ONLY).....	0104 00
VEHICLE WILL NOT ACCEPT INVERTER AC POWER (M1068A3 ONLY).....	0105 00
NO POWER TO DC CIRCUITS (M1068A3 ONLY).....	0106 00
NO POWER TO AC CIRCUITS (M1068A3 ONLY).....	0107 00
NO DC OUTPUT FROM DC POWER SUPPLY (M1068A3 ONLY).....	0108 00
NO AC POWER FROM INVERTERS (M1068A3 ONLY).....	0109 00
NO DATA OUTPUT FROM DATA PANEL A12 (M1068A3 ONLY).....	0110 00
NO LAN OUTPUT FROM DATA PANEL A12 (M1068A3 ONLY).....	0111 00
NO DATA OUTPUT FROM DATA PANEL A13 (M1068A3 ONLY).....	0112 00

## CHAPTER 2

## UNIT TROUBLESHOOTING PROCEDURES

**WORK PACKAGE INDEX (Continued)**

<u>Title</u>	<u>Sequence No.</u>
NO LAN OUTPUT FROM DATA PANEL A13 (M1068A3 ONLY).....	0113 00
PHONE EXTENSION BOX A14 POST(S) INOPERATIVE (M1068A3 ONLY).....	0114 00
SPEEDOMETER MALFUNCTIONS.....	0115 00
TACHOMETER MALFUNCTIONS.....	0116 00
HOOK UP/REMOVE STE/ICE TEST SET TO DCA 6.....	0117 00
STE/ICE TEST 10 ENGINE RPM.....	0118 00
STE/ICE TEST 24 FUEL SUPPLY PRESSURE.....	0119 00
STE/ICE TEST 25 FUEL RETURN PRESSURE.....	0120 00
STE/ICE TEST 26 FUEL FILTER PRESSURE DROP.....	0121 00
STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE.....	0122 00
STE/ICE TEST 32 AIR BOX PRESSURE.....	0123 00
STE/ICE TEST 67 BATTERY VOLTAGE.....	0124 00
STE/ICE TEST 68 STARTER MOTOR VOLTAGE.....	0125 00
STE/ICE TEST 69 STARTER NEGATIVE CABLE VOLTAGE DROP.....	0126 00
STE/ICE TEST 70 STARTER SOLENOID VOLTAGE.....	0127 00
STE/ICE TEST 71 STARTER CURRENT (AVERAGE).....	0128 00
STE/ICE TEST 72 STARTER CURRENT (FIRST PEAK).....	0129 00
STE/ICE TEST 73 BATTERY RESISTANCE AND STE/ICE TEST 75 BATTERY RESISTANCE CHANGE (PACK).....	0130 00
STE/ICE TEST 74 STARTER CIRCUIT RESISTANCE.....	0131 00
STE/ICE TEST 80 BATTERY CURRENT.....	0132 00
STE/ICE TEST 82 GENERATOR OUTPUT VOLTAGE.....	0133 00
STE/ICE TEST 83 GENERATOR FIELD VOLTAGE.....	0134 00
STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP.....	0135 00
STE/ICE SCHEMATIC (ALL EXCEPT M981A3).....	0136 00
STE/ICE SCHEMATIC (M981A3 ONLY).....	0137 00
STE/ICE BLANK DISPLAY DIAGNOSTIC TROUBLESHOOTING.....	0138 00
STE/ICE CONFIDENCE TEST DIAGNOSTIC TROUBLESHOOTING.....	0139 00
STE/ICE TEST 10, 11, 12 AND 13 DIAGNOSTIC TROUBLESHOOTING.....	0140 00
DCA BATTERY VOLTAGE DIAGNOSTIC TROUBLESHOOTING.....	0141 00
DCA CURRENT SHUNT DIAGNOSTIC TROUBLESHOOTING.....	0142 00
STE/ICE TEST 24 FUEL SUPPLY PRESSURE DIAGNOSTIC TROUBLESHOOTING.....	0143 00
STE/ICE TEST 25 FUEL RETURN PRESSURE DIAGNOSTIC TROUBLESHOOTING.....	0144 00
STE/ICE TEST 26 FUEL FILTER PRESSURE DROP DIAGNOSTIC TROUBLESHOOTING.....	0145 00
STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE DIAGNOSTIC TROUBLESHOOTING.....	0146 00
STE/ICE TEST 32 AIR BOX PRESSURE DIAGNOSTIC TROUBLESHOOTING.....	0147 00
STE/ICE TEST 68 STARTER MOTOR VOLTAGE DIAGNOSTIC TROUBLESHOOTING.....	0148 00
STE/ICE TEST 69 STARTER NEGATIVE CABLE VOLTAGE DROP DIAGNOSTIC TROUBLESHOOTING.....	0149 00
STE/ICE TEST 70 STARTER SOLENOID VOLTAGE DIAGNOSTIC TROUBLESHOOTING.....	0150 00
STE/ICE TEST 82 GENERATOR OUTPUT VOLTAGE DIAGNOSTIC TROUBLESHOOTING.....	0151 00
STE/ICE TEST 83 GENERATOR FIELD VOLTAGE DIAGNOSTIC TROUBLESHOOTING.....	0152 00
STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP DIAGNOSTIC TROUBLESHOOTING.....	0153 00



---

**INTRODUCTION TO HOW TO USE TROUBLESHOOTING**

---

**0005 00****PURPOSE**

The purpose of unit troubleshooting is to diagnose problems which are reported to unit maintenance. You should not begin unit troubleshooting until **ALL** operator troubleshooting procedures have been performed. You will perform four actions in unit troubleshooting:

- (1) Before starting a troubleshooting task, verify that the reported problem is present.
- (2) After verifying the symptom, find the part that is causing problem.
- (3) Replace or adjust that part.
- (4) Check to make sure problem no longer exists, and that there are no other problems.

**DEFINITIONS AND DESCRIPTIONS OF TROUBLESHOOTING PARTS**

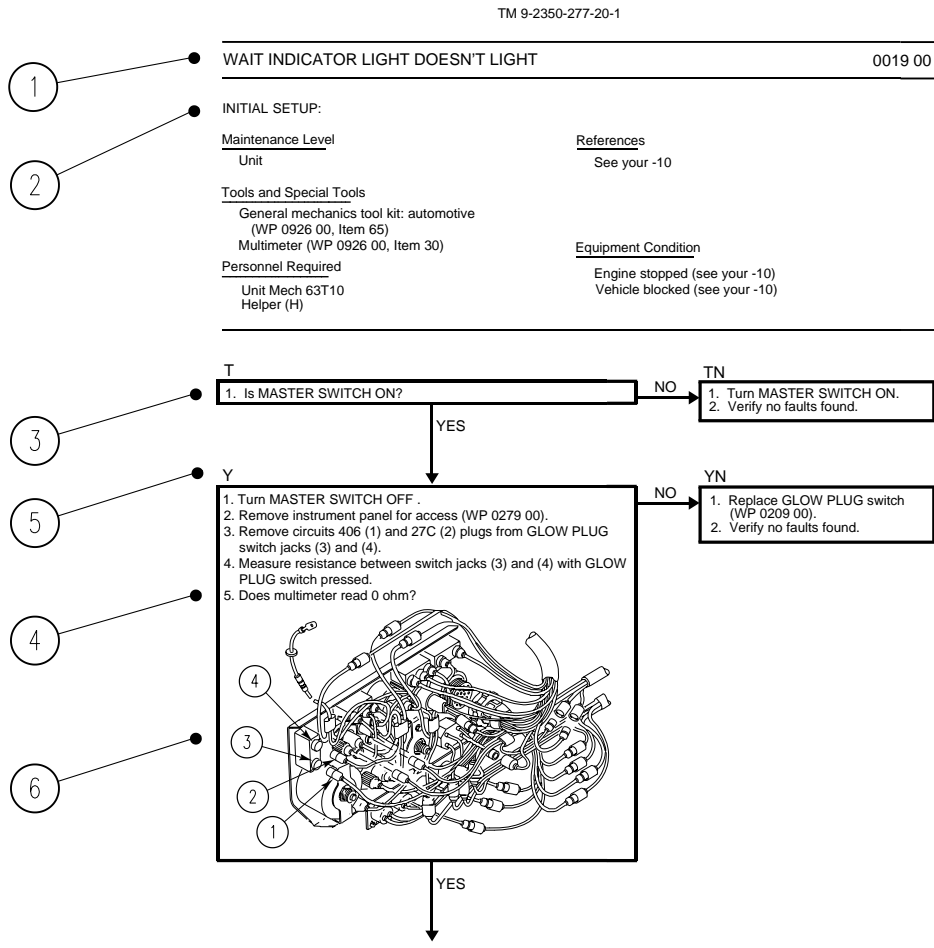
Troubleshooting tasks always have a beginning and an end. You will use task steps, test procedures, indexes, maintenance tasks, and other technical manuals to troubleshoot. Troubleshooting uses the following terms that are not used in other kinds of tasks:

- |                                   |  |
|-----------------------------------|--|
| <b>1. FAULT:</b>                  | The part that is not operating correctly and is causing the problem.   |
| <b>2. SYMPTOM:</b>                | The problem reported to unit maintenance.  |
| <b>3. STE/ICE:</b>                | Diagnostic and test equipment used to troubleshoot at unit maintenance level. It is used to make measurements and find faulty parts in the carrier system.   |
| <b>4. VERIFY NO FAULTS FOUND:</b> | After you have completed the corrective action, you must verify that no faults exist. If the fault condition still exists, then the fault is not fixed or there is another fault. If this happens, start at the beginning of the correct/appropriate troubleshooting procedure until you find and correct all faults. Always operate the system and/or carrier to make sure that you have corrected the reported problem. If troubleshooting does not identify a faulty part, the carrier is defective beyond the level of unit maintenance. |

**TROUBLESHOOTING BASICS**

**Troubleshooting Procedure**

A troubleshooting procedure serves as a starting point for your troubleshooting work. You will branch in and out of procedures as you work to find a fault. After correcting the fault, check that the problem has been corrected. The parts of a troubleshooting procedure are given below.



**Legend to Sample Above**

- 1 TITLE** This is the name of the procedure that best describes your symptom.
- 2 INITIAL SETUP** This tells you the tools, materials/parts, personnel, references, and equipment conditions needed to do the procedure.
- 3 TASK STEPS** Step-by-step instructions that isolate the fault.
- 4 QUESTION** This is last step in YES blocks. The answer to this question will direct you to the next block.
- 5 BLOCK ID CODE** These codes identify YES/NO blocks for ease of referencing. When filling out 2028s, list these codes, along with titles and page numbers.
- 6 ILLUSTRATIONS** These help you locate and identify parts.

**STE-ICE Test Procedure**

A STE/ICE test procedure will tell you how to use the STE/ICE test equipment. You may be directed to go to a STE/ICE test procedure when performing the troubleshooting procedures. The parts of a STE/ICE test procedure are given below.

TM 9-2350-277-20-1

1 ● STE/ICE TEST 67 BATTERY VOLTAGE 0124 00

---

THIS WORK PACKAGE COVERS:  
Test (page 0124 00-1).

2 ● INITIAL SETUP:

<p><u>Maintenance Level</u></p> <p>Unit</p> <p><u>Personnel Required</u></p> <p>Unit Mech 63T10</p> <p><u>References</u></p> <p>See your-10 TM 9-4910-571-12&amp;P</p>	<p><u>Equipment Condition</u></p> <p>Engine stopped (see your -10) Vehicle blocked (see your -10) STE/ICE hooked up to DCA 6 (WP 0117 00)</p>
--	---

3 ●

---

4 ●

1. Select TEST 67.
2. Press and release TEST button.

<p>CONDITIONS</p> <p>Engine off/MASTER SWITCH OFF.</p> <p>Cranking engine fuel off.</p> <p>Charging 1100-1300 RPM/service lights on.</p>	<p>VOLTS</p> <p>21 or more</p> <p>17 or more</p> <p>26 to 29.5</p>
--	--

- a. If display is erratic or shows 0 (v olts), go to: STE/ICE DCA Battery Voltage Diagnostic Troubleshooting (WP 0142 00).
- b. If error message appears, see TM 9-4910-571-12&P.

3. Return to troubleshooting.

**Legend to Sample Above**

- 1 TITLE** Test number and procedure name.
- 2 INITIAL SETUP** This tells you the tools, materials/parts, personnel, references, and equipment conditions needed to do the procedure.
- 3 STE/ICE HOOK UP** Steps that tell you how to perform the HOOK UP/REMOVE STE/ICE test.
- 4 TASK STEPS** Steps that tell you how to set up and perform the test.

Before you begin, make sure you have all items in the INITIAL SETUP. Do all steps in the test procedure and then return to where you left off in troubleshooting task. Continue to follow troubleshooting task instructions to find and correct the fault.

**Locating the Correct Troubleshooting Procedure**

- (1) Carrier arrives at shop.
- (2) Read DA Form 2404.
- (3) Verify that the problem on DA Form 2404 exists.
- (4) Look up the carrier symptom in the Troubleshooting Fault Symptom Index (WP 0006 00) and go to that task.

**Doing the Troubleshooting Procedure**

- (1) Make sure you have all items in INITIAL SETUP.
- (2) Perform required action(s) in Equipment Conditions.
- (3) Complete the first block of task steps.
- (4) Refer to system schematics for system components, details, and configuration.
- (5) Answer question at the bottom of the first block.
- (6) Follow YES or NO arrows to next block.
- (7) Move from block to block. Answer questions and follow instructions. You may be directed to:
  - do further checks and tests on parts;
  - go to another manual and do tasks;
  - or go to another task in this manual.
- (8) After completing the actions called for on another page or manual, return to the point in the troubleshooting procedure where you left off.
- (9) Locate the fault in the carrier or part, and perform the corrective action.
- (10) Check to make sure the fault is corrected, and there are no new faults.
- (11) Button up by installing items listed in Equipment Conditions after finishing the troubleshooting task.

**TROUBLESHOOTING SAMPLE**

The following sample takes you through a typical troubleshooting procedure.

**Finding the Right Troubleshooting Procedure**

A carrier arrives at the shop. The DA Form 2404 shows that the engine cranks slowly. The best task match is ENGINE CRANKS SLOWLY (WP 0020 00).

TM 9-2350-277-20-1

MALFUNCTION/SYMPTOM INDEX WP 0006 00

ENGINE SYSTEM

ENGINE OVERHEATS..... WP 0014 00

ENGINE OVERCOOLS..... WP 0015 00

ENGINE DOESN'T CRANK..... WP 0016 00

ENGINE DOESN'T START (COLD WEATHER ONLY)..... WP 0017 00

WAIT INDICATOR FLASHES DURING START ATTEMPTS (PREGLOW OR AFTER GLOW)..... WP 0018 00

WAIT INDICATOR DOESN'T LIGHT..... WP 0019 00

ENGINE CRANKS SLOWLY..... WP 0020 00

ENGINE CRANKS BUT WILL NOT START..... WP 0021 00

ENGINE CRANKS BUT WON'T START BELOW 40 FAHRENHEIT (AIR BOX HEATER IS USED)..... WP 0022 00

ENGINE CRANKS BUT WON'T START BELOW 40 FAHRENHEIT (GLOW PLUGS ARE USED)..... WP 0023 00

ENGINE RUNS ROUGH, STALLS OR DOESN'T PUT OUT FULL POWER..... WP 0024 00

GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR INDICATOR..... WP 0025 00

ENGINE OIL LOW PRESSURE INDICATOR COMES ON..... WP 0026 00

ELECTRICAL SYSTEM

NO EXTERIOR LIGHTS OPERATE..... WP 0029 00

BLACK OUT DRIVE LIGHT DOESN'T WORK..... WP 0030 00

SERVICE HEADLIGHTS DON'T WORK..... WP 0031 00

INFRARED HEADLIGHT(S) DON'T WORK..... WP 0032 00

SERVICE AND/OR BLACKOUT STOP LIGHTS MALFUNCTION..... WP 0033 00

BLACK OUTMARKER LIGHT DON'T WORK..... WP 0034 00

SERVICE TAIL LIGHT DOESN'T WORK..... WP 0035 00

TRAILER LIGHTS DON'T WORK..... WP 0036 00

HORN DOESN'T WORK..... WP 0037 00

INSTRUMENT PANEL AND/OR TRANSMISSION CONTROLLER ILLUMINATION LIGHTS MALFUNCTION..... WP 0038 00

DOMelight(S) DON'T WORK..... WP 0039 00

DOMelight(S) MALFUNCTION (M577A3 ONLY)..... WP 0040 00

BLACK OUT DOME LIGHTS DO NOT WORK..... WP 0041 00

RIGHT REAR UTILITY OUTLET/ADMITTANCE BUZZER WORKS IMPROPERLY (M577A3 AND M1068A3 ONLY)..... WP 0042 00

LEFT REAR UTILITY OUTLET/BLOWER DOES NOT WORK (M577A3 AND M1068A3 ONLY)..... WP 0043 00

RADIO(S) DON'T WORK..... WP 0044 00

SMOKE GRENADE LAUNCHER(S) MALFUNCTION (M113A3, M901A3, M981A3, AND M1059A3 ONLY)..... WP 0045 00

INSTRUMENT & WARNING LIGHT PANEL INDICATORS

MASTER SWITCH ON INDICATOR DOESN'T LIGHT..... WP 0048 00

FUEL LEVEL INDICATOR MALFUNCTIONS..... WP 0049 00

HIGH BEAM INDICATOR LIGHT DOESN'T WORK..... WP 0050 00

BATTERY/GENERATOR INDICATOR MALFUNCTIONS..... WP 0051 00

PARKING BRAKE INDICATOR MALFUNCTIONS..... WP 0052 00

0006 00-1

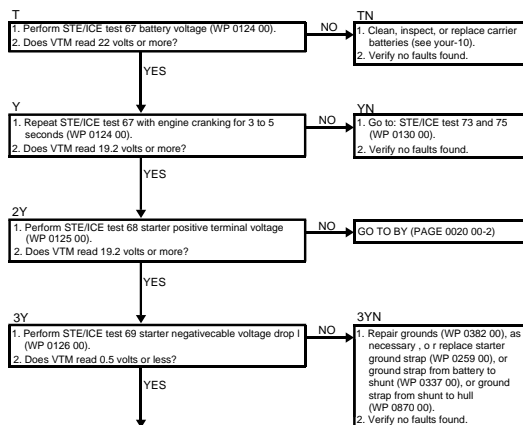
This is the procedure you want.

TM 9-2350-277-20-1

ENGINE CRANKS SLOWLY 0020 00

INITIAL SETUP:

Maintenance Level	References
Unit	See your-10
Tools and Special Tools	Equipment Condition
General mechanic stool kit: automotive (WP 0926 00, Item 65)	Engine stopped (see your-10)
STE/ICE-Rtest set (WP 0926 00, Item 61)	Vehicle blocked (see your-10)
Personnel Required	
Unit Mech 63T10	
Helper (H)	



0020 00-1

Check the title to make sure you are troubleshooting the correct system for the problem. Read the INITIAL SETUP carefully and make sure you have all items listed. Some access steps in Equipment Conditions may not need to be performed depending on the fault location. You decide which are necessary for your particular problem.

TM 9-2350-277-20-1

ENGINE CRANKS SLOWLY

0020 00

INITIAL SETUP:

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General mechanics tool kit: automotive  
(WP 0926 00, Item 65)  
STE/ICE-R test set (WP 0926 00, Item 61)

Equipment Condition

Engine stopped (see your -10)  
Vehicle blocked (see your -10)

Personnel Required

Unit Mech 63T10  
Helper (H)

This is the first block of the troubleshooting task. Step 1 has you performing a STE/ICE test. Go to the page shown. You will be using a STE/ICE test procedure for this step. Come back to this block when you complete the test.

1. Perform STE/ICE test 67 battery voltage (WP 0124 00).

NO



Here is the STE/ICE test procedure. It will give you more steps to find the fault. Before you begin, make sure you have all the items in the INITIAL SETUP. Do all the steps in the procedure. After you do the steps, go back to where you left off in the troubleshooting task.

TM 9-2350-277-20-1

STE/ICE TEST 67 BATTERY VOLTAGE 0124 00

THIS WORK PACKAGE COVERS:  
Test (page 0124 00-1).

INITIAL SETUP:

Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your-10

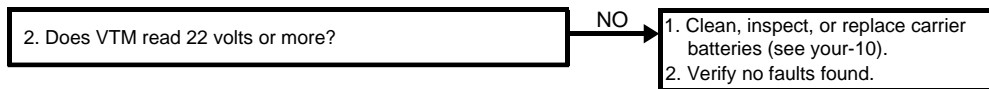
TM 9-4910-571-12&P

1. Select TEST 67.
2. Press and release TEST button.

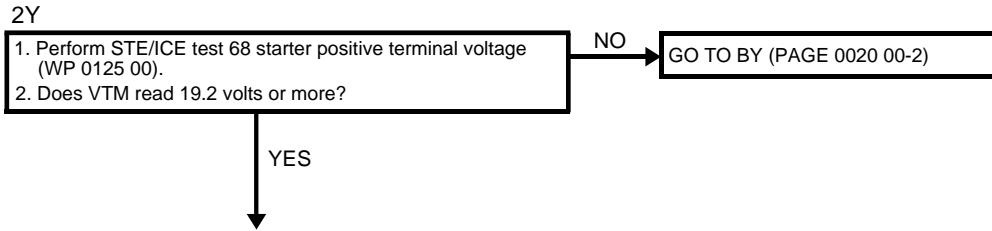
CONDITIONS	VOLTS
Engine off/MASTER SWITCH OFF.	21 or more
Cranking engine fuel off.	17 or more
Charging 1100-1300 RPM/service lights on.	26 to 29.5

- a. If display is erratic or shows 0 (v olts), go to: STE/ICE DCA Battery Voltage Diagnostic Troubleshooting (WP 0142 00).
  - b. If error message appears, see TM 9-4910-571-12&P.
3. Return to troubleshooting.

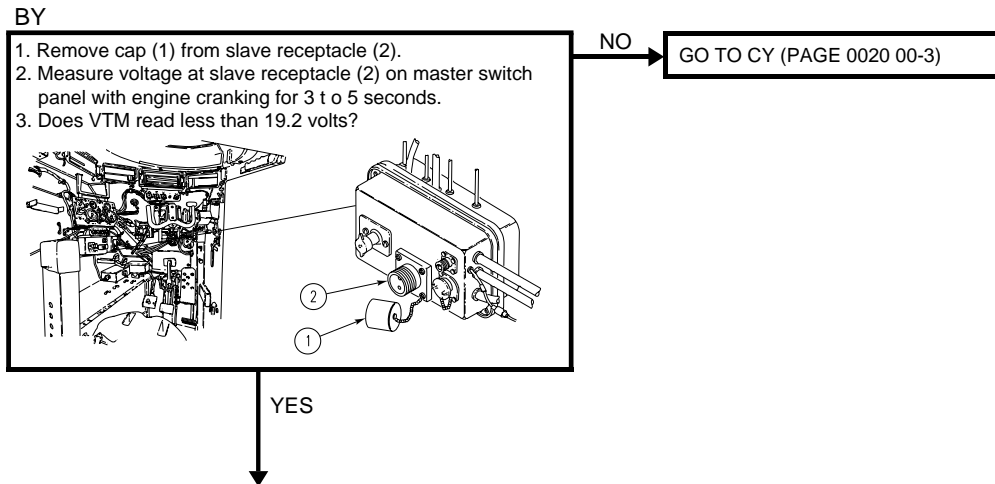
This is where you left off in the troubleshooting task. Answer the question in step 2. The answer to question depends on what you found when you did the STE/ICE test procedure. In this sample, let us say the test shows 22 volts. So the answer to the question, "Does test read 22 volts or more?" is YES. Follow the YES arrow to the next block.



The YES arrow takes you to this block. Do steps 1 and 2. In this sample, let us say the test show 17 volts. So the answer to the question, “Does VTM read 19.2 volts or more?” is NO. Follow the NO arrow to the reference indicated.

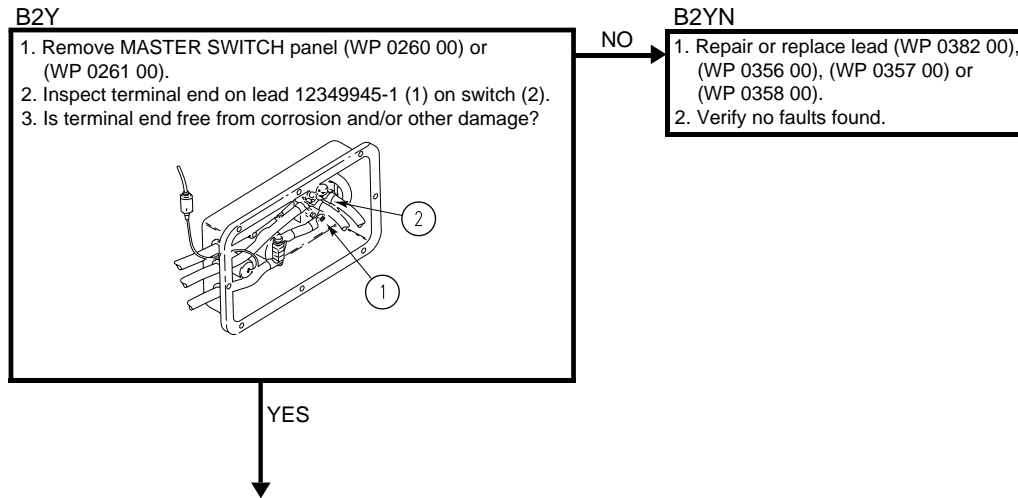


This is how the reference appears once you locate it. Do steps 1 thru 3. Let us say the VTM reads less than 19.2 volts. So the answer to the question, “Does VTM read less than 19.2 volts?” is YES. Follow the YES arrow to the next block.





The YES arrow takes you to this block. Do steps 1 thru 3. In this sample, let us say the terminal end is free from corrosion and/or other damage. So the answer to step 3 is YES. Follow the YES arrow to the next block.



The YES arrow takes you to this block. You have found the fault in the MASTER SWITCH. This block gives you the step to correct the fault. Do step 1. It tells you to go to another task in the manual. Go to the page shown and perform the task. Return to this block when you have completed the task.

**B3Y**

1. Replace MASTER SWITCH (WP 0262 00) or (WP 0273 00).
2. Verify no faults found.

Step 2 in this block is “Verify no faults found”. Check to make sure you have fixed the reported fault and there are no other problems. After no faults have been verified, return carrier to operation.

This section has given you information on how to use troubleshooting. By going through the troubleshooting sample, you have seen how parts of this chapter are used. This information will help you successfully troubleshoot at the unit maintenance level.



**MALFUNCTION/SYMPTOM INDEX WP**

**0006 00**

**ENGINE SYSTEM**

ENGINE OVERHEATS.....WP 0014 00  
 ENGINE OVERCOOLS.....WP 0015 00  
 ENGINE DOESN'T CRANK.....WP 0016 00  
 ENGINE DOESN'T START (COLD WEATHER ONLY).....WP 0017 00  
 WAIT INDICATOR FLASHES DURING START ATTEMPTS (PREGLOW  
 OR AFTERGLOW).....WP 0018 00  
 WAIT INDICATOR DOESN'T LIGHT.....WP 0019 00  
 ENGINE CRANKS SLOWLY.....WP 0020 00  
 ENGINE CRANKS BUT WILL NOT START.....WP 0021 00  
 ENGINE CRANKS BUT WON'T START BELOW 40° FAHRENHEIT (AIR  
 BOX HEATER IS USED).....WP 0022 00  
 ENGINE CRANKS BUT WON'T START BELOW 40° FAHRENHEIT  
 (GLOW PLUGS ARE USED).....WP 0023 00  
 ENGINE RUNS ROUGH, STALLS OR DOESN'T PUT OUT FULL  
 POWER.....WP0024 00  
 GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/  
 GENERATOR INDICATOR.....WP 0025 00  
 ENGINE OIL LOW PRESSURE INDICATOR COMES ON.....WP 0026 00

**ELECTRICAL SYSTEM**

NO EXTERIOR LIGHTS OPERATE.....WP 0029 00  
 BLACKOUT DRIVE LIGHT DOESN'T WORK.....WP 0030 00  
 SERVICE HEADLIGHTS DON'T WORK.....WP 0031 00  
 INFRARED HEADLIGHT(S) DON'T WORK.....WP 0032 00  
 SERVICE AND/OR BLACKOUT STOP LIGHTS MALFUNCTION.....WP 0033 00  
 BLACKOUT MARKER LIGHT DON'T WORK.....WP 0034 00  
 SERVICE TAIL LIGHT DOESN'T WORK.....WP 0035 00  
 TRAILER LIGHTS DON'T WORK.....WP 0036 00  
 HORN DOESN'T WORK.....WP 0037 00  
 INSTRUMENT PANEL AND/OR TRANSMISSION CONTROLLER  
 ILLUMINATION LIGHTS MALFUNCTION.....WP 0038 00  
 DOME LIGHT(S) DON'T WORK.....WP 0039 00  
 DOME LIGHTS MALFUNCTION (M577A3 ONLY).....WP 0040 00  
 BLACKOUT DOME LIGHTS DO NOT WORK.....WP 0041 00  
 RIGHT REAR UTILITY OUTLET/ADMITTANCE BUZZER WORKS  
 IMPROPERLY (M577A3 AND M1068A3 ONLY).....WP 0042 00  
 LEFT REAR UTILITY OUTLET/BLOWER DOES NOT WORK (M577A3  
 AND M1068A3 ONLY).....WP 0043 00  
 RADIO(S) DON'T WORK.....WP 0044 00  
 SMOKE GRENADE LAUNCHER(S) MALFUNCTION (M113A3,  
 M901A3, M981A3, AND M1059A3 ONLY).....WP 0045 00

**INSTRUMENT & WARNING LIGHT PANEL INDICATORS**

MASTER SWITCH ON INDICATOR DOESN'T LIGHT.....WP 0048 00  
 FUEL LEVEL INDICATOR MALFUNCTIONS.....WP 0049 00  
 HIGH BEAM INDICATOR LIGHT DOESN'T WORK.....WP 0050 00  
 BATTERY/GENERATOR INDICATOR MALFUNCTIONS.....WP 0051 00  
 PARKING BRAKE INDICATOR MALFUNCTIONS.....WP 0052 00

COOLANT TEMPERATURE INDICATOR MALFUNCTIONS.....WP 0053 00  
 STEERING LOCKED INDICATOR MALFUNCTIONS.....WP 0054 00  
 ENGINE OIL LOW PRESSURE INDICATOR MALFUNCTIONS.....WP 0055 00  
 TRANSMISSION OIL LOW PRESSURE INDICATOR MALFUNCTIONS.....WP 0056 00  
 TRANSMISSION OIL HIGH TEMP INDICATOR MALFUNCTIONS.....WP 0057 00  
 ENGINE COOLANT LOW LEVEL INDICATOR MALFUNCTIONS.....WP 0058 00  
 TRANSMISSION FILTER CLOGGED INDICATOR MALFUNCTIONS.....WP 0059 00

**TRANSMISSION SYSTEM**

CARRIER MOVES WITH TRANSMISSION IN SL.....WP 0061 00  
 CARRIER DOES NOT MOVE IN ANY SHIFT LEVER POSITION.....WP 0062 00  
 CARRIER DRIFTS OR DOES NOT STEER.....WP 0063 00  
 SERVICE AND/OR PARKING BRAKE WON'T HOLD CARRIER.....WP 0064 00  
 TRANSMISSION WON'T UPSHIFT OR SHIFTS ERRATICALLY IN 1-4  
 POSITION.....WP 0065 00  
 TRANSMISSION DOES NOT DOWNSHIFT IN 1-4 POSITION.....WP 0066 00  
 TRANSMISSION DOES NOT HOLD 1ST POSITION.....WP 0067 00  
 TRANSMISSION DOES NOT HOLD 2ND POSITION.....WP 0068 00  
 TRANSMISSION DOES NOT HOLD 3RD POSITION.....WP 0069 00  
 TRANSMISSION DOES NOT REVERSE.....WP 0070 00  
 TRANSMISSION DOES NOT PIVOT STEER.....WP 0071 00  
 TRANSMISSION HIGH TEMP INDICATOR COMES ON.....WP 0072 00  
 TRANSMISSION LOW LUBE INDICATOR COMES ON.....WP 0073 00

**STEERING SYSTEM**

SOLENOID-ACTIVATED STEERING LOCK MALFUNCTIONS.....WP 0076 00  
 CABLE-ACTIVATED STEERING LOCK MALFUNCTIONS.....WP 0077 00

**BILGE PUMPS SYSTEM**

FRONT AND/OR REAR BILGE PUMP(S) AND/OR LIGHTS DON'T  
 WORK.....WP 0080 00

**RAMP HYDRAULIC SYSTEM**

RAMP WILL NOT LOWER.....WP 0082 00  
 RAMP OPERATION IS SLOW OR SLUGGISH.....WP 0083 00  
 RAMP WILL NOT RAISE OR FREE FALLS.....WP 0084 00

**PERSONNEL HEATER SYSTEM**

PERSONNEL HEATER MALFUNCTIONS.....WP 0086 00

**COOLANT HEATER SYSTEM**

COOLANT HEATER MALFUNCTIONS.....WP 0089 00

**ELECTRICAL EQUIPMENT (M1068A3 ONLY)**

POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT  
 INOPERATIVE (M1068A3 ONLY).....WP 0090 00

**MALFUNCTION/SYMPTOM INDEX WP—Continued**

**0006 00**

NO AC POWER FROM TENT INTERFACE PANEL A5 (M1068A3 ONLY) .....WP 0091 00  
 NO DC POWER FROM TENT INTERFACE PANEL A5 (M1068A3 ONLY) .....WP 0092 00  
 NO POWER FROM ROADSIDE AC POWER EXTENSION BOX A6  
 (M1068A3 ONLY).....WP 0093 00  
 NO POWER FROM CURBSIDE AC POWER EXTENSION BOX A7  
 (M1068A3 ONLY).....WP 0094 00  
 NO POWER FROM DC POWER EXTENSION BOX A9 (ALL EXCEPT  
 JACK J23) (M1068A3 ONLY).....WP 0095 00  
 NO POWER FROM DC POWER EXTENSION BOX A9, JACK J23 (JTIDS)  
 (M1068A3 ONLY).....WP 0096 00  
 NO DC POWER TO SINGLE POINT LAN GROUND BOX A15 (M1068A3  
 ONLY).....WP 0097 00  
 NO POWER FROM UPS POWER EXTENSION BOX A18 (M1068A3  
 ONLY).....WP 0098 00  
 NO POWER FROM CURBSIDE UPS POWER EXTENSION BOX A19  
 (M1068A3 ONLY).....WP 0099 00  
 NO AC/DC INPUT TO ATCCS UPS POWER BOX (M1068A3 ONLY).....WP 0100 00  
 IN BLACKOUT MODE, FLUORESCENT LIGHTS OPERATE  
 INCORRECTLY (M1068A3 ONLY).....WP 0101 00  
 FLUORESCENT LIGHTS DO NOT OPERATE (M1068A3 ONLY).....WP 0102 00  
 VEHICLE BATTERIES DISCHARGE WITH EXTERNAL AC POWER  
 APPLIED (M1068A3 ONLY).....WP 0103 00  
 VEHICLE WILL NOT ACCEPT EXTERNAL AC POWER (M1068A3  
 ONLY).....WP 0104 00  
 VEHICLE WILL NOT ACCEPT INVERTER AC POWER (M1068A3  
 ONLY).....WP 0105 00  
 NO POWER TO DC CIRCUITS (M1068A3 ONLY).....WP 0106 00  
 NO POWER TO AC CIRCUITS (M1068A3 ONLY).....WP 0107 00  
 NO DC OUTPUT FROM DC POWER SUPPLY (M1068A3 ONLY).....WP 0108 00  
 NO AC POWER FROM INVERTERS (M1068A3 ONLY).....WP 0109 00

**COMMUNICATION EQUIPMENT**

NO DATA OUTPUT FROM DATA PANEL A12 (M1068A3 ONLY).....WP 0110 00  
 NO LAN OUTPUT FROM DATA PANEL A12 (M1068A3 ONLY).....WP 0111 00  
 NO DATA OUTPUT FROM DATA PANEL A13 (M1068A3 ONLY).....WP 0112 00  
 NO LAN OUTPUT FROM DATA PANEL A13 (M1068A3 ONLY).....WP 0113 00  
 PHONE EXTENSION BOX A14 POST(S) INOPERATIVE (M1068A3  
 ONLY).....WP 0114 00

**GAUGES**

SPEEDOMETER MALFUNCTIONS.....WP 0115 00  
 TACHOMETER MALFUNCTIONS.....WP 0116 00

**STE/ICE TESTS**

HOOK UP/REMOVE STE/ICE TEST SET TO DCA 6.....WP 0117 00  
 STE/ICE TEST 10 ENGINE RPM.....WP 0118 00  
 STE/ICE TEST 24 FUEL SUPPLY PRESSURE.....WP 0119 00  
 STE/ICE TEST 25 FUEL RETURN PRESSURE.....WP 0120 00  
 STE/ICE TEST 26 FUEL FILTER PRESSURE DROP.....WP 0121 00

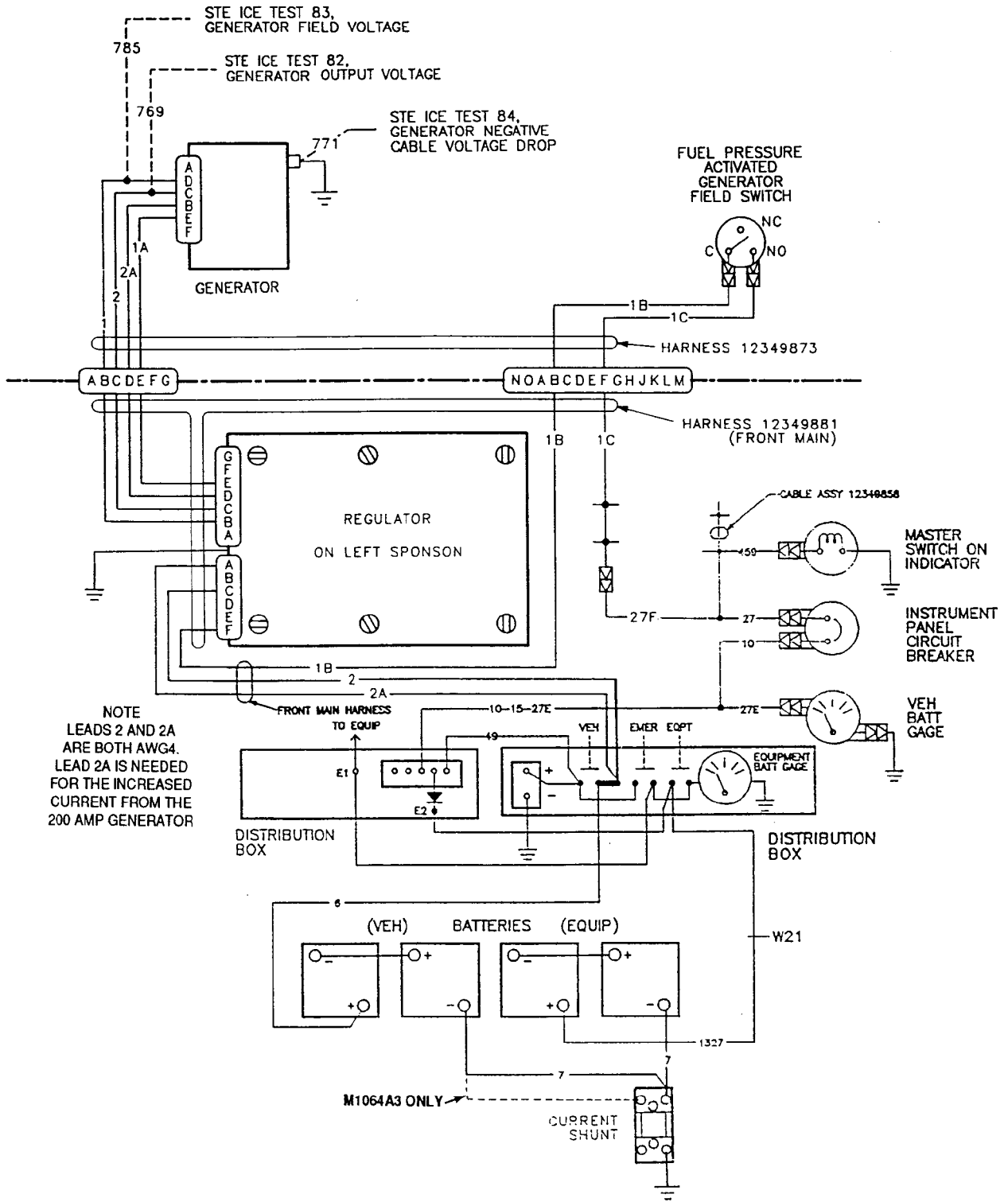
STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE.....WP 0122 00  
 STE/ICE TEST 32 AIR BOX PRESSURE.....WP 0123 00  
 STE/ICE TEST 67 BATTERY VOLTAGE.....WP 0124 00  
 STE/ICE TEST 68 STARTER MOTOR VOLTAGE.....WP 0125 00  
 STE/ICE TEST 69 STARTER NEGATIVE CABLE VOLTAGE DROP.....WP 0126 00  
 STE/ICE TEST 70 STARTER SOLENOID VOLTAGE.....WP 0127 00  
 STE/ICE TEST 71 STARTER CURRENT (AVERAGE).....WP 0128 00  
 STE/ICE TEST 72 STARTER CURRENT (FIRST PEAK).....WP 0129 00  
 STE/ICE TEST 73 BATTERY RESISTANCE AND STE/ICE TEST 75:  
     BATTERY RESISTANCE CHANGE (PACK).....WP 0130 00  
 STE/ICE TEST 74 STARTER CIRCUIT RESISTANCE.....WP 0131 00  
 STE/ICE TEST 80 BATTERY CURRENT.....WP 0132 00  
 STE/ICE TEST 82 GENERATOR OUTPUT VOLTAGE.....WP 0133 00  
 STE/ICE TEST 83 GENERATOR FIELD VOLTAGE.....WP 0134 00  
 STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP.....WP 0135 00

**STE/ICE DIAGNOSTIC TROUBLESHOOTING**

STE/ICE BLANK DISPLAY DIAGNOSTIC TROUBLESHOOTING.....WP 0138 00  
 STE/ICE CONFIDENCE TEST DIAGNOSTIC TROUBLESHOOTING.....WP 0139 00  
 STE/ICE TEST 10, 12, AND 13 DIAGNOSTIC TROUBLESHOOTING.....WP 0140 00  
 DCA BATTERY VOLTAGE DIAGNOSTIC TROUBLESHOOTING.....WP 0141 00  
 DCA CURRENT SHUNT DIAGNOSTIC TROUBLESHOOTING.....WP 0142 00  
 STE/ICE TEST 24 FUEL SUPPLY PRESSURE DIAGNOSTIC  
     TROUBLESHOOTING.....WP 0143 00  
 STE/ICE TEST 25 FUEL RETURN PRESSURE DIAGNOSTIC  
     TROUBLESHOOTING.....WP 0144 00  
 STE/ICE TEST 26 FUEL FILTER PRESSURE DROP DIAGNOSTIC  
     TROUBLESHOOTING.....WP 0145 00  
 STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE  
     DIAGNOSTIC TROUBLESHOOTING.....WP 0146 00  
 STE/ICE TEST 32 AIR BOX PRESSURE DIAGNOSTIC  
     TROUBLESHOOTING.....WP 0147 00  
 STE/ICE TEST 68 STARTER MOTOR VOLTAGE DIAGNOSTIC  
     TROUBLESHOOTING.....WP 0148 00  
 STE/ICE TEST 69 STARTER NEGATIVE CABLE VOLTAGE DROP  
     DIAGNOSTIC TROUBLESHOOTING.....WP 0149 00  
 STE/ICE TEST 70 STARTER SOLENOID VOLTAGE DIAGNOSTIC  
     TROUBLESHOOTING.....WP 0150 00  
 STE/ICE TEST 82 GENERATOR OUTPUT VOLTAGE DIAGNOSTIC  
     TROUBLESHOOTING.....WP 0151 00  
 STE/ICE TEST 83 GENERATOR FIELD VOLTAGE DIAGNOSTIC  
     TROUBLESHOOTING.....WP 0152 00  
 STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP  
     DIAGNOSTIC TROUBLESHOOTING.....WP 0153 00

ENGINE CHARGING SYSTEM SCHEMATIC (ALL EXCEPT M981A3 ONLY)

0007 00

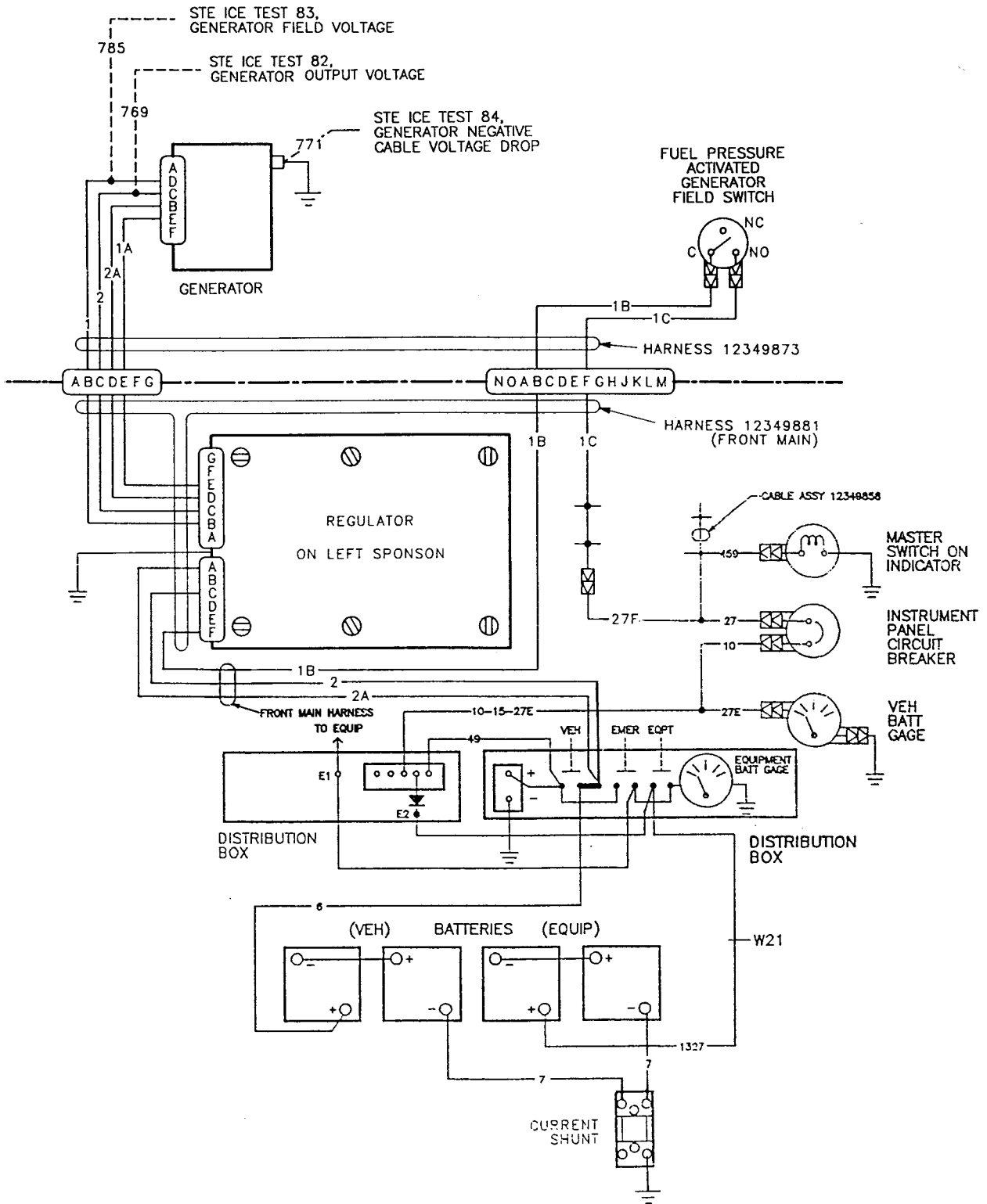






ENGINE CHARGING SYSTEM SCHEMATIC (M981A3 ONLY)

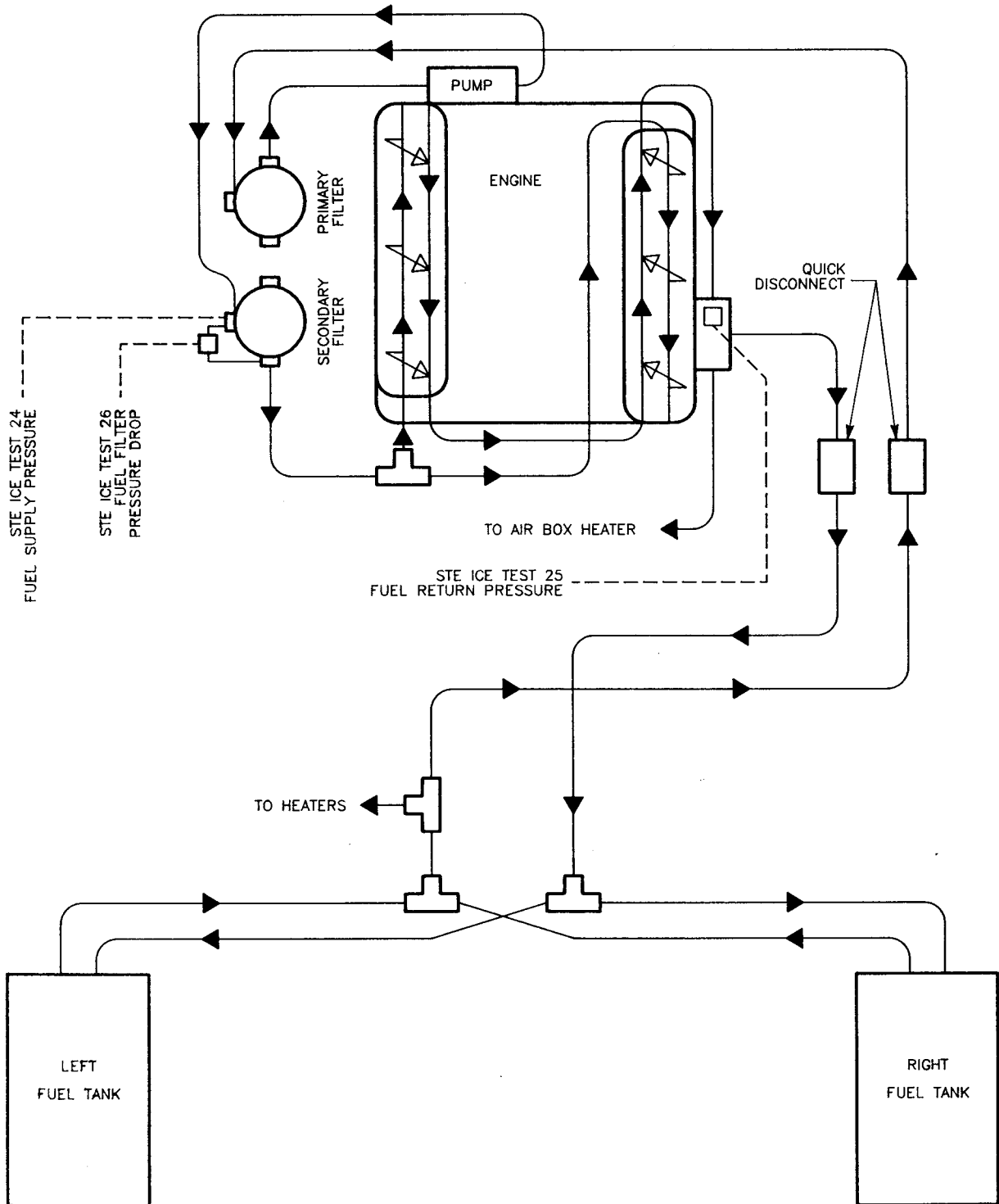
0008 00





ENGINE FUEL SYSTEM SCHEMATIC (ALL EXCEPT M577A3 AND M1068A3)

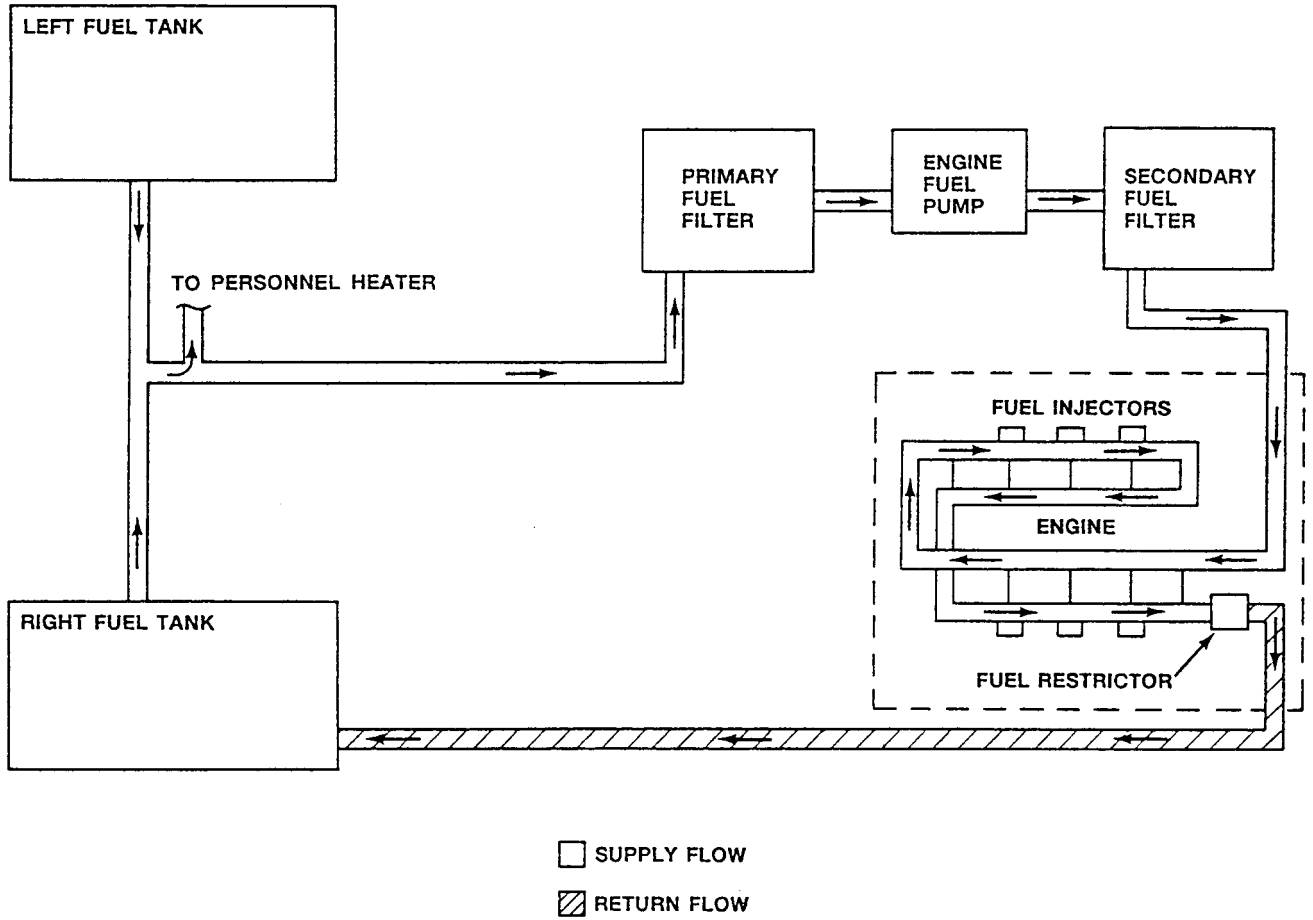
0009 00





ENGINE FUEL SYSTEM SCHEMATIC (M577A3 AND M1068A3 ONLY)

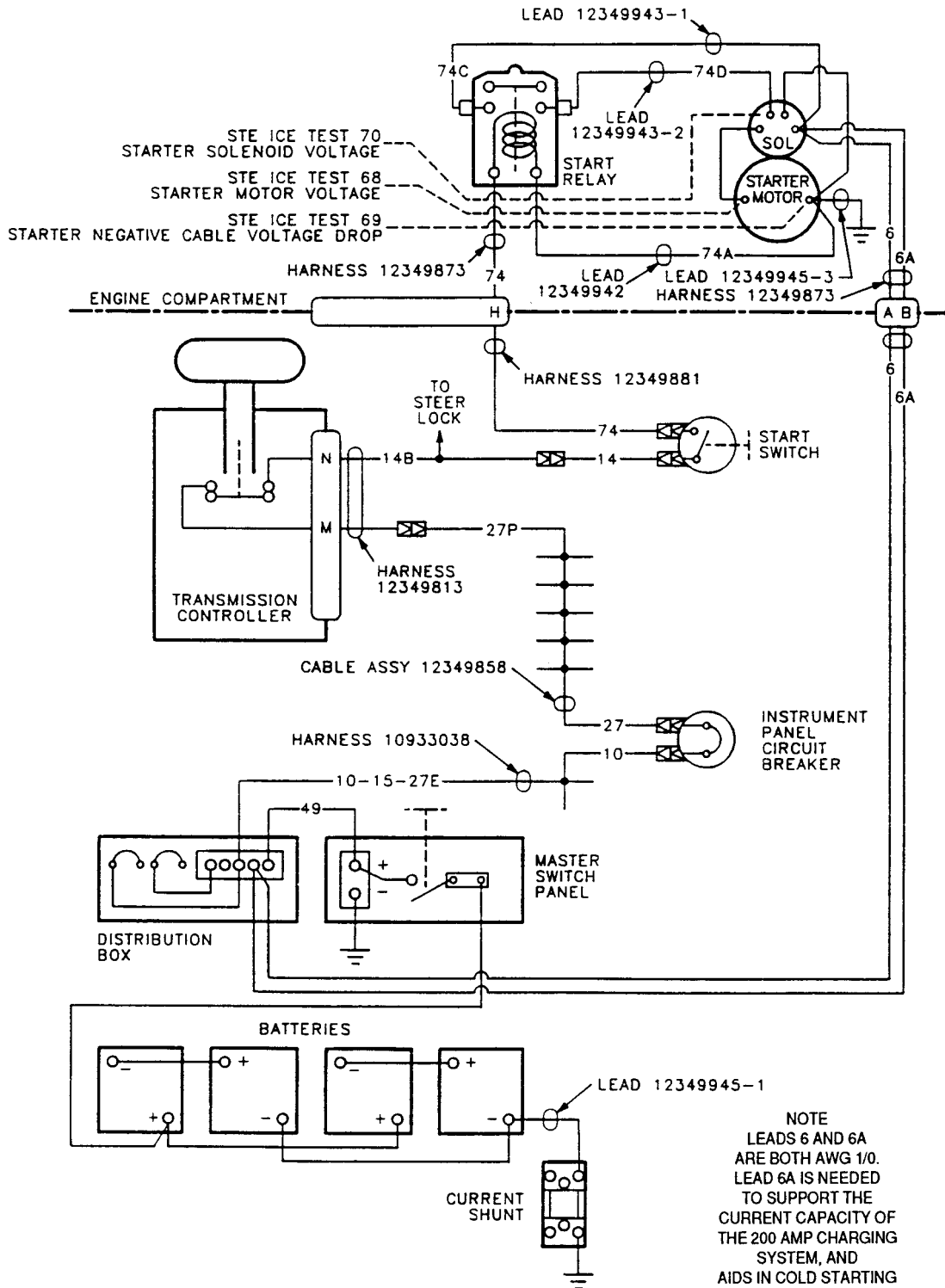
0010 00





ENGINE STARTER CIRCUIT SCHEMATIC (ALL EXCEPT M981A3)

0011 00

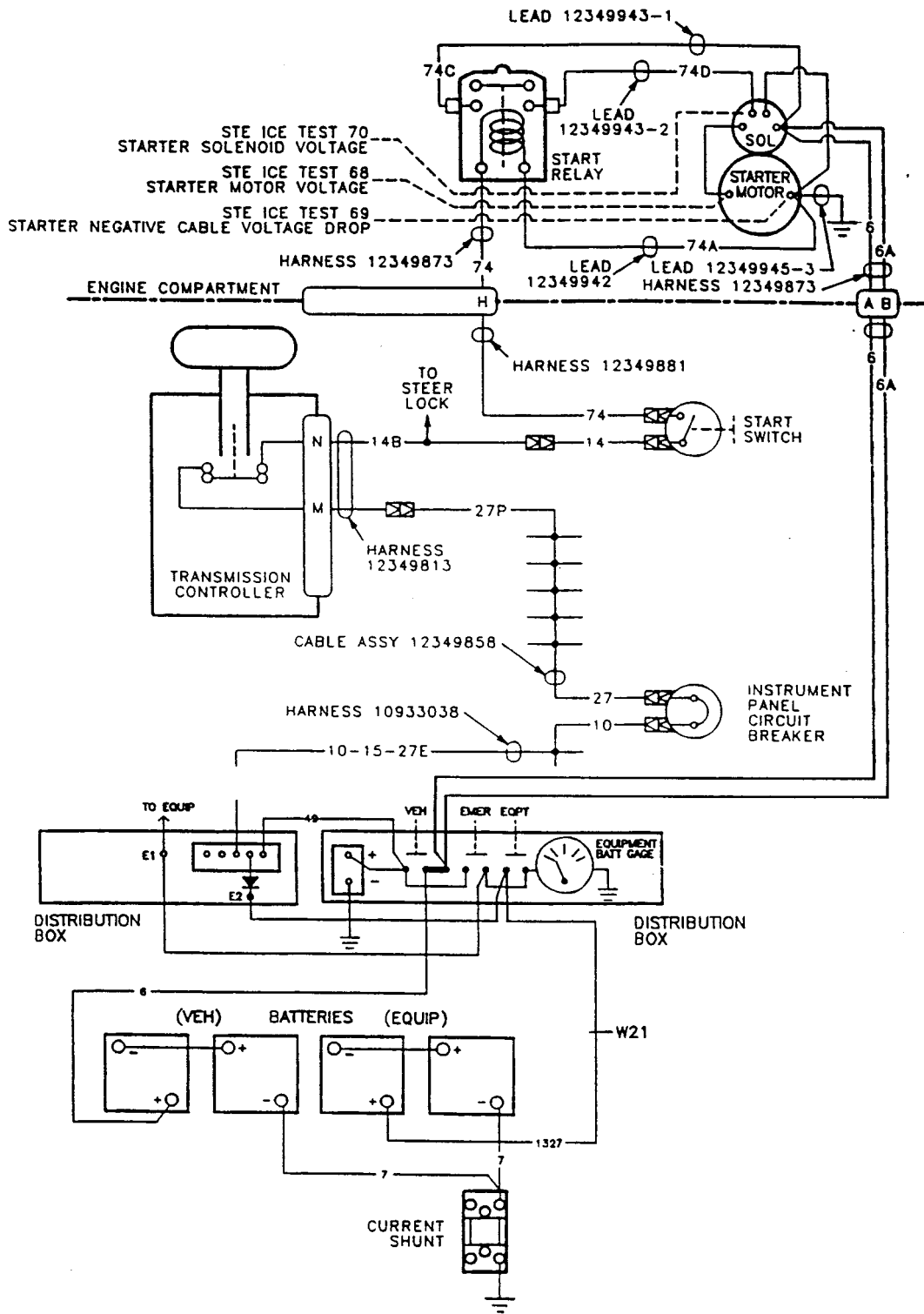






ENGINE STARTER CIRCUIT SCHEMATIC (M981A3 ONLY)

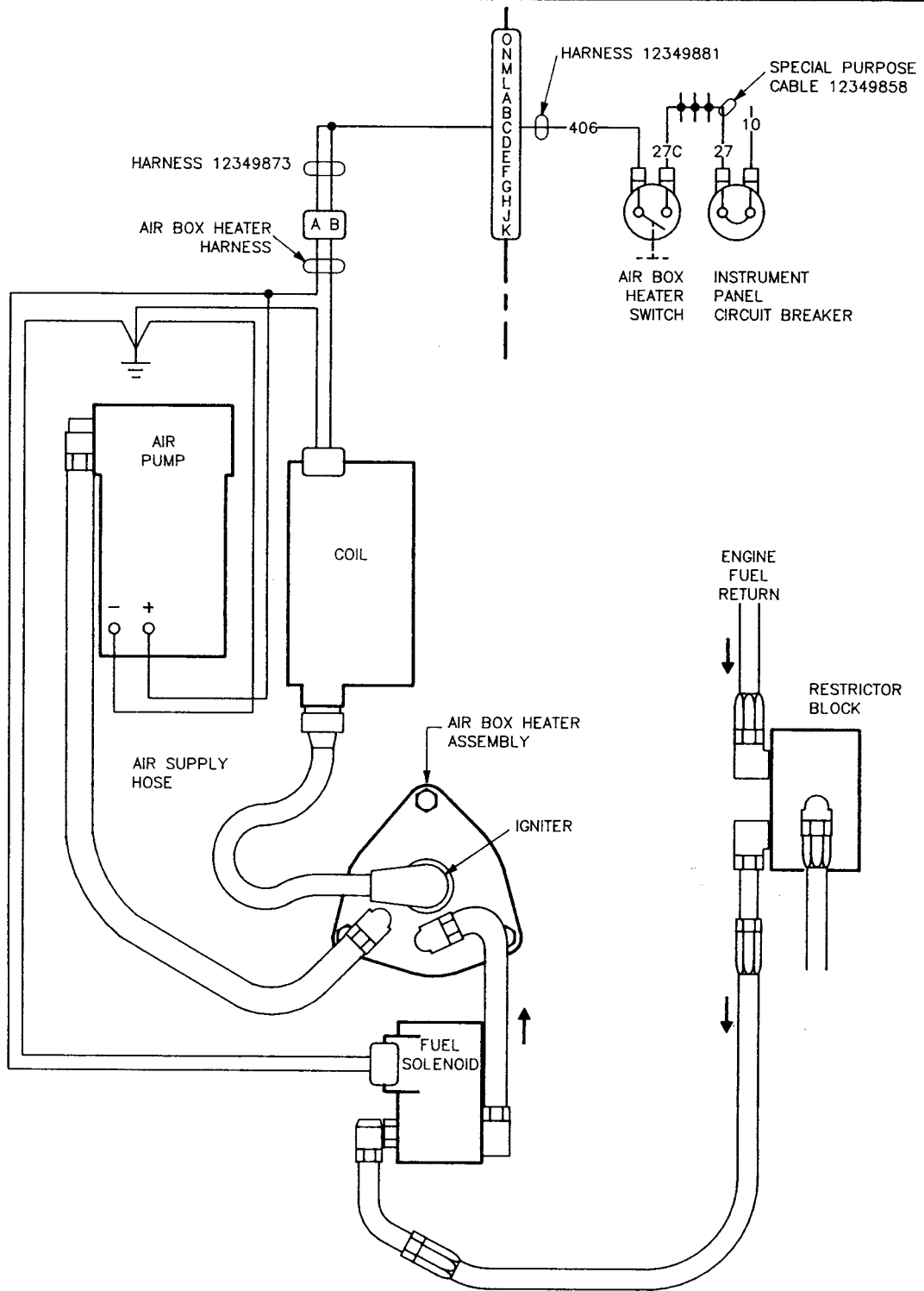
0012 00





ENGINE AIR BOX HEATER SCHEMATIC

0013 00





**ENGINE OVERHEATS**

**0014 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

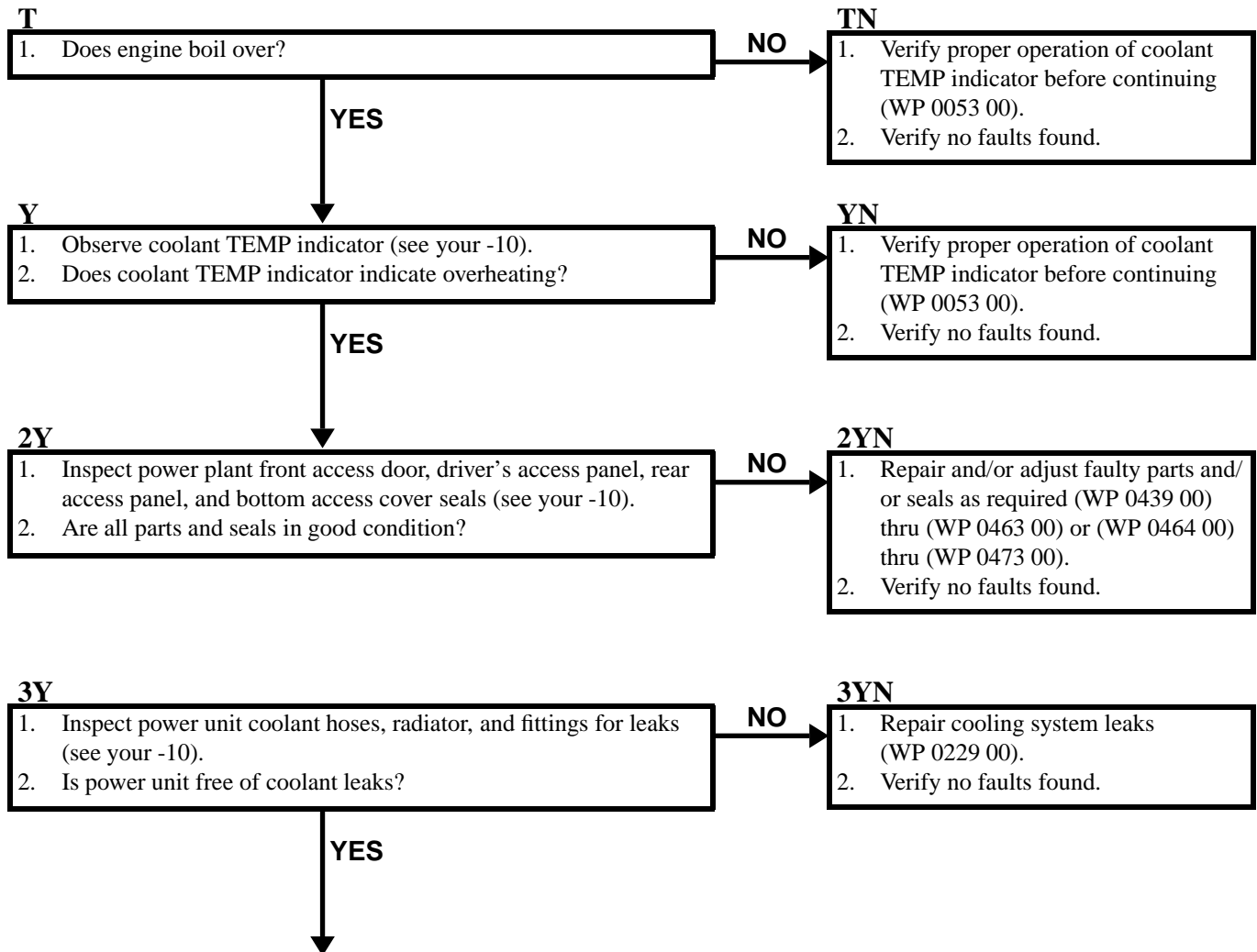
- General mechanic's tool kit: automotive (WP 0926 00, Item 65)
- Pipe bushing, 1/4 ext to 1/8 int (WP 0926 00, Item 11)
- Pipe plug, 1/8 inch (WP 0926 00, Item 33)
- Radiator test kit (WP 0926 00, Item 60)

Equipment Condition

- Engine stopped (see your -10)
- Vehicle blocked (see your -10)
- Power plant access door open (see your -10)
- Trim vane lowered (see your -10)
- Driver's power plant access panels removed (WP 0441 00)
- Power plant access panels removed (WP 0439 00)

Personnel Required

- Unit Mech 63T10
- Helper (H)



**4Y**

1. Inspect engine coolant pump drive belt tension (WP 0239 00).  
 2. Is drive belt in good condition and in proper adjustment?

**NO** → **4YN**

1. Replace and/or adjust coolant pump belt (WP 0239 00), and (WP 0240 00).  
 2. Verify no faults found.

**YES** ↓

**5Y**

1. Inspect ventilating fan drive belt tension (WP 0242 00).  
 2. Is drive belt in good condition and in proper adjustment?

**NO** → **5YN**

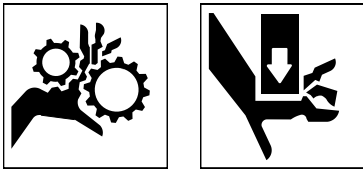
1. Replace and/or adjust ventilating fan drive belt (WP 0242 00) and (WP 0243 00).  
 2. Verify no faults found.

**YES** ↓

**6Y**

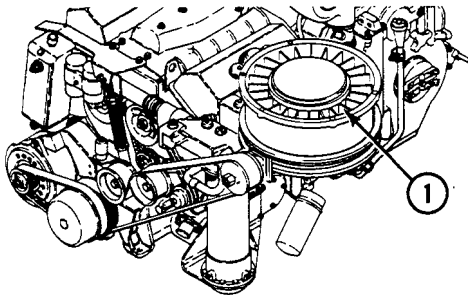
**WARNING**

**NO** → **GO TO BY (PAGE 0014 00-5)**



**Moving parts of power unit can seriously injure you.**  
**Clear personnel away from power unit before startup.**  
**Stay clear of moving parts when power unit is running.**

1. Turn MASTER SWITCH ON.
2. Start engine (see your -10).
3. Run engine until coolant temperature indicator reads 200 degrees.
4. Observe ventilating fan (1) operation.
5. Does ventilating fan rotate?



**YES** ↓

**7Y**

1. Engage thermostatic fan speed switch (see your -10).
2. Observe ventilating fan speed.
3. Does speed stay the same?

NO

**7YN**

1. Replace thermostatic fan switch (WP 0231 00).
2. Verify no faults found.

YES

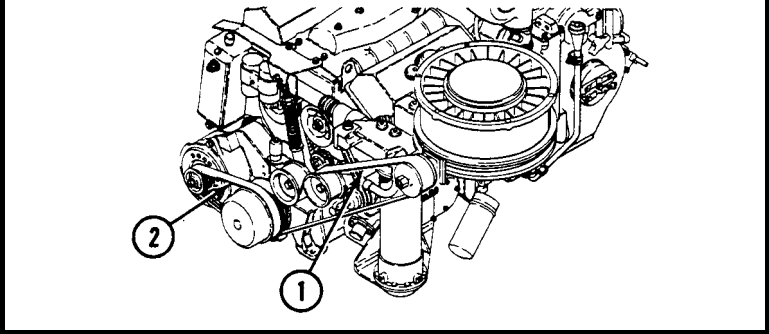
**8Y**

1. Observe rotation of ventilating fan (1) and generator drive pulleys (2) on drive unit.
2. Is fan pulley rotating as fast as the generator pulley?

NO

**8YN**

1. Disengage thermostatic fan speed switch.
2. Replace variable speed fan drive (WP 0249 00).
3. Verify no faults found.



YES

9Y

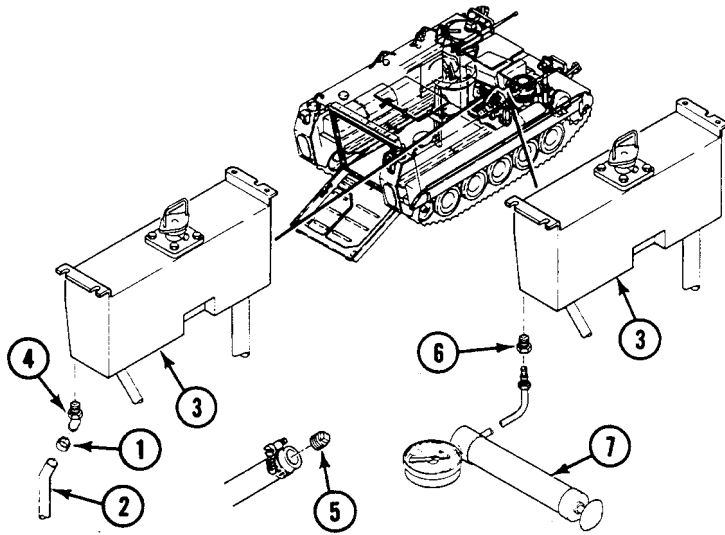
**WARNING**



**Hot parts can burn you.**

**Allow parts to cool before working on or near them.  
If necessary, use heat protective gloves to work on hot parts.**

1. Drain cooling system until auxiliary tank is empty (WP 0227 00).
2. Loosen hose clamp (1) on hose (2) at auxiliary tank (3).
3. Remove hose (2) from auxiliary tank (3).
4. Allow coolant to drain from elbow (4) on auxiliary tank (3). Use clean suitable container to catch coolant.
5. Install pipe plug (5) in hose (2) using hose clamp (1).
6. Remove elbow (4) from auxiliary tank (3).
7. Install bushing (6) on auxiliary tank (3).
8. Install radiator pressure tester (7) to bushing (6).
9. Pump system no higher than 15 psi pressure.
10. Does auxiliary tank filler cap relieve pressure between 13 and 15 psi pressure?



**YES**

**NO**

9YN

1. Refill cooling system (WP 0227 00).
2. Replace auxiliary tank filler cap (WP 0230 00).
3. Verify no faults found.



**10Y**

1. Allow system to remain at 13 to 15 psi pressure for five minutes.
2. Does pressure drop less than one psi?

NO

**10YN**

1. Internal coolant system leak. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**11Y**

1. Replace coolant pump (WP 0241 00).
2. Verify no faults found.

**BY**

1. Engage thermostatic fan speed switch (see your -10).
2. Does fan still fail to rotate?

NO

**BYN**

1. Replace thermostatic fan speed switch (WP 0231 00).
2. Verify no faults found.

YES

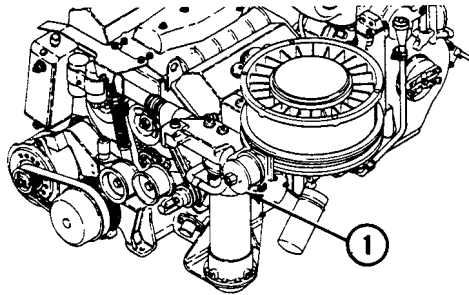
**B2Y**

1. Stop engine (see your -10).
2. Remove ventilating fan drive belt (WP 0243 00).
3. Manually rotate ventilating fan drive shaft pulley (1).
4. Does fan spin freely?

NO

**B2YN**

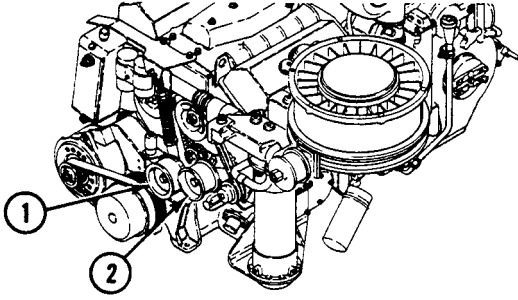
1. Faulty fan drive gearbox. Beyond unit maintenance repair.
2. Notify supervisor.



YES

**B3Y**

1. Manually rotate adjustable (1) and nonadjustable (2) ventilating fan drive idler pulleys.
2. Do pulleys spin freely?



NO

**B3YN**

1. Replace adjustable and/or nonadjustable idler pulleys (WP 0240 00).
2. Verify no faults found.

YES

**B4Y**

1. Replace variable speed fan drive unit (WP 0249 00).
2. Verify no faults found.

**ENGINE OVERCOOLS**

**0015 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

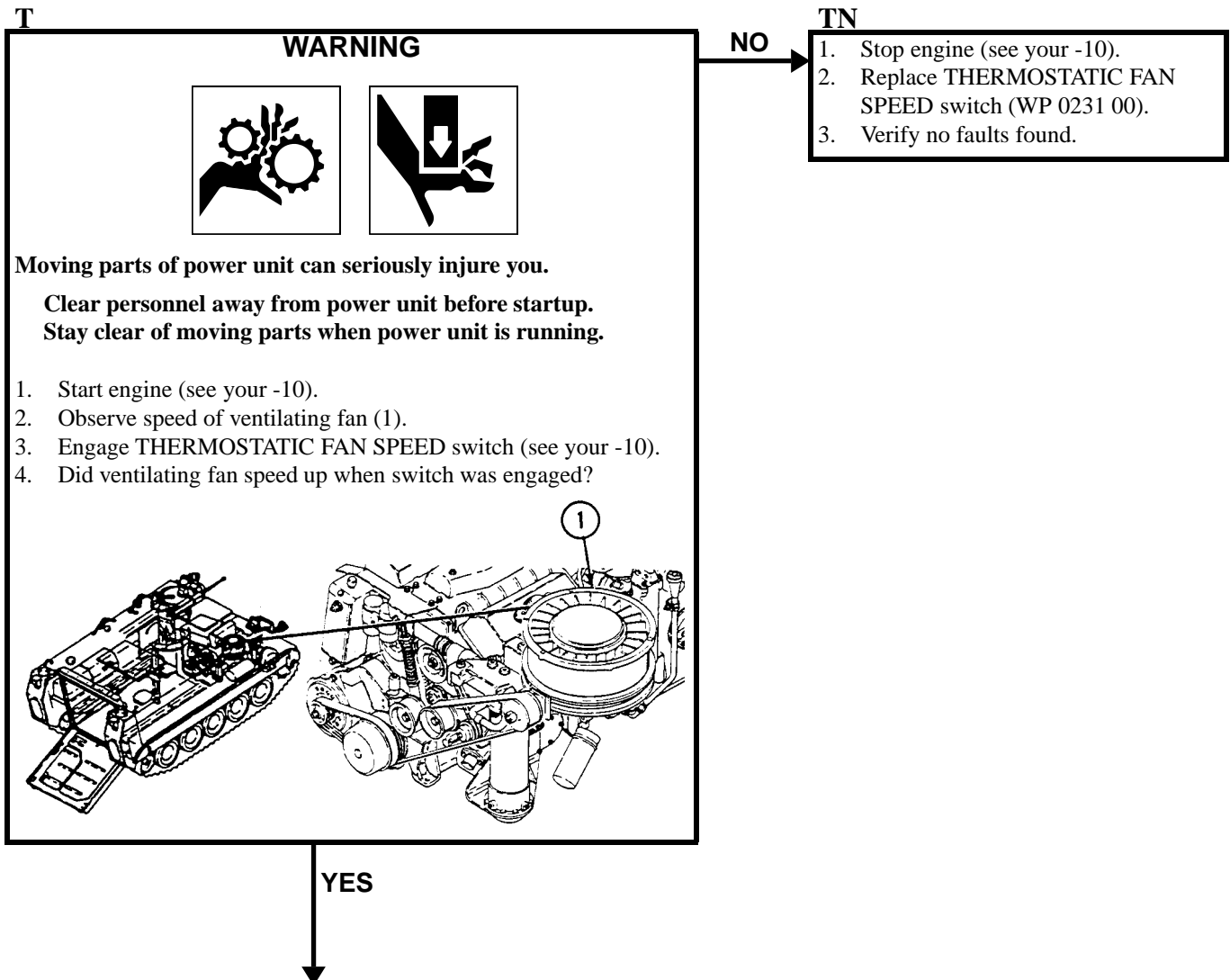
Unit Mechanic 63T10  
Helper (H)

References

See your -10

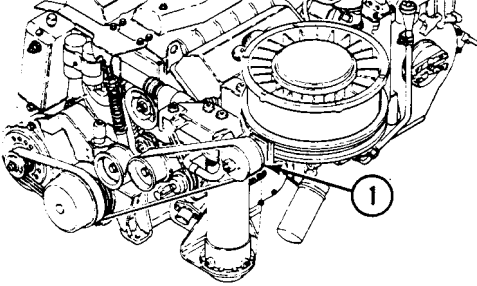
Equipment Condition

Engine stopped (see your -10)  
Vehicle blocked (see your -10)  
Trim vane lowered (see your -10)  
Power plant access panels open (see your -10)  
Power plant access panels removed (WP 0439 00)  
Driver's power plant access panel removed (WP 0441 00)  
Coolant TEMP indicator operation checked (WP 0053 00)



**Y**

1. Stop engine (see your -10).
2. Disengage THERMOSTATIC FAN SPEED switch (see your -10).
3. Manually rotate fan drive belt (1).
4. Do fan drive belt and all related pulleys rotate freely?



**NO**

**YN**

1. Replace variable speed fan drive unit (WP 0249 00).
2. Verify no faults found.

**YES**

**2Y**

1. Replace engine thermostat (WP 0237 00).
2. Verify no faults found.

**ENGINE DOES NOT CRANK**

**0016 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-751-12&P

Tools and Special Tools

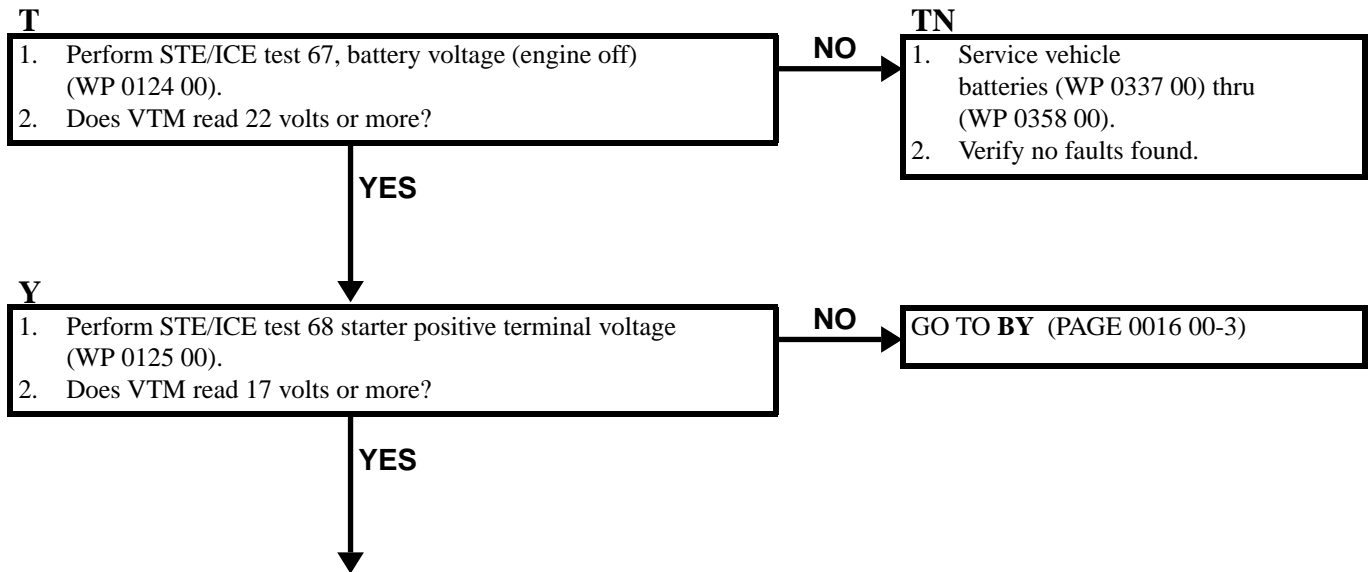
General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)  
STE/ICE test set (WP 0926 00, Item 61)  
Electrical tool kit (WP 0926 00, Item 64)  
Socket wrench set (WP 0926 00, Item 73)

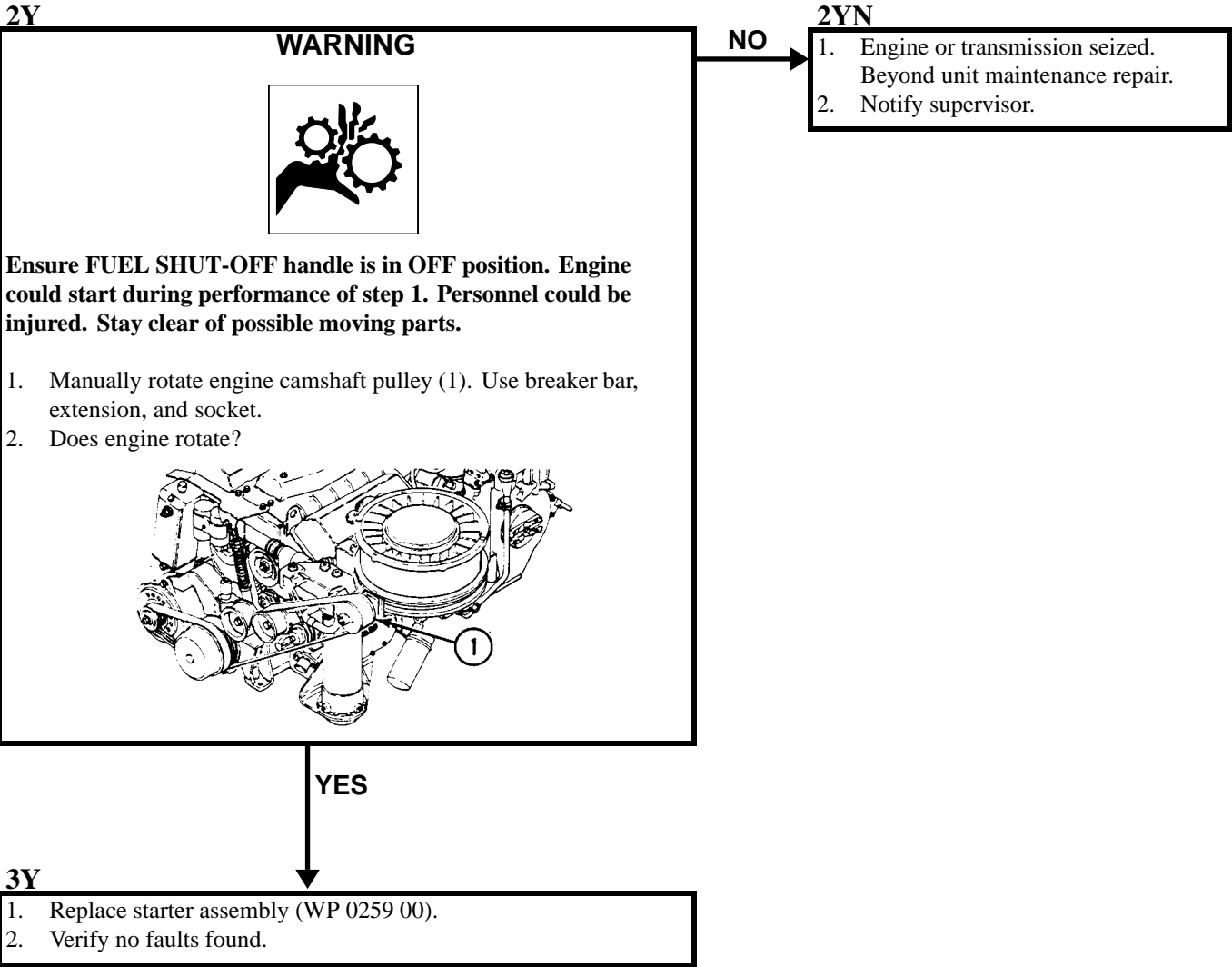
Equipment Condition

Engine stopped (see your -10)  
Vehicle blocked (see your -10)  
Trim vane lowered (see your -10)  
Power plant access panel open (see your -10)  
STE/ICE VTM hooked up to DCA 6 (WP 0117 00)  
Driver's power plant access panel removed  
(WP 0441 00)

Personnel Required

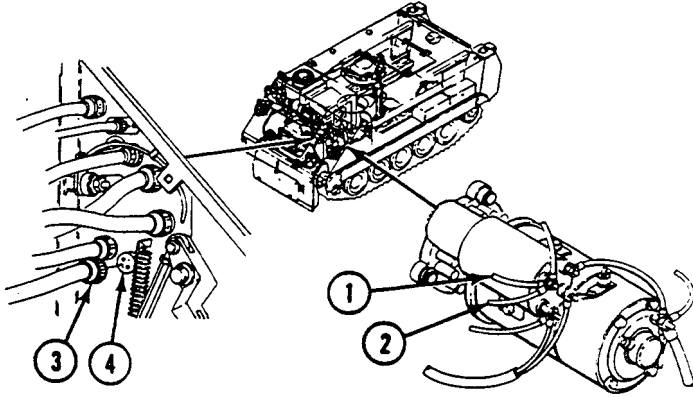
Unit Mech 63T10  
Helper (H)





**BY**

1. Inspect harness 12349873 circuit 6 (1) and 6A (2) terminal ends on starter for corrosion and/or damage.
2. Remove harness 12349873 circuit 6/6A plug (3) from harness 12349881 jack (4) at vehicle bulkhead.
3. Inspect condition of plug and jack pins.
4. Are all parts free from corrosion and damage?



NO

**BYN**

1. Clean and repair parts as required (WP 0382 00).
2. Verify no faults found.

YES

**B2Y**

1. Install harness 12349873 circuit 6/6A plug to harness 12349881 jack at vehicle bulkhead.
2. Perform STE/ICE test 70 starter solenoid voltage (WP 0127 00).
3. Does VTM read less than 17 volts?

NO

**B2YN**

1. Replace starter assembly (WP 0259 00).
2. Verify no faults found.

YES

**B3Y**

1. Turn MASTER SWITCH to ON.
2. Is STEERING LOCKED indicator ON?

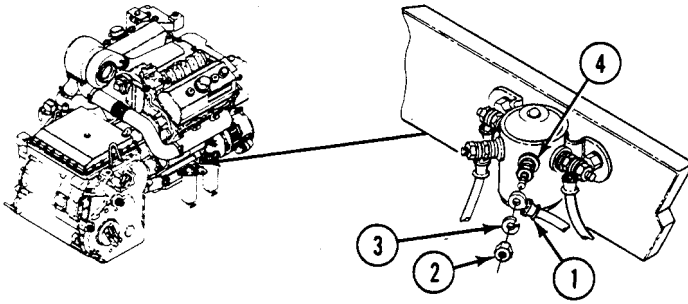
NO

GO TO CY (PAGE 0016 00-6)

YES

**B4Y**

1. Set up STE/ICE test 91 TM 9-4910-751-12&P.
2. Remove nut (1), lockwasher (2), and lead 12349942 circuit 74A (3) from starter relay (4).
3. Measure resistance between lead 12349942 circuit 74A (3) and ground.
4. Does VTM read 0 ohms?



NO

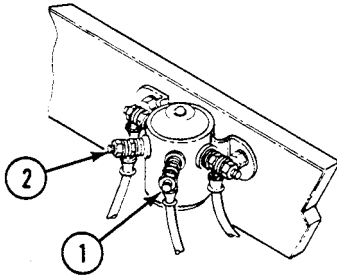
**B4YN**

1. Replace lead 12349942 circuit (WP 0258 00).
2. Verify no faults found.

YES

**B5Y**

1. Set up STE/ICE test 89 TM 9-4910-751-12&P.
2. Install lead 12349942 circuit 74A on starter relay.
3. Measure voltage between circuit 74 (1) and circuit 74A (2) posts on starter relay with START button pressed.
4. Does VTM read less than 22 volts?



NO

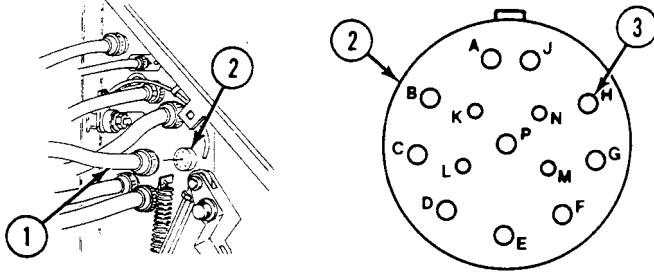
GO TO DY (PAGE 0016 00-7)

YES



**B6Y**

1. Remove harness 12349873 plug (1) from harness 12349881 jack (2) at vehicle bulkhead.
2. Measure voltage between harness 12349881 jack (2) socket H (3) and ground with START button pressed.
3. Does VTM read less than 22 volts?



NO

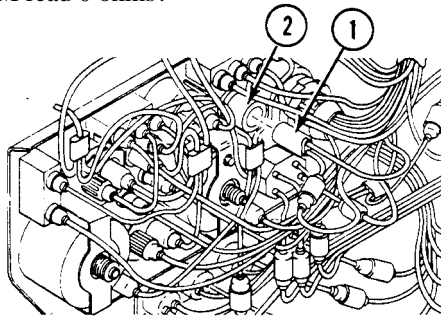
**B6YN**

1. Faulty harness 12349873 circuit 74. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**B7Y**

1. Set up STE/ICE test 91 Tm 9-4910-751-12&P.
2. Remove instrument panel for access (WP 0279 00).
3. Remove harness 12349881 plug (1) from start switch jack (2).
4. Measure resistance between start switch jack (2) pins with START button pressed.
5. Does VTM read 0 ohms?



NO

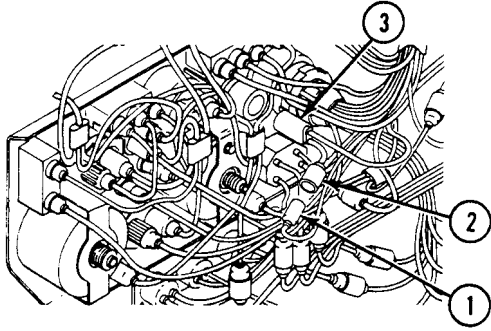
**B7YN**

1. Install harness 12349873 plug on harness 12349881 jack.
2. Replace engine start switch (WP 0284 00).
3. Verify no faults found.

YES

**B8Y**

1. Remove harness 12349813 circuit 14B plug (1) from harness 12349881 circuit 14 jack (2).
2. Measure resistance between harness 12349881 circuit 14 jack (2) and circuit 14 plug (3).
3. Does VTM read 0 ohms?



NO

**B8YN**

1. Install harness 12349873 plug on harness 12349881 jack.
2. Repair harness 12349881 circuit 14 (WP 0382 00).
3. Install instrument panel (WP 0279 00).
4. Verify no faults found.

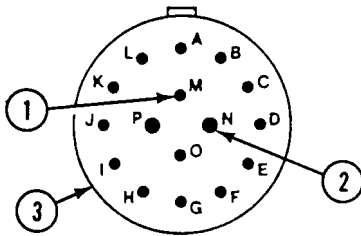
YES

**B9Y**

1. Install harness 12349813 plug on harness 12349881 circuit 14 jack.
2. Repair harness 12349881 circuit 74 (WP 0382 00).
3. Install instrument panel (WP 0279 00).
4. Verify no faults found.

**CY**

1. Turn MASTER SWITCH OFF.
2. Set up STE/ICE test 91 TM 9-4910-751-12&P.
3. Remove transmission controller (WP 0386 00) or (WP 0387 00).
4. Place transmission controller in SL position.
5. Measure resistance between pin M (1) and pin N (2) on controller jack (3).
6. Does VTM read 0 ohms?



NO

**CYN**

1. Replace transmission controller (WP 0386 00) or (WP 0387 00).
2. Verify no faults found.

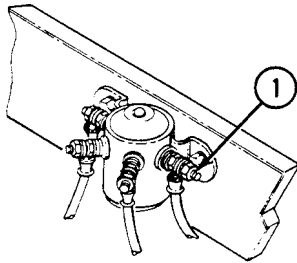
YES

**C2Y**

1. Go to: STEERING LOCKED indicator malfunctions (WP 0054 00).

**DY**

1. Measure voltage between starter relay circuit 74C post (1) and ground.
2. Does VTM read 22 volts or more?



NO

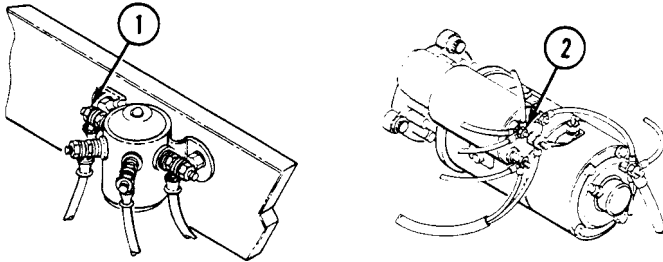
**DYN**

1. Replace lead 12349943-1 (WP 0258 00).
2. Verify no faults found.

YES

**D2Y**

1. Set up STE/ICE test 91 TM 9-4910-751-12&P.
2. Measure resistance between starter relay circuit 74D terminal (1) and starter solenoid circuit 74D terminal (2).
3. Does VTM read 0 ohms?



NO

**D2YN**

1. Replace lead 12349943-2 (WP 0258 00).
2. Verify no faults found.

YES

**D3Y**

1. Replace starter relay (WP 0258 00).
2. Verify no faults found.



**ENGINE DOES NOT START (COLD WEATHER ONLY)**

**0017 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)  
Multimeter (WP 0926 00, Item 30)

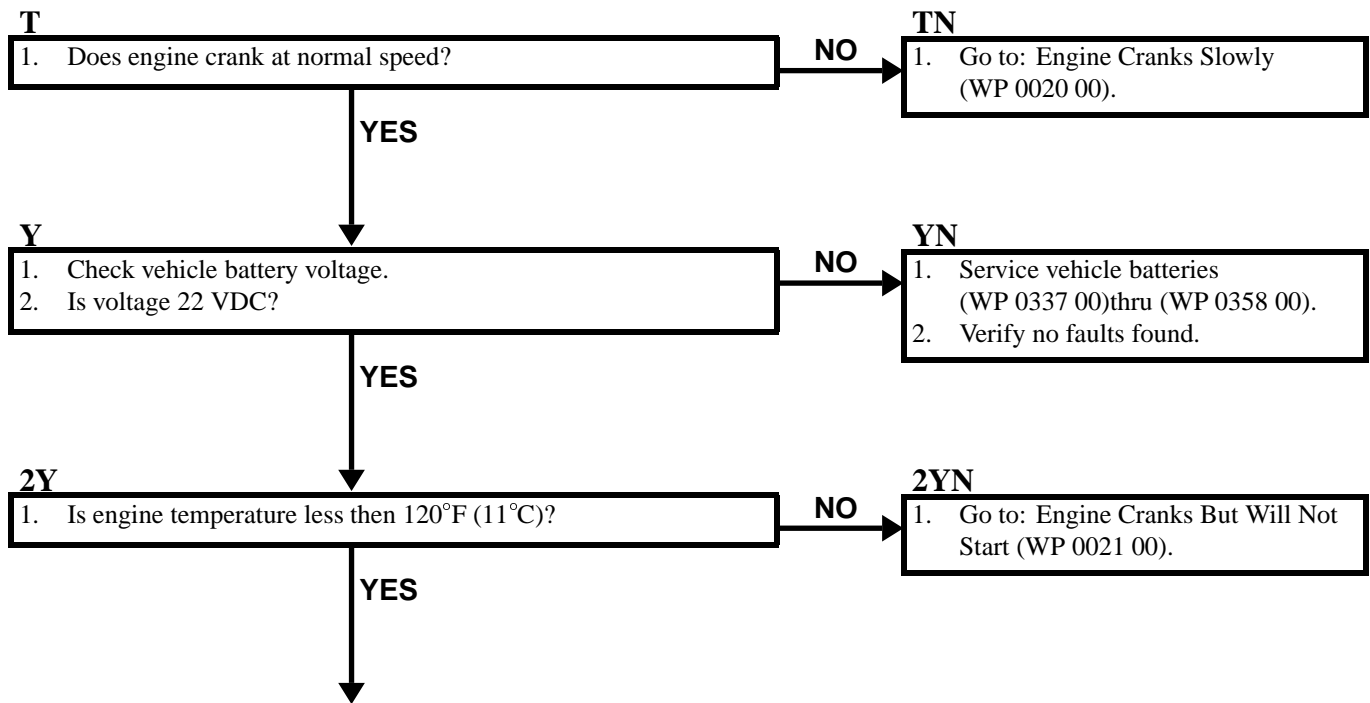
Equipment Condition

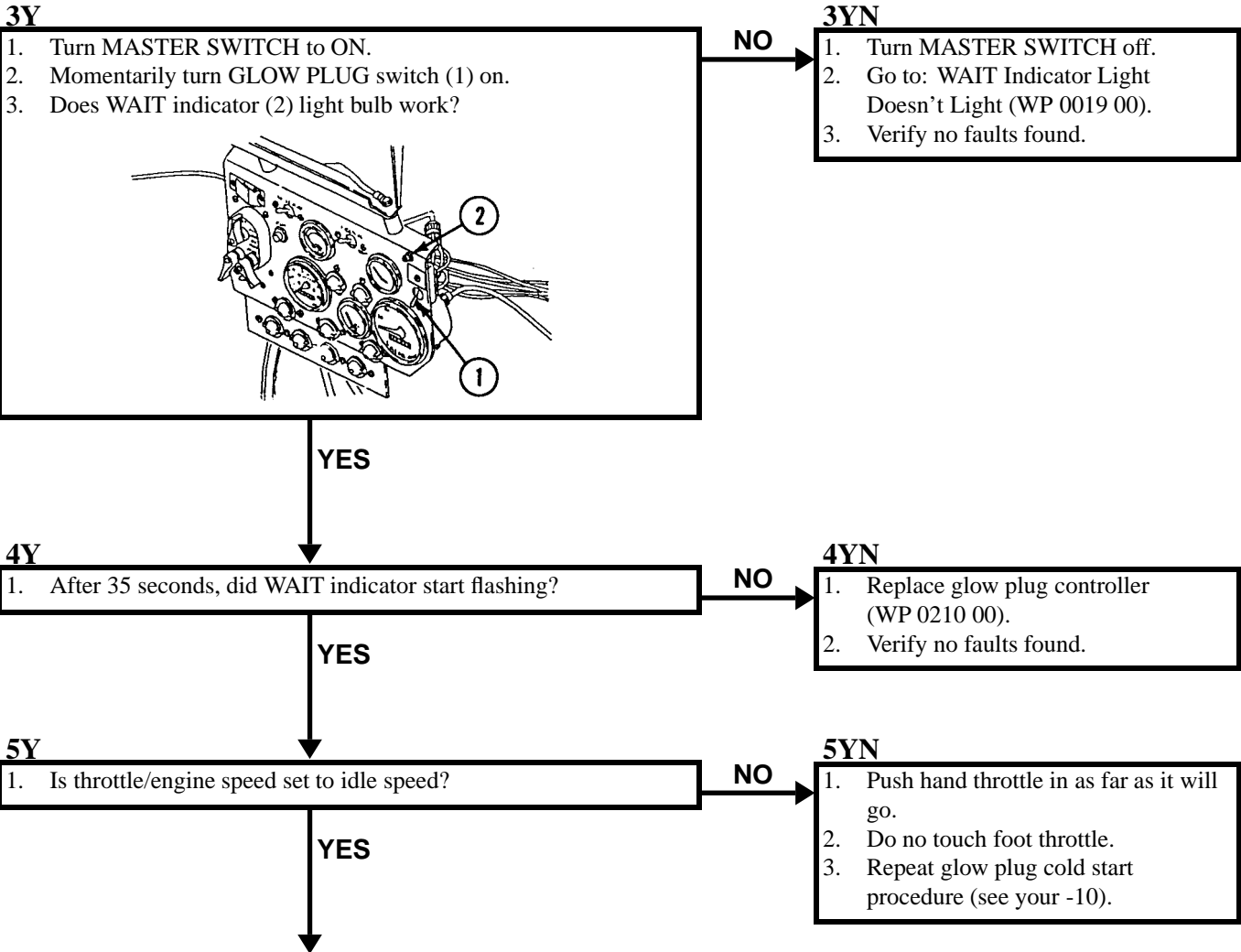
Engine stopped (see your -10)

Personnel Required

Unit Mech 63T10  
Helper (H)

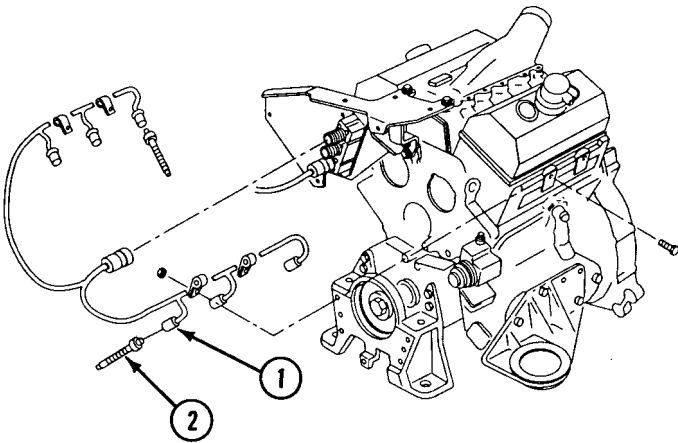
Vehicle blocked (see your -10)





**6Y**

1. Turn MASTER SWITCH OFF.
2. Disconnect glow plug harness lead (1) from glow plug (2).
3. Place multimeter red lead on glow plug and black lead on engine cylinder head.
4. Is resistance less than 3 to 10 ohms?



**NO**

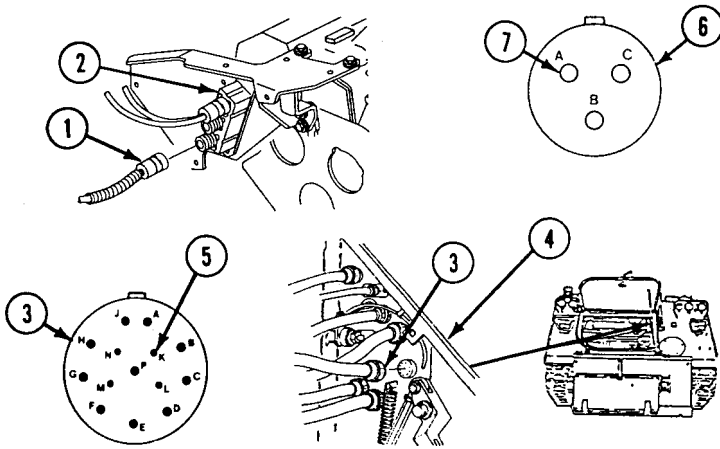
**6YN**

1. Replace glow plugs that are not within 3 to 10 ohms range (WP 0209 00).
2. Verify no faults found.

**YES**

**7Y**

1. Remove engine wiring harness 12349873-1 (1) from J2 connector on controller (2).
2. Remove engine wiring harness 12349873-1 (1) jack (3) from engine compartment bulkhead (4).
3. Check continuity between engine compartment jack (3) pin K (5) and controller plug (6) pin A (7).
4. Does multimeter read 0 ohm?



**NO**

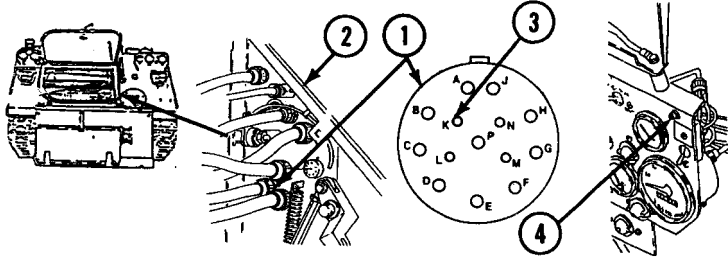
**7YN**

1. Replace engine harness 12349873-1 circuit 406A lead.
2. Verify no faults found.

**YES**

**8Y**

1. Remove front main wiring harness 12349881-2 plug (1) from engine compartment bulkhead (2).
2. Check continuity from plug pin K (3) to WAIT indicator (4) positive terminal.
3. Does multimeter read 0 ohm?



**NO**

**8YN**

1. Faulty main wiring harness 12349881-2. Beyond unit maintenance repair.
2. Notify your supervisor.

**YES**

**9Y**

1. Replace glow plug controller (WP 0210 00). If engine must be started, use your manual override procedure (see your -10).
2. Verify no faults found.



**WAIT INDICATOR FLASHES DURING START ATTEMPTS (PREGLOW OR AFTERGLOW)**

**0018 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)  
Multimeter (WP 0926 00, Item 30)

Equipment Condition

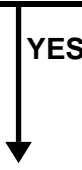
Engine stopped (see your -10)  
Vehicle blocked (see your -10)  
Battery ground leads disconnected (WP 0337 00),  
(WP 0338 00), or (WP 0339 00)

Personnel Required

Unit Mech 63T10  
Helper (H)

**T**

1. Turn MASTER SWITCH OFF.
2. Disconnect glow plug harness lead from each glow plug.
3. Place multimeter red lead on glow plug and black lead on engine cylinder head.
4. Is resistance less than 3 ohms to 10 ohms?



**NO**

**TN**

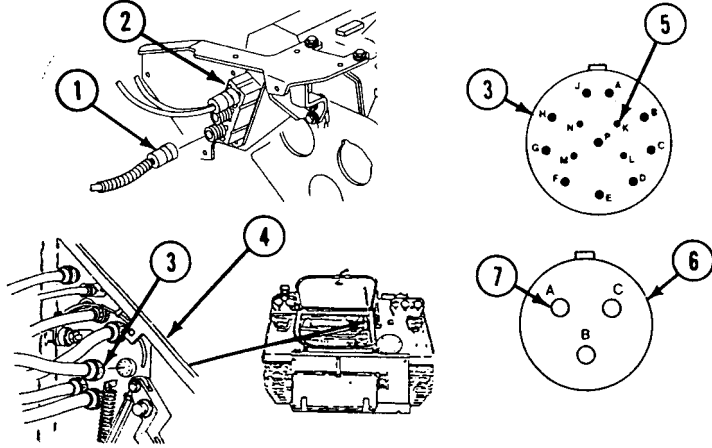
1. Replace glow plugs that are not within resistance range (WP 0209 00).
2. Verify no faults found.

**WAIT INDICATOR FLASHES DURING START ATTEMPTS (PREGLOW OR AFTERGLOW)—Continued**

0018 00

**Y**

1. Remove front main wiring harness 12349873-1 (1) from J2 connector on controller (2).
2. Remove engine wiring harness 12349873-1 jack (3) from engine compartment bulkhead (4).
3. Check continuity between engine compartment jack pin K (5) and controller plug (6) pin A (7).
4. Does multimeter read 0 ohm?



**YES**

**NO**

**YN**

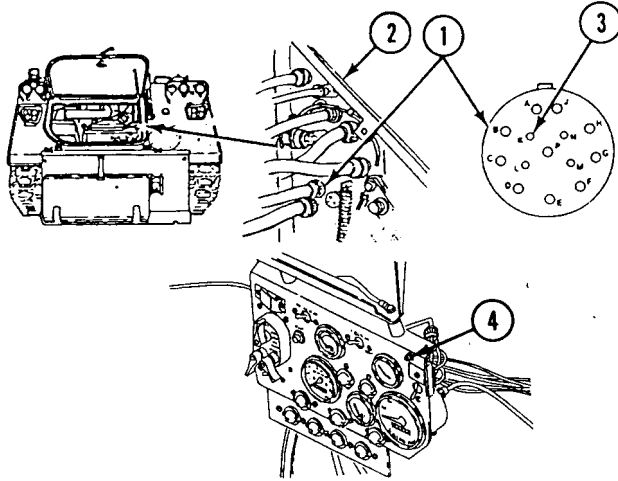
1. Repair or replace engine wiring harness 12349873-1 circuit 406A lead (WP 0359 00).
2. Verify no faults found.

**WAIT INDICATOR FLASHES DURING START ATTEMPTS (PREGLOW OR AFTERGLOW)—Continued**

0018 00

**2Y**

1. Remove front main wiring harness 12349881-2 plug (1) from engine compartment bulkhead (2).
2. Check continuity from plug pin K (3) to WAIT indicator (4) positive terminal.
3. Does multimeter read 0 ohm?



**NO**

**2YN**

1. Faulty front main wiring harness 12349881-2. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**3Y**

1. Replace glow plug controller (WP 0210 00).
2. Verify no faults found.



**WAIT INDICATOR LIGHT DOESN'T LIGHT**

**0019 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)

Multimeter (WP 0926 00, Item 30)

Equipment Condition

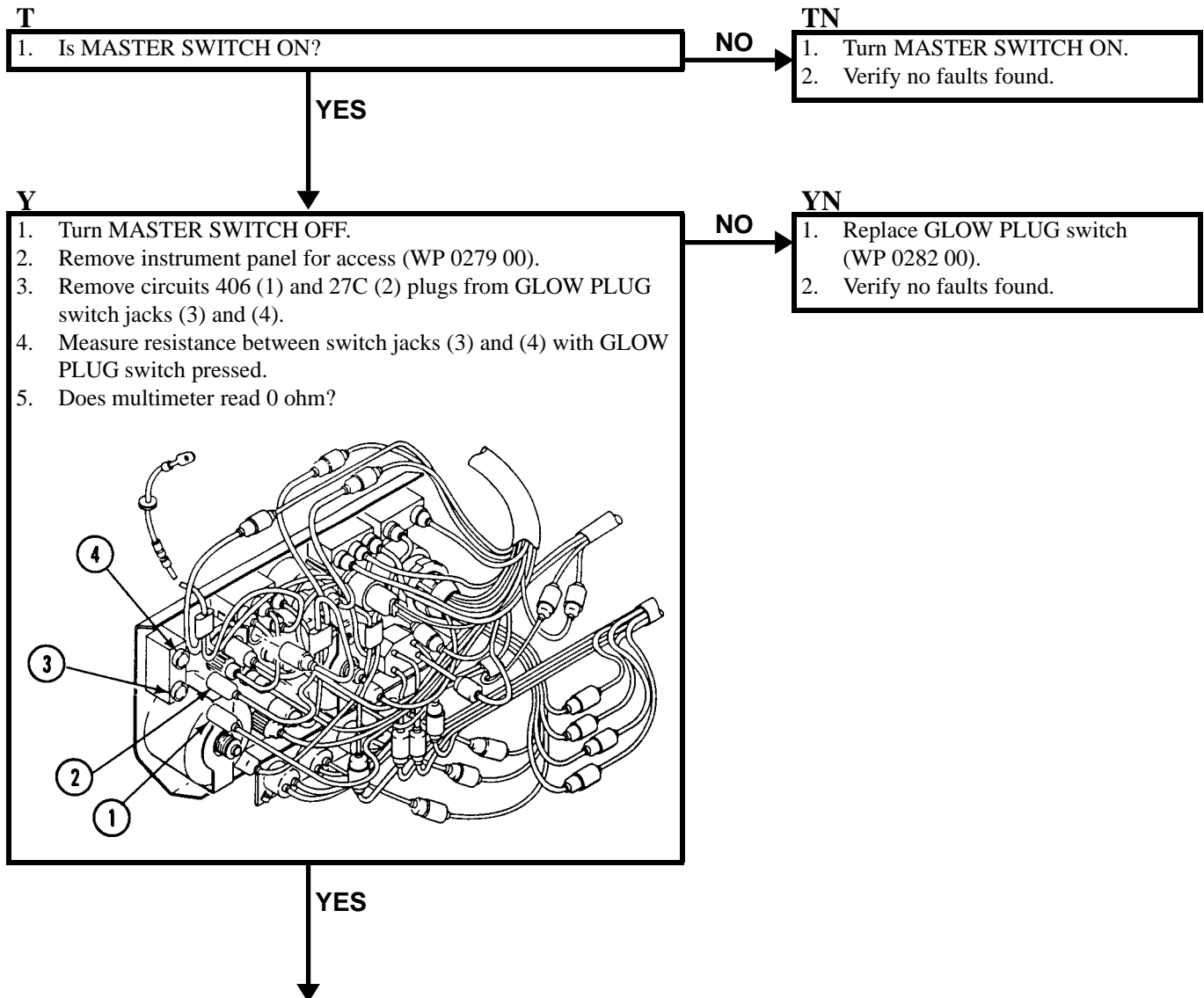
Engine stopped (see your -10)

Vehicle blocked (see your -10)

Personnel Required

Unit Mech 63T10

Helper (H)



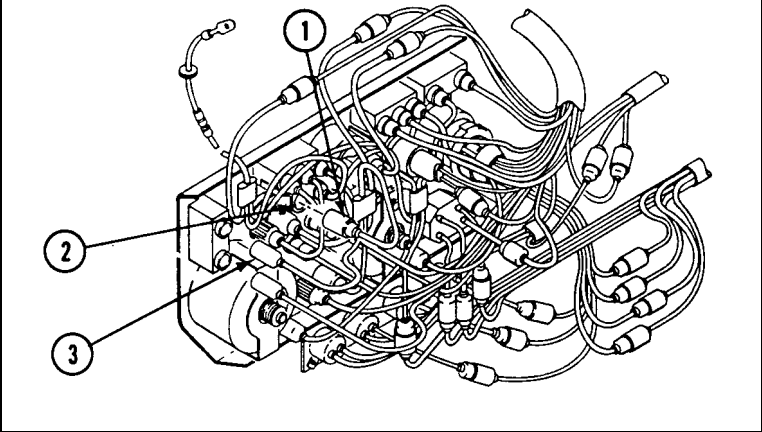
**2Y**

1. Remove circuit 27 plug (1) from instrument panel circuit breaker (2).
2. Measure resistance between cable assembly 12349858 circuit 27 (1) and 27C (3) plug pins.
3. Does multimeter read 0 ohm?

NO

**2YN**

1. Repair special purpose cable 12349858 circuit 27C/27 (WP 0382 00).
2. Verify no faults found.



YES

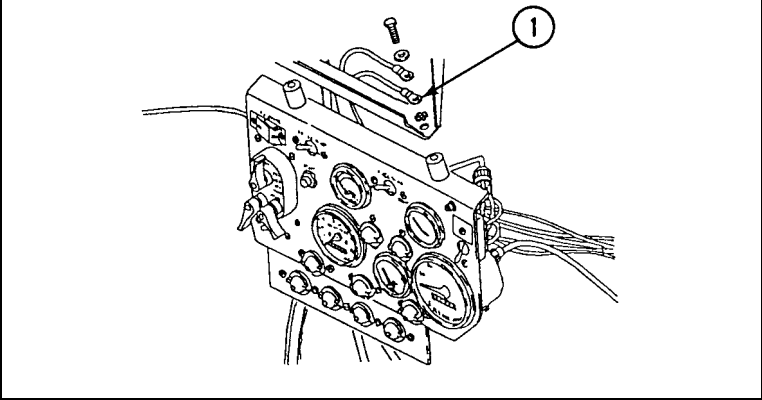
**3Y**

1. Check circuit 406B lead (1).
2. Is circuit 406B lead grounded to instrument panel mount?

NO

**3YN**

1. Ground circuit 406B lead to instrument panel mount and tighten screw.
2. Verify no faults found.



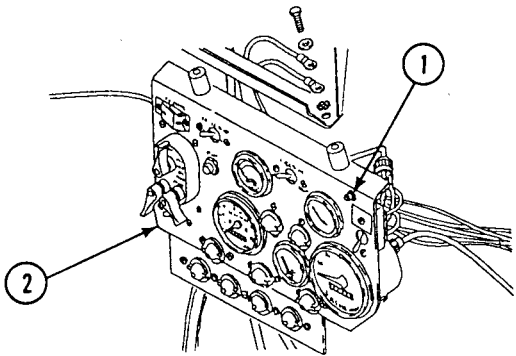
YES

WAIT INDICATOR LIGHT DOESN'T LIGHT—Continued

0019 00

**4Y**

1. Remove knurled nut from WAIT indicator (1) and instrument panel (2).
2. Remove WAIT indicator (1) from instrument panel (2).
3. Check resistance between WAIT indicator's terminals.
4. Does multimeter read approximately 240 ohms of resistance?



**NO**

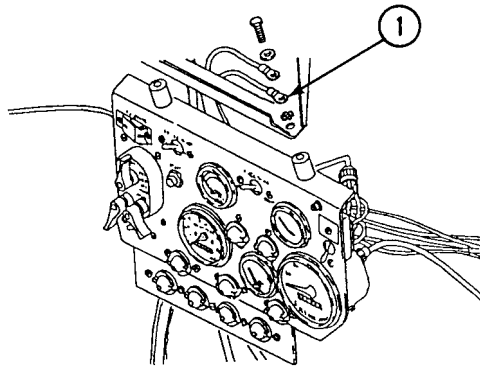
**4YN**

1. Faulty WAIT indicator on wiring harness 12349881-2. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**5Y**

1. Check circuit 406B lead (1) for continuity.
2. Does multimeter read 0 ohm?



**NO**

**5YN**

1. Faulty circuit 406B lead on wiring harness 12349881-2. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

WAIT INDICATOR LIGHT DOESN'T LIGHT—Continued

0019 00

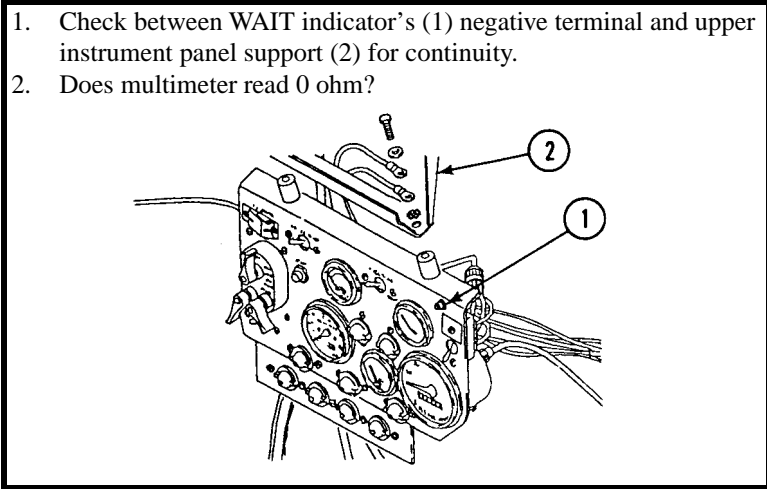
6Y

1. Check between WAIT indicator's (1) negative terminal and upper instrument panel support (2) for continuity.
2. Does multimeter read 0 ohm?

NO

6YN

1. Tighten screw securing instrument panel to support.
2. Verify no faults found



YES

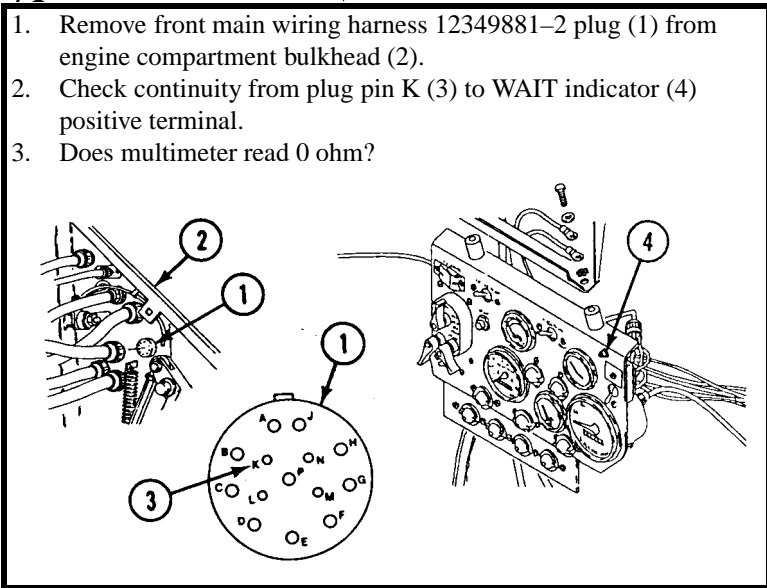
7Y

1. Remove front main wiring harness 12349881-2 plug (1) from engine compartment bulkhead (2).
2. Check continuity from plug pin K (3) to WAIT indicator (4) positive terminal.
3. Does multimeter read 0 ohm?

NO

7YN

1. Faulty front main wiring harness 12349881-2. Beyond unit maintenance repair.
2. Notify supervisor.

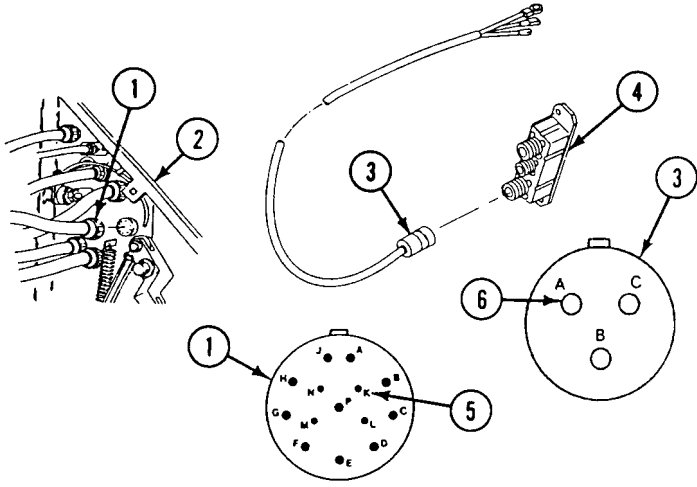


YES



**8Y**

1. Remove engine wiring harness 12349873-1 plug (1) from engine compartment bulkhead (2).
2. Disconnect plug (3) from glow plug controller (4).
3. Check continuity between engine wiring harness 12349873-1 plug (1) pin K (5) and plug (3) pin A (6).
4. Does multimeter read 0 ohms?



YES

**9Y**

1. Replace glow plug controller (WP 0210 00).
2. Verify no faults found.

NO

**8YN**

1. Replace engine wiring harness 12349873-1 circuit 406A lead.
2. Verify no faults found.



**ENGINE CRANKS SLOWLY**

**0020 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

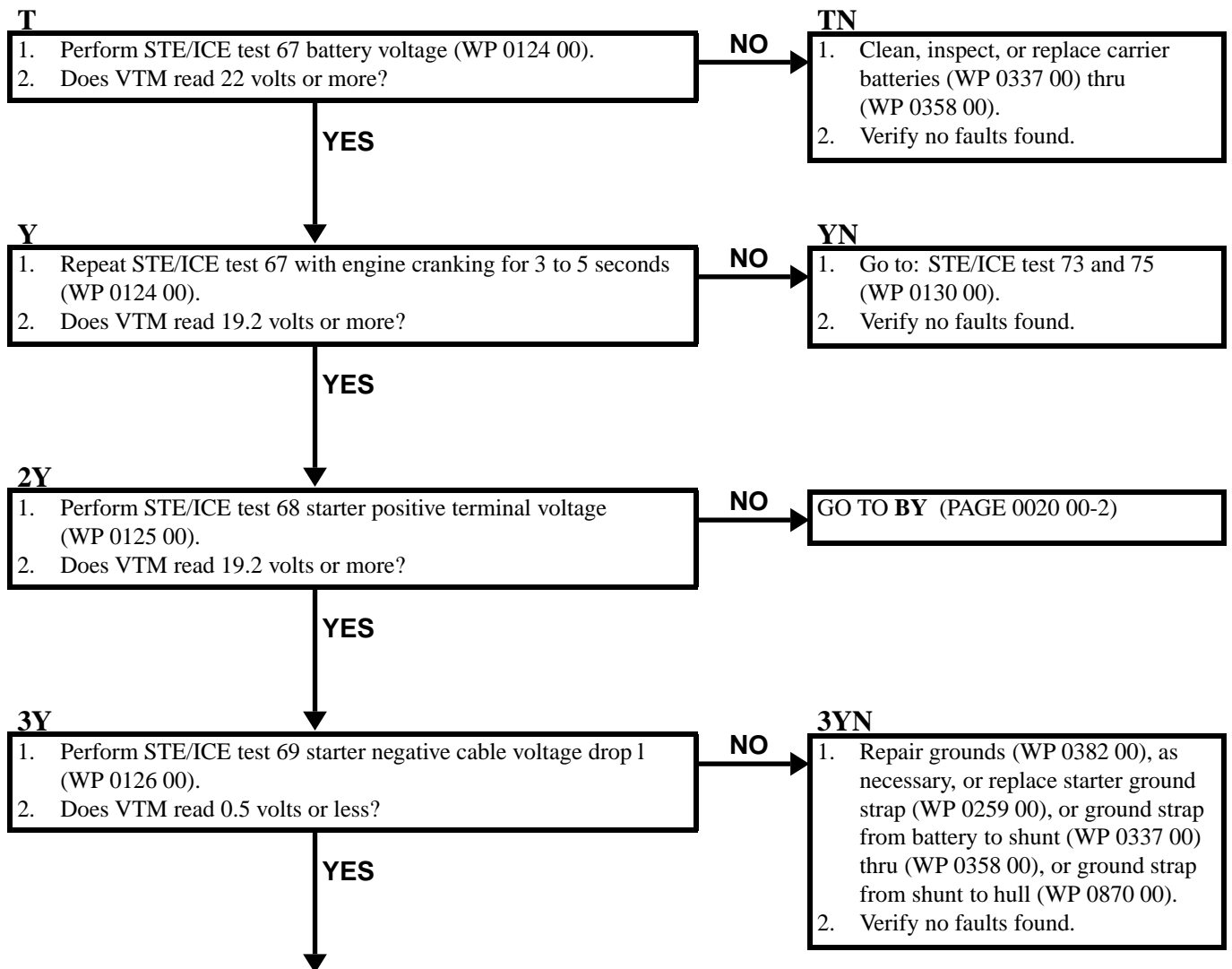
General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)  
STE/ICE-R test set (WP 0926 00, Item 61)

Equipment Condition

Engine stopped (see your -10)  
Vehicle blocked (see your -10)

Personnel Required

Unit Mech 63T10  
Helper (H)



ENGINE CRANKS SLOWLY—Continued

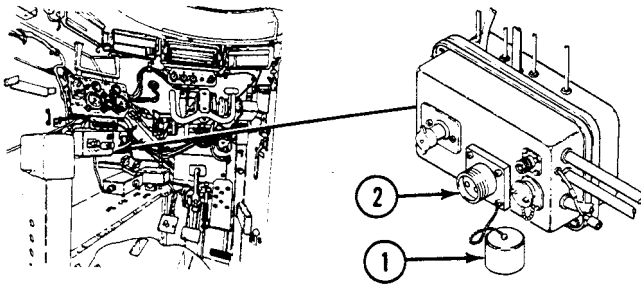
0020 00

**4Y**

1. Replace starter (WP 0259 00).
2. Verify no faults found.

**BY**

1. Remove cap (1) from slave receptacle (2).
2. Measure voltage at slave receptacle (2) on master switch panel with engine cranking for 3 to 5 seconds.
3. Does VTM read less than 19.2 volts?

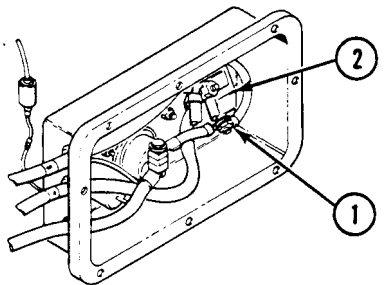


**NO** → GO TO CY (PAGE 0020 00-3)

**YES**

**B2Y**

1. Remove MASTER SWITCH panel (WP 0260 00) or (WP 0261 00).
2. Inspect terminal end on lead 12349945-1 (1) on switch (2).
3. Is terminal end free from corrosion and/or other damage?



**NO** → **B2YN**  
 1. Repair or replace lead (WP 0382 00), (WP 0356 00), (WP 0357 00) or (WP 0358 00).  
 2. Verify no faults found.

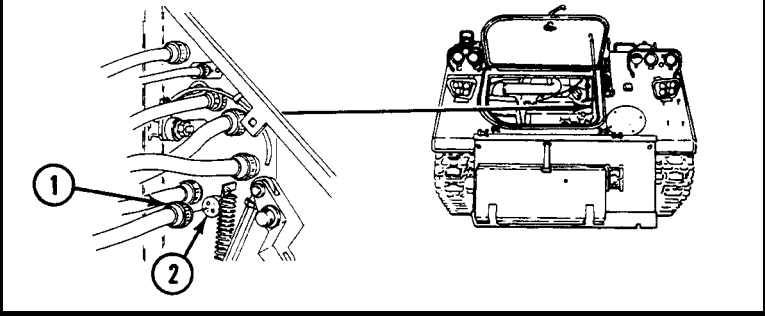
**YES**

**B3Y**

1. Replace MASTER SWITCH (WP 0261 00) or (WP 0262 00).
2. Verify no faults found.

**CY**

1. Remove harness 12349873 circuit 6/6A plug (2) from harness 12349881 circuit 6/6A jack (1) at vehicle bulkhead.
2. Inspect plug and jack for corrosion and/or other damage.
3. Are parts in good condition?



**NO**

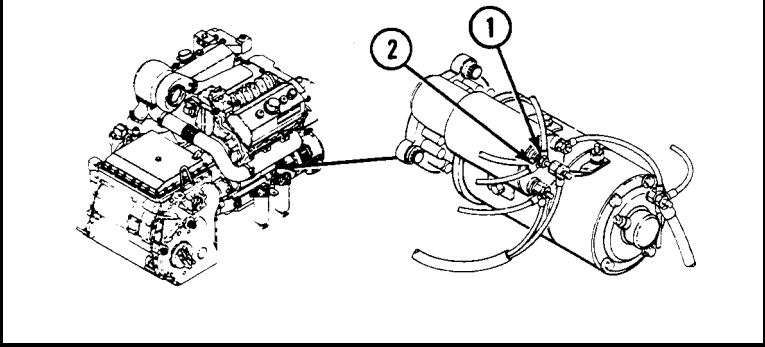
**CYN**

1. Faulty plug and/or jack. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**C2Y**

1. Install harness 12349873 circuit 6/6A plug (1) on harness 12349881 circuit 6/6A (2) jack at vehicle bulkhead.
2. Inspect harness 12349873 circuit 6 (1) and 6A (1) terminal ends on starter.
3. Are terminal ends and leads free from corrosion and/or other damage?



**NO**

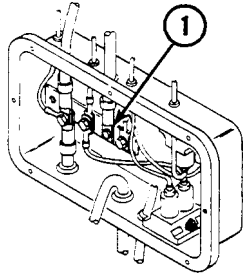
**C2YN**

1. Replace harness 12349873 (WP 0382 00).
2. Verify no faults found.

**YES**

**C3Y**

1. Remove MASTER SWITCH panel (WP 0260 00) or (WP 0261 00).
2. Inspect lead 12350256-1 (1) from MASTER SWITCH to distribution box.
3. Are lead and lead end free from corrosion and damage?



NO

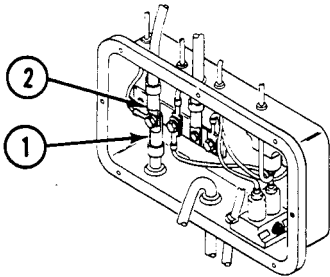
**C3YN**

1. Replace lead 12350256-1 (WP 0266 00) or (WP 0267 00).
2. Verify no faults found.

YES

**C4Y**

1. Inspect harness 12349881 circuit 6 (1) and 6A (2) leads on distribution box.
2. Are leads and lead terminal ends free of corrosion and damage?



NO

**C4YN**

1. Repair harness 12349881 circuit 6 and 6A (WP 0382 00).
2. Verify no faults found.

YES

**C5Y**

1. Install MASTER SWITCH panel (WP 0260 00) or (WP 0261 00).
2. Replace starter assembly (WP 0259 00).
3. Verify no faults found.

**ENGINE CRANKS BUT WILL NOT START**

**0021 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Equipment Condition

Engine stopped (see your -10)

Carrier blocked (see your -10)

Driver's power plant access panels removed  
(see your -10)

Power plant rear access panels removed (see your -10)

Trim vane lowered (see your -10)

Power plant access door open (see your -10)

Materials/Parts

Suitable container

Personnel Required

Unit Mechanic

Helper (H)

**T**

1. Inspect condition and operation of fuel cut off cable assembly (WP 0220 00).
2. Is cable assembly in good condition and in proper adjustment?

**NO**

**TN**

1. Replace and/or adjust fuel cut off cable assembly (WP 0220 00).
2. Verify no faults found.

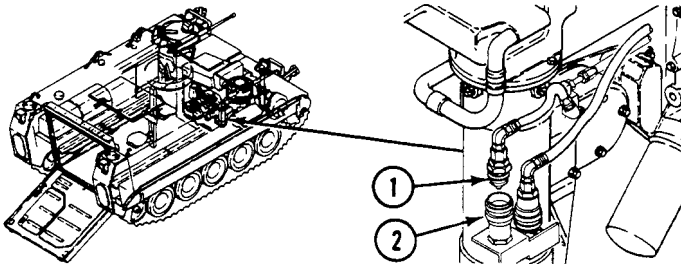
**YES**

**Y**

1. Disconnect engine fuel return line (1) from quick disconnect fitting (2).
2. Depress plunger on quick disconnect fitting (1). Catch fuel in suitable container.
3. Crank engine with plunger depressed. Have helper assist.
4. Does fuel flow out while cranking engine?

**NO**

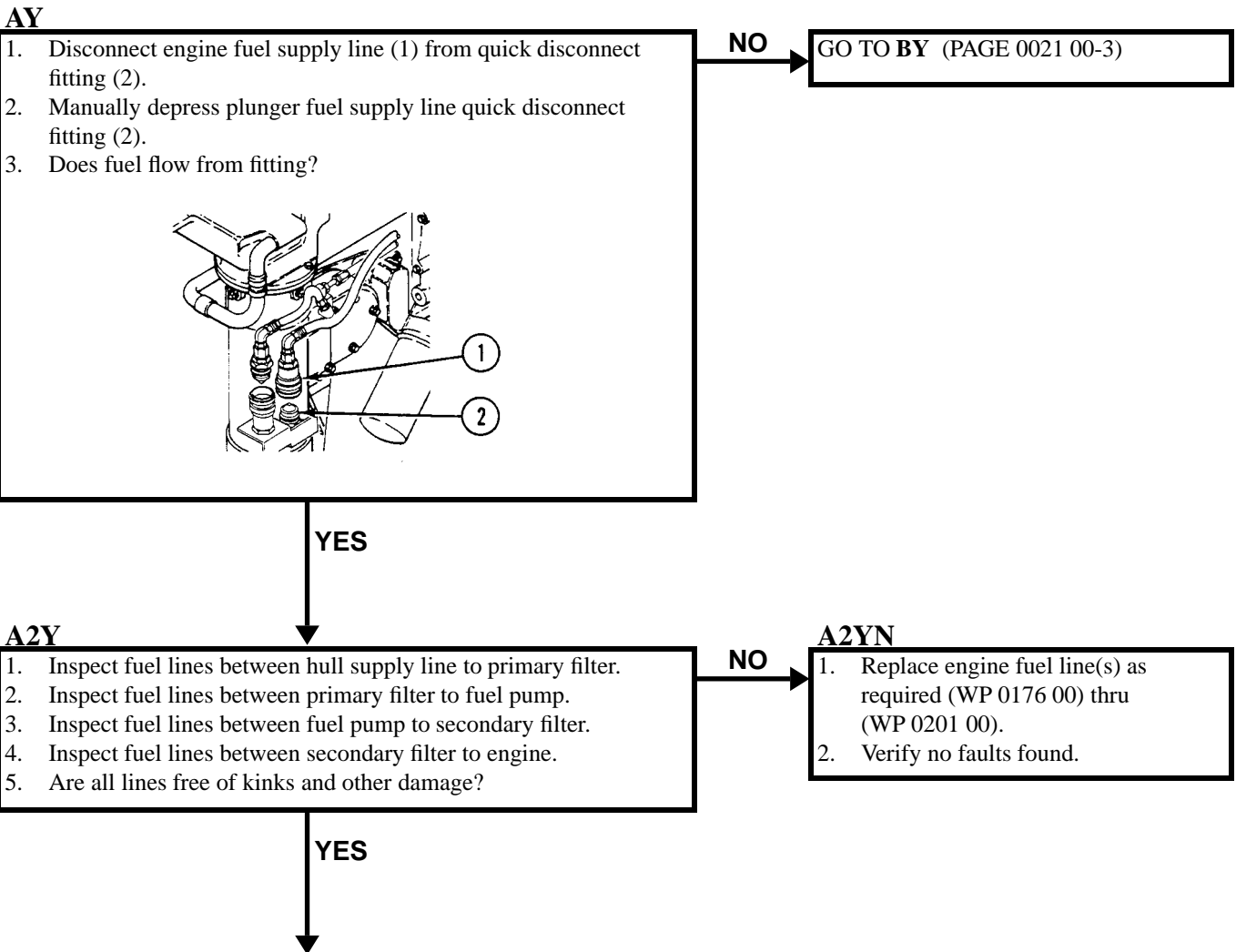
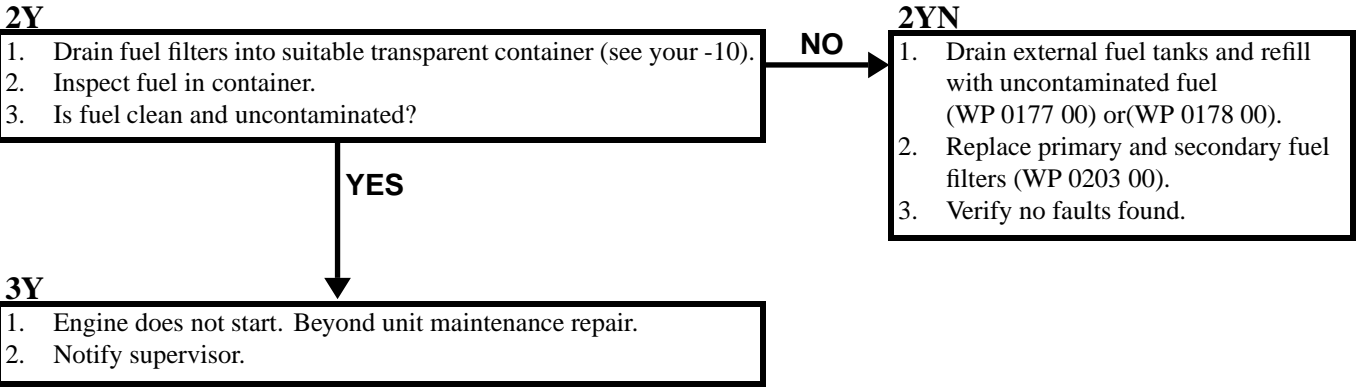
**GO TO AY (PAGE 0021 00-2)**



**YES**

ENGINE CRANKS BUT WILL NOT START—Continued

0021 00



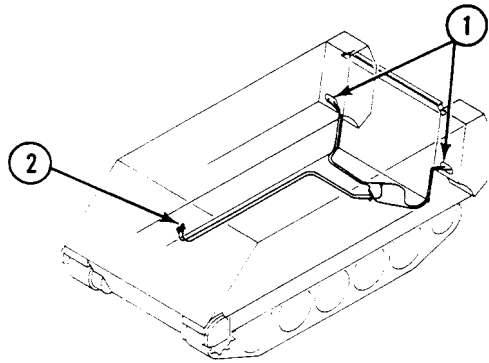


**A3Y**

1. Replace fuel pump (WP 0166 00).
2. Verify no faults found.

**BY**

1. Remove rear compartment floor plates (WP 0539 00) thru (WP 0545 00).
2. Inspect fuel lines between fuel tanks (1) and quick disconnect fittings (2).
3. Are all line and fittings free from leaks and damage?



NO

**BYN**

1. Repair/replace fuel line(s) as required (WP 0176 00) thru (WP 0201 00).
2. Verify no faults found.

YES

**B2Y**

1. Clear clogged fuel pick up tubes in external tanks (WP 0177 00) and (WP 0178 00).
2. Verify no faults found.



**ENGINE CRANKS BUT WON'T START BELOW 40° (AIR BOX HEATER IS USED)**

0022 00

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)

Carrier blocked (see your -10)

Fuel tanks half full or more (see your -10)

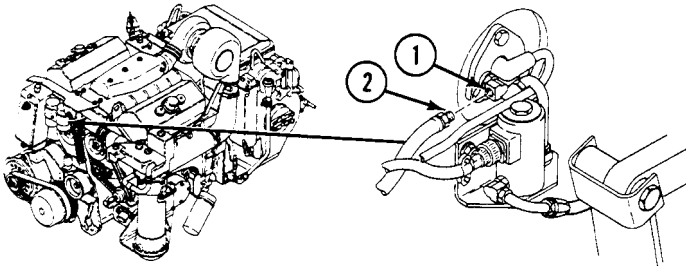
Personnel Required

Unit Mechanic

Helper (H)

**T**

1. Remove air pump to air box heater hose (2) from air box heater (1).
2. Turn MASTER SWITCH and AIR BOX HEATER to ON (see your -10).
3. Does air flow from end of hose?



**NO**

**GO TO AY (PAGE 0022 00-4)**

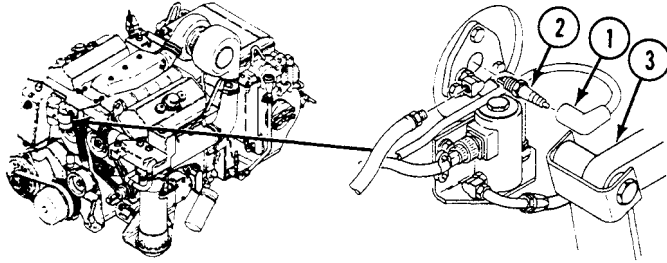
**YES**

**ENGINE CRANKS BUT WON'T START BELOW 40° (AIR BOX HEATER IS USED)—Continued**

0022 00

**Y**

1. Release air box heater switch.
2. Install air pump to air box heater hose onto air box heater.
3. Remove air box igniter high voltage wire (1) and igniter (2).
4. Install high voltage wire (1) on igniter (2).
5. Ground hex portion of igniter (2) on idler pulley pivot (3).
6. Depress air box heater switch.
7. Does igniter produce a spark?



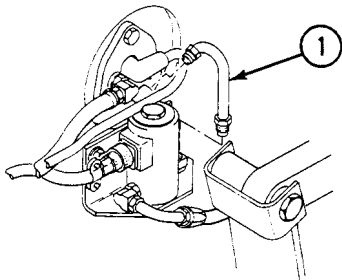
**NO**

**GO TO BY (PAGE 0022 00-5)**

**YES**

**2Y**

1. Release air box heater switch.
2. Install air box igniter.
3. Remove solenoid to air box heater tube assembly (1).
4. Depress air box heater switch with engine cranking for 5 seconds. Do not allow engine to start.
5. Does fuel fail to flow from solenoid with switch depressed?



**NO**

**2YN**

1. Air box heater is working properly.
2. Go to Engine cranks, but will not start (WP 0021 00).

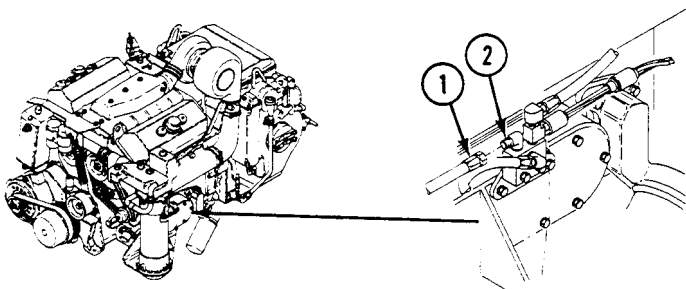
**YES**

ENGINE CRANKS BUT WON'T START BELOW 40° (AIR BOX HEATER IS USED)—Continued

0022 00

**3Y**

1. Turn AIRBOX HEATER and MASTER SWITCH to OFF.
2. Remove fuel supply line to solenoid (1) at restrictor block (2).
3. Does fuel flow from restrictor block with engine cranking?



**NO**

**3YN**

1. Install fuel supply line to solenoid at restrictor block (WP 0206 00).
2. Go to engine cranks, but won't start (WP 0021 00).

**YES**

**4Y**

1. Inspect fuel supply line to solenoid.
2. Is line free from kinks or clogs?

**NO**

**4YN**

1. Replace air box fuel supply line (WP 0206 00).
2. Verify no faults found.

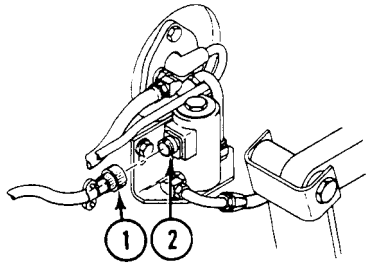
**YES**

**ENGINE CRANKS BUT WON'T START BELOW 40° (AIR BOX HEATER IS USED)—Continued**

0022 00

**5Y**

1. Install fuel supply line to solenoid at restrictor block (WP 0206 00).
2. Remove air box heater harness plug (1) from solenoid (2).
3. Measure voltage between plug (1) pins with air box heater switch depressed.
4. Does multimeter read less than 17 volts?



**NO**

**5YN**

1. Replace air box heater fuel supply solenoid (WP 0205 00).
2. Verify no faults found.

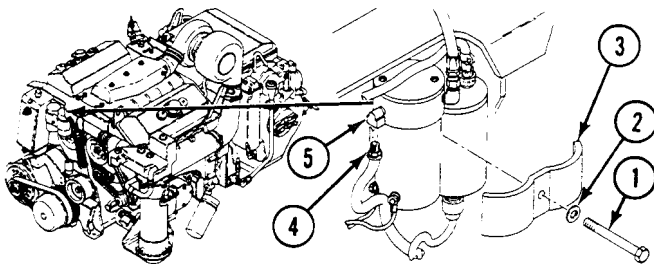
**YES**

**6Y**

1. GO TO **B4Y** (PAGE 0022 00-6).

**AY**

1. Turn AIRBOX HEATER and MASTER SWITCH to OFF.
2. Remove screw (1), washer (2), and bracket (3).
3. Remove air hose (4) from air pump elbow (5).
4. Is hose free from restriction and damage?



**NO**

**AYN**

1. Replace air pump to air box heater hose.
2. Verify no faults found.

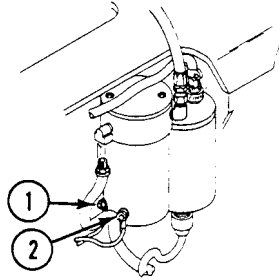
**YES**

**ENGINE CRANKS BUT WON'T START BELOW 40° (AIR BOX HEATER IS USED)—Continued**

0022 00

**A2Y**

1. Turn MASTER SWITCH to ON.
2. Measure voltage between power lead terminals (1) on air pump (2) with air box switch depressed.
3. Does multimeter read less than 17 volts?



NO

**A2YN**

1. Turn MASTER SWITCH to OFF.
2. Replace air pump.
3. Verify no faults found.

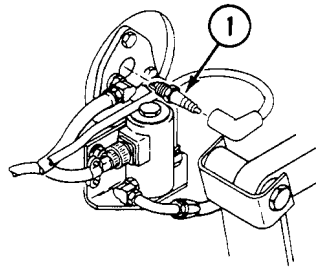
YES

**A3Y**

1. GO TO **B4Y** (PAGE 0022 00-6).

**BY**

1. Inspect igniter electrode (1).
2. Is igniter electrode free from debris and damage?



NO

**BYN**

1. Clean and/or replace air box heater igniter (WP 0207 00).
2. Verify no faults found.

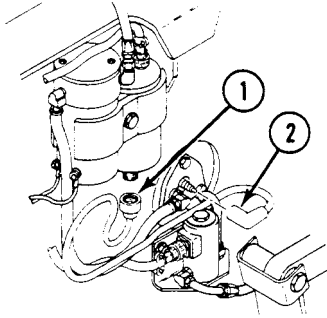
YES

**ENGINE CRANKS BUT WON'T START BELOW 40° (AIR BOX HEATER IS USED)—Continued**

0022 00

**B2Y**

1. Install air box igniter (WP 0207 00).
2. Remove ignition wire (1).
3. Measure resistance between wire ends (1) and (2).
4. Is ignition wire in good condition and measure 0 ohms?



NO

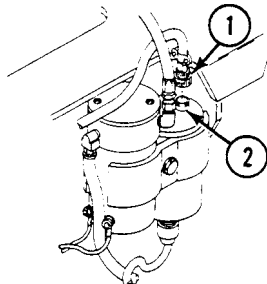
**B2YN**

1. Replace igniter wire (WP 0204 00).
2. Verify no faults found.

YES

**B3Y**

1. Install ignition wire on igniter (WP 0204 00).
2. Remove air box heater harness plug (1) from ignition coil (2).
3. Depress air box heater switch.
4. Measure voltage between air box heater harness plug (1) pins then release switch.
5. Does multimeter read less than 17 volts with switch depressed?



NO

**B3YN**

1. Replace ignition coil (WP 0208 00).
2. Verify no faults found.

YES

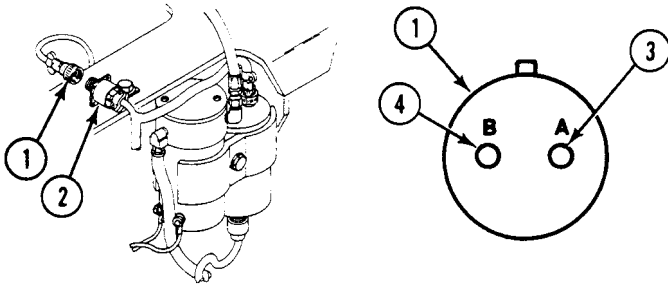


**ENGINE CRANKS BUT WON'T START BELOW 40° (AIR BOX HEATER IS USED)—Continued**

0022 00

**B4Y**

1. Install solenoid to air box heater fuel line, if removed.
2. Install hose on air pump elbow, if removed.
3. Install bracket, screw, and washer on air pump, if removed.
4. Install air box heater harness plug on ignition coil, if removed.
5. Remove harness 12349873 plug (1) from air box heater harness jack (2).
6. Turn MASTER SWITCH to ON.
7. Measure voltage between harness 12349873 plug (1) pin A (3) to ground and pin B (4) to ground with air box heater switch depressed.
8. Does multimeter read less than 17 volts either time?



NO

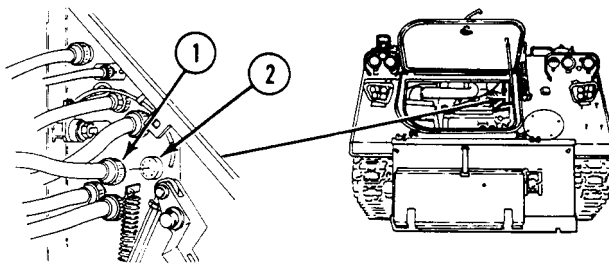
**B4YN**

1. Turn MASTER SWITCH to OFF.
2. Replace air box heater wiring harness (WP 0205 00).
3. Verify no faults found.

YES

**B5Y**

1. Remove harness 12349873 plug (1) from harness 12349881 jack (2) at carrier bulkhead.
2. Measure voltage between harness 12349881 jack (2) pin C (3) and ground with air box heater switch depressed.
3. Does multimeter read less than 17 volts?



NO

**B5YN**

1. Turn MASTER SWITCH to OFF.
2. Replace harness 12349873 (WP 0359 00).
3. Verify no faults found.

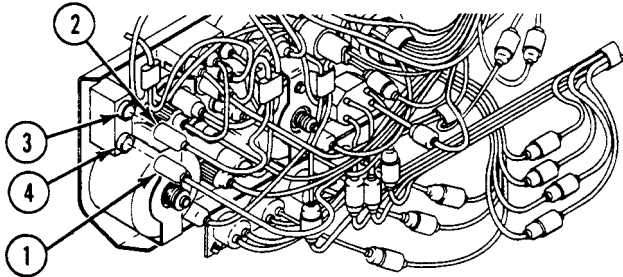
YES

**ENGINE CRANKS BUT WON'T START BELOW 40° (AIR BOX HEATER IS USED)—Continued**

0022 00

**B6Y**

1. Turn MASTER SWITCH to OFF.
2. Remove instrument panel for access. See task: remove instrument panel mounts and ground leads (WP 0295 00).
3. Remove circuits 406 (1) and 27C (2) plugs from air box heater switch jacks (3) and (4).
4. Measure resistance between switch jacks (3) and (4) with air box heater switch depressed.
5. Does multimeter read 0 ohms?



NO

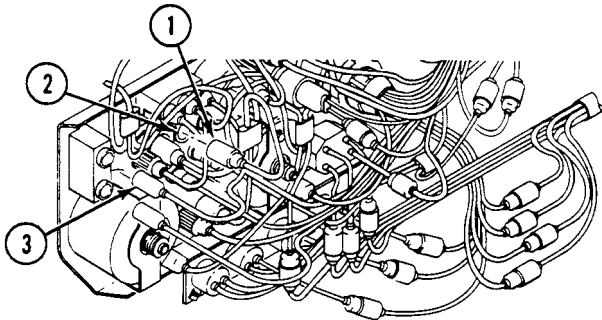
**B6YN**

1. Replace air box heater switch (WP 0282 00).
2. Verify no faults found.

YES

**B7Y**

1. Remove circuit 27 plug (1) from instrument panel circuit breaker (2).
2. Measure resistance between cable assembly 12349858 circuit 27 (1) and 27C (3) plug pins.
3. Does multimeter read 0 ohms?



NO

**B7YN**

1. Repair special purpose cable 12349858 circuit 27C/27 (WP 0382 00).
2. Verify no faults found.

YES

**B8Y**

1. Repair harness 12349881 circuit 406 (WP 0382 00).
2. Verify no faults found.

**ENGINE CRANKS BUT WON'T START BELOW 40°F (GLOW PLUGS ARE USED)**

**0023 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

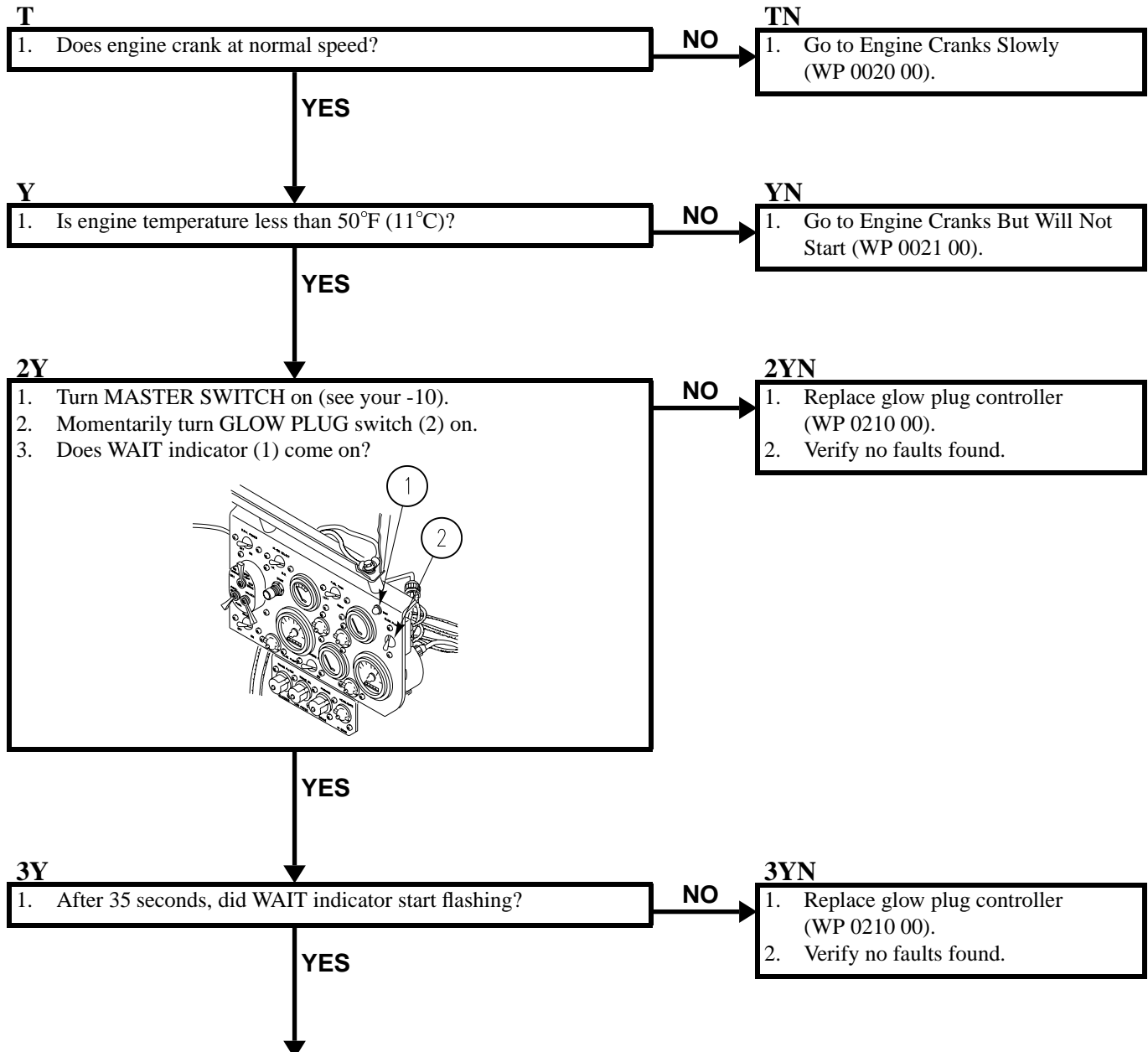
- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)

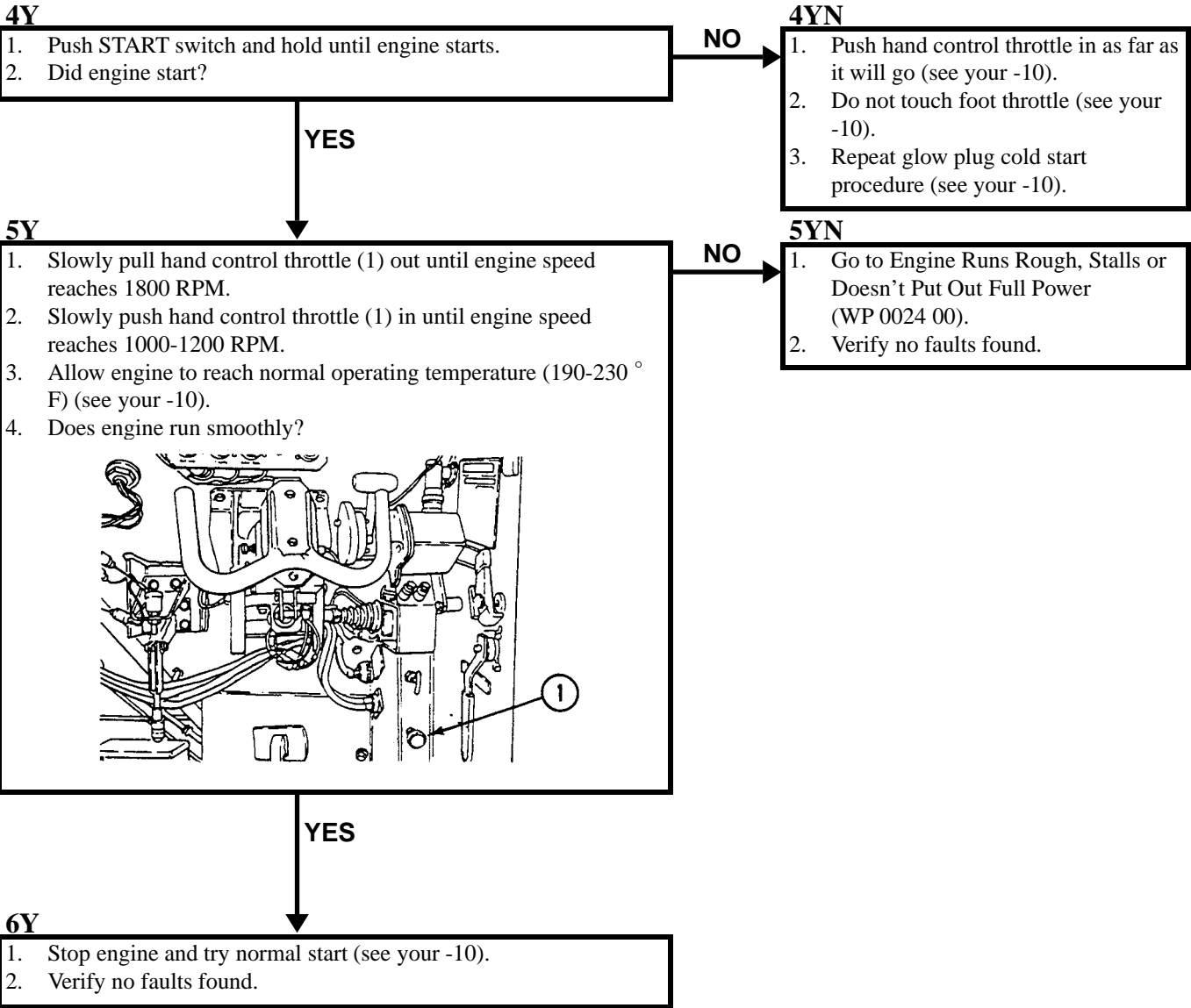
Personnel Required

Unit Mechanic



**ENGINE CRANKS BUT WON'T START BELOW 40°F (GLOW PLUGS ARE USED)—Continued**

0023 00



**ENGINE RUNS ROUGH, STALLS, OR DOESN'T PUT OUT FULL POWER**

**0024 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

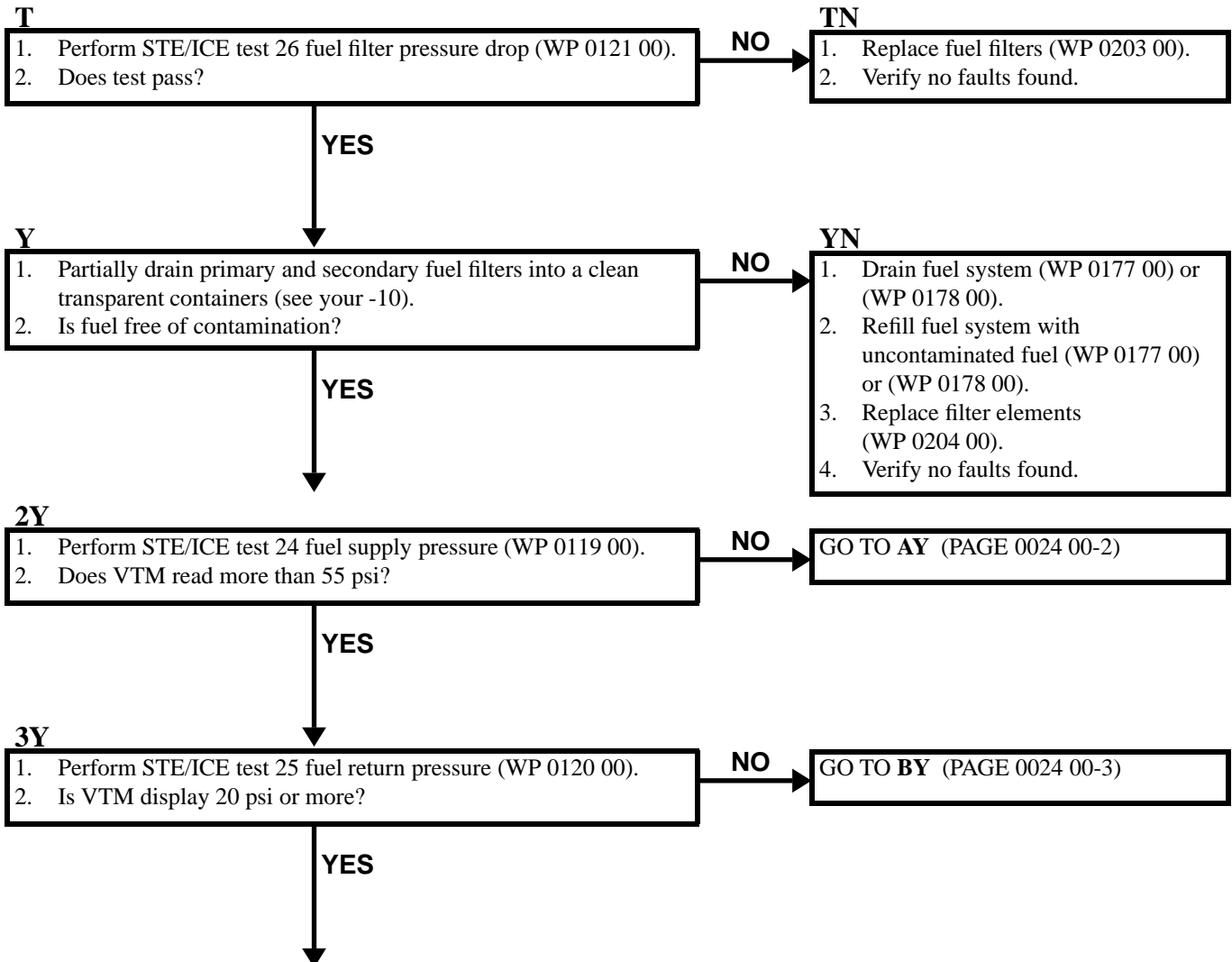
- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)
- Power plant rear access panels removed (see your -10)
- Rear floor plates removed (see Table of Contents)

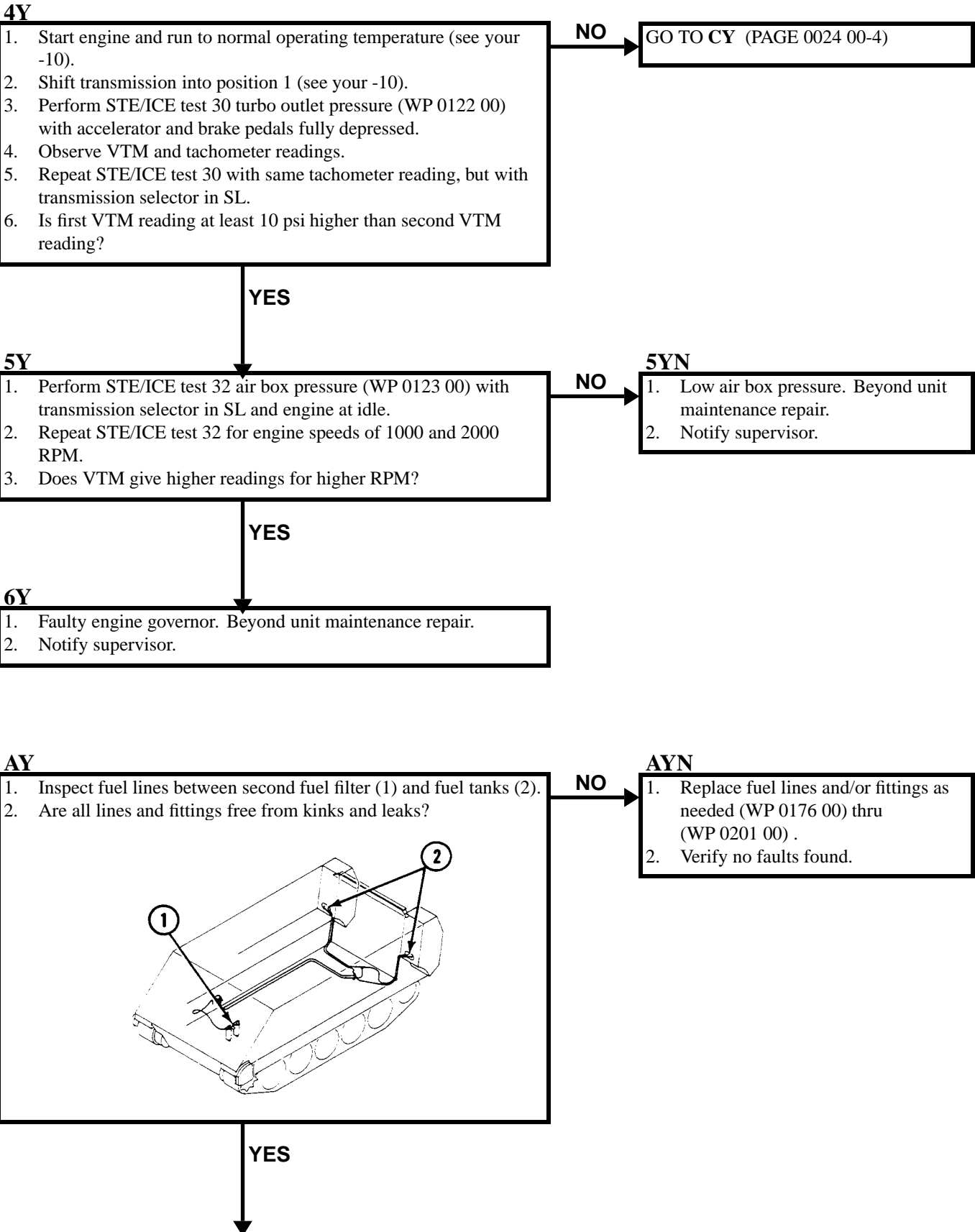
Materials/Parts

Suitable container

Personnel Required

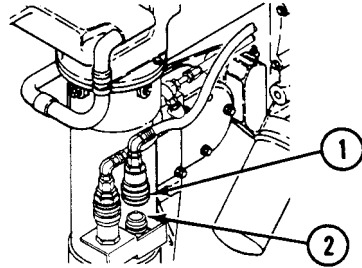
Unit Mechanic  
Helper (H)





**A2Y**

1. Disconnect engine fuel supply line (1) from quick disconnect fitting (2).
2. Manually depress plunger on fuel supply quick disconnect fitting (2).
3. Does fuel flow freely from fitting?



**NO**

**A2YN**

1. Unclog fuel pick up tubes in fuel tanks (WP 0179 00) or (WP 0180 00).
2. Verify no faults found.

**YES**

**A3Y**

1. Replace engine fuel pump (WP 0166 00).
2. Verify no faults found.

**BY**

1. Inspect fuel lines on engine between secondary fuel filter and engine cylinder heads.
2. Inspect fuel lines on engine between right engine cylinder head and left cylinder head.
3. Inspect fuel lines on engine between engine cylinder head and restrictor block.
4. Are any fuel lines kinked or leaking?

**NO**

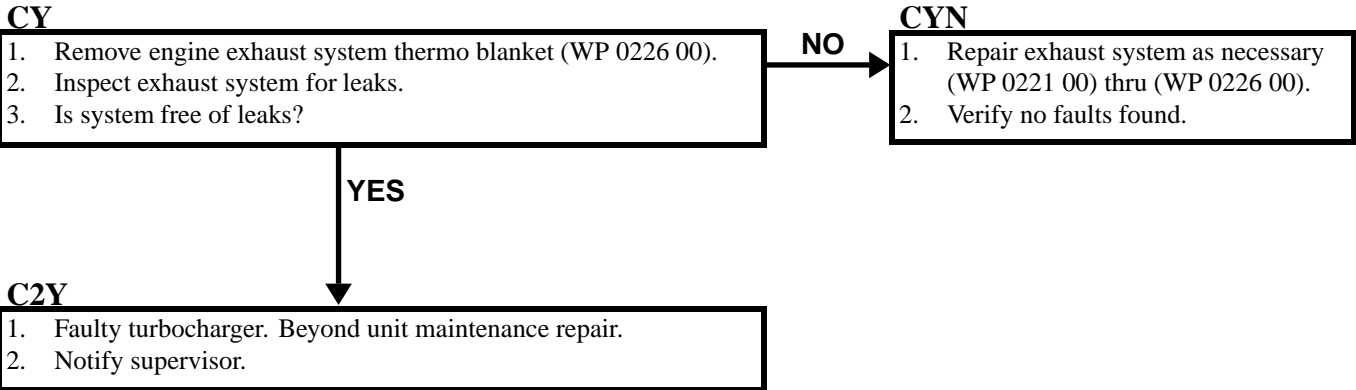
**BYN**

1. Internal engine fuel restriction. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**B2Y**

1. Replace fuel lines as necessary (WP 0176 00) thru (WP 0201 00).
2. Verify no faults found.





**GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR INDICATOR**

**0025 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

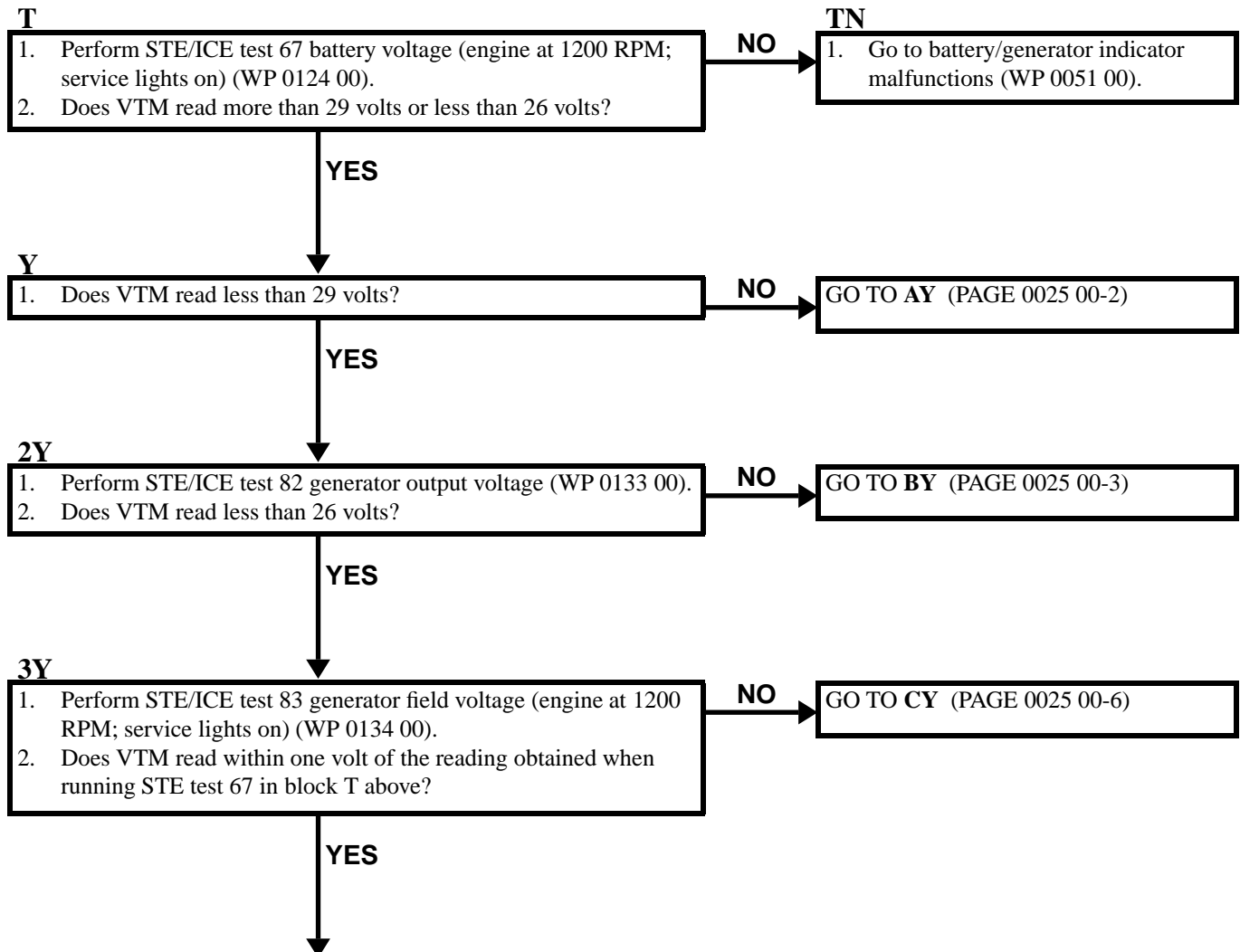
General Mechanic's Tool Kit (WP 0926 00, Item 65)  
STE/ICE Test Set (WP 0926 00, Item 61)  
Jumper Wire

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Trim vane lowered (see your -10)  
Power plant access door open (see your -10)  
Driver's power plant access panel removed (see your -10)

Personnel Required

Unit Mechanic  
Helper (H)

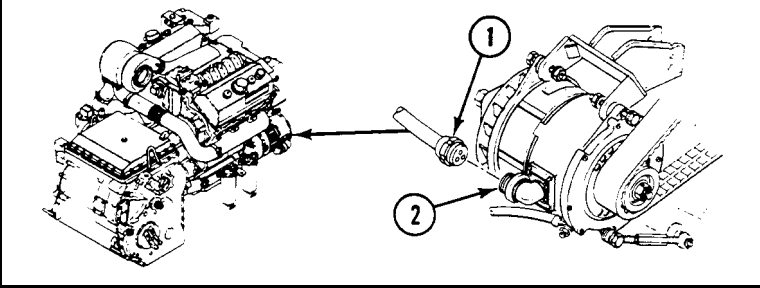


**GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR INDICATOR—Continued**

0025 00

**4Y**

1. Disconnect battery ground strap/lead(s) (WP 0337 00), (WP 0338 00), or (WP 0339 00).
2. Remove harness 12349873 plug (1) from generator jack (2).
3. Inspect harness plug pins for corrosion or damage.
4. Is plug free from corrosion and damage?



**NO**

**4YN**

1. Replace harness. (See Table of Contents).
2. Verify no faults found.

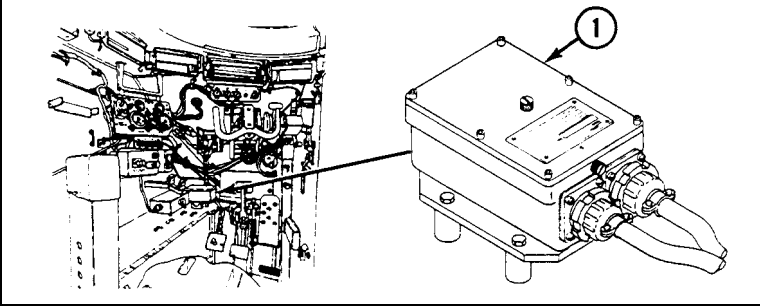
**YES**

**5Y**

1. Replace generator (WP 0255 00).
2. Verify no faults found.

**AY**

1. Measure resistance between regulator housing (1) and ground. Use VTM.
2. Does VTM read 0 ohms?



**NO**

**AYN**

1. Remove regulator (WP 0257 00) and clean ground contact (bolted surface).
2. Install regulator (WP 0257 00).
3. Verify no faults found.

**YES**

**A2Y**

1. Has regulator been adjusted?

**NO**

**A2YN**

1. Adjust voltage regulator (WP 0256 00).
2. Verify no faults found.

**YES**

**GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR INDICATOR—Continued**

0025 00

**A3Y**

1. Has regulator been replaced?

**NO**

**A3YN**

- 1. Replace regulator (WP 0257 00).
- 2. Verify no faults found.

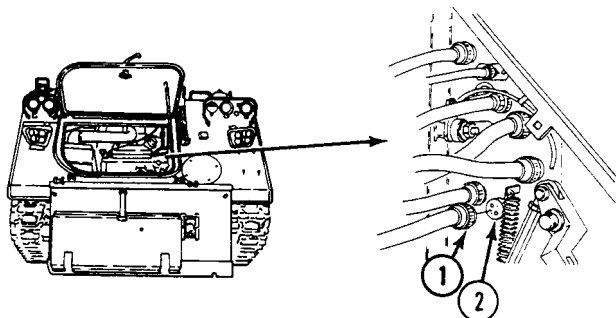
**YES**

**A4Y**

- 1. Replace generator (WP 0255 00).
- 2. Verify no faults found.

**BY**

- 1. Disconnect battery ground strap/lead(s) (WP 0337 00), (WP 0338 00), or (WP 0339 00).
- 2. Remove harness 12349873 plug (1) from harness 12349881 jack (2).
- 3. Inspect plugs and jacks for damage or corrosion.
- 4. Are plugs and jacks free from corrosion and damage?



**NO**

**BYN**

- 1. Replace harness 12349873.(See Table of Contents).
- 2. Verify no faults found.

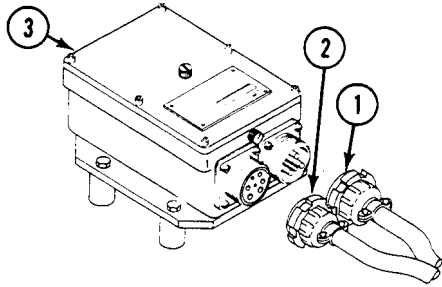
**YES**

**GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR INDICATOR—Continued**

0025 00

**B2Y**

1. Remove harness 12349881 plugs (1) and (2) from voltage regulator (3).
2. Inspect all plug and jack pins for corrosion or damage.
3. Are plugs and jacks free from corrosion and damage?



NO

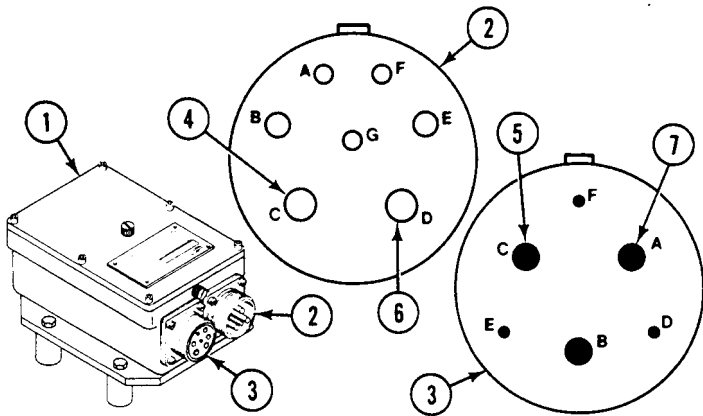
**B2YN**

1. Faulty harness 12349881 plug or jack. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**B3Y**

1. Measure resistance on regulator (1), between jacks (2) and (3); Measure between socket C (4) and pin C (5). Measure between socket D (6) and pin A (7).
2. Does VTM read 0 ohms?



NO

**B3YN**

1. Replace regulator (WP 0257 00).
2. Verify no faults found.

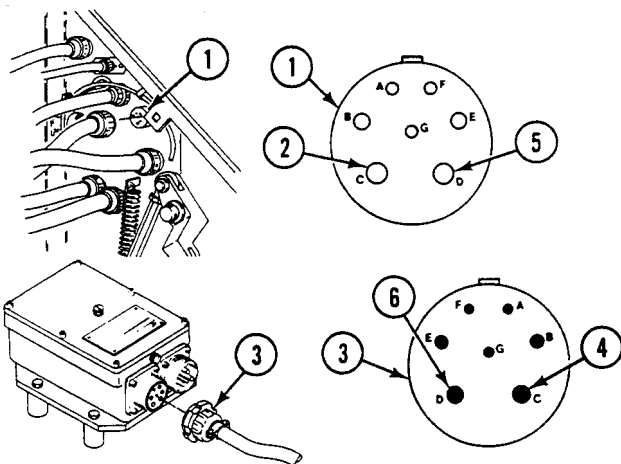
YES

**GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR INDICATOR—Continued**

0025 00

**B4Y**

1. Measure resistance between harness 12349881 bulkhead jack (1) socket C (2), and regulator plug (3) pin C (4).
2. Measure resistance between harness 12349881 bulkhead jack (1) socket D (5), and regulator plug (3) pin D (6).
3. Is reading 0 ohms for both measurements?



**NO**

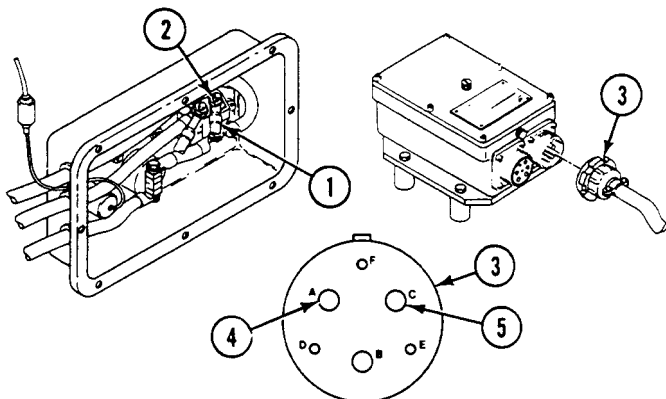
**B4YN**

1. Faulty harness 12349881 circuit 2/2A. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**B5Y**

1. Remove master switch panel (WP 0260 00, WP 0261 00).
2. Measure resistance between harness 12349881 circuit 2/2A (1) between master switch terminal (2) and regulator plug (3) sockets A (4) and C (5).
3. Does VTM read 0 ohms?



**NO**

**B5YN**

1. Faulty harness 12349881 circuit 2/2A. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR INDICATOR—Continued**

0025 00

**B6Y**

1. Replace circuit 6 lead (WP 0356 00), (WP 0357 00), or (WP 0358 00).
2. Verify no faults found.

**CY**

1. Has regulator been adjusted?

NO

YES

**CYN**

1. Adjust voltage regulator (WP 0256 00).
2. Verify no faults found.

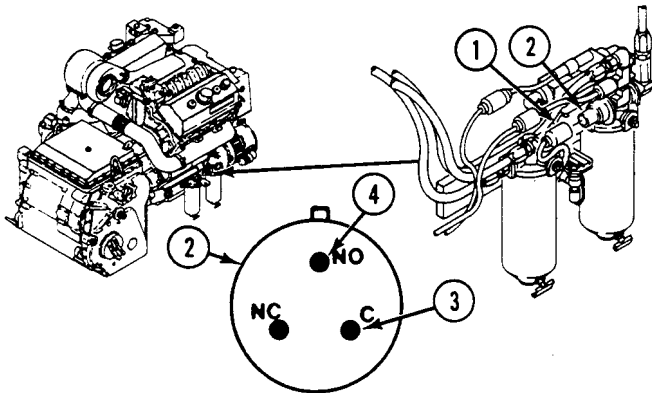
**C2Y**

1. Remove harness 12349873 plug (1) from generator field switch (2).
2. Start engine (see your -10).
3. Measure resistance across switch (2) pins (3) and (4) with engine idling. Use VTM.
4. Does VTM read 0 ohms?

NO

**C2YN**

1. Stop engine (see your -10).
2. Replace generator field switch (WP 0323 00).
3. Verify no faults found.



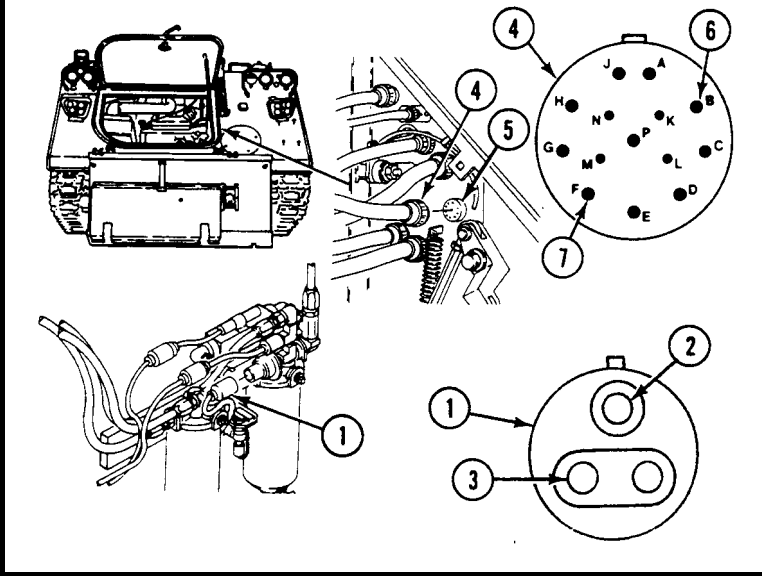
YES

**GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR INDICATOR—Continued**

0025 00

**C3Y**

1. Stop engine (see your -10).
2. Install jumper wire on harness 12349873 generator field switch plug (1) between sockets (2) and (3).
3. Remove harness 12349873 plug (4) from harness 12349881 jack (5).
4. Measure resistance between harness 12349873 plug (4) pins B (6) and F (7).
5. Does VTM read 0 ohms?



**YES**  
↓

**NO** →

**C3YN**

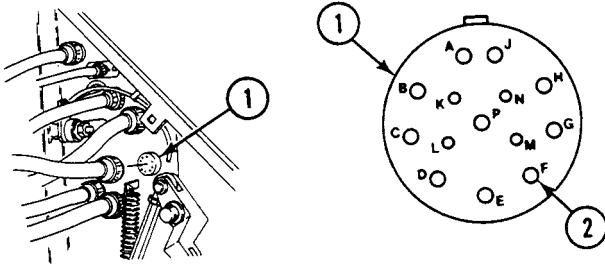
1. Replace harness 12349873.
2. Verify no faults found.

**GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR INDICATOR—Continued**

0025 00

**C4Y**

1. Remove jumper wire and install harness 12349873 plug on field switch.
2. Perform STE/ICE test 67 (MASTER SWITCH ON, engine OFF) (WP 0124 00). Record reading.
3. Set up STE/ICE test 89 TM 9-4910-571-12&P .
4. Measure voltage between harness 12349881 jack (1) socket F (2) and ground with MASTER SWITCH ON.
5. Is VTM reading within one volt of VTM reading for STE test 67?



**NO**

**C4YN**

1. Faulty harness 12349881 circuit 1C. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

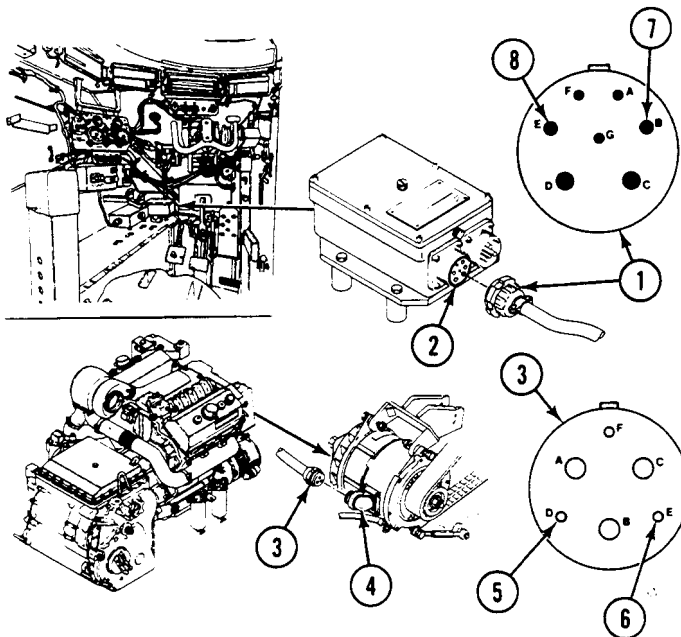


**GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR INDICATOR—Continued**

0025 00

**C5Y**

1. Turn MASTER SWITCH to OFF.
2. Install harness 12349873 plug on harness 12349881 jack.
3. Remove harness 12349881 circuit 1/1A/2/2A plug (1) from regulator jack (2).
4. Remove harness 12349873 plug (3) from generator jack (4).
5. Install jumper wire between generator plug (3) sockets D (5) and E (6).
6. Measure resistance between harness 12349881 regulator plug (1) pins B (7) and E (8).
7. Does VTM read more than 0 ohms?



**NO**

**C5YN**

1. Remove jumper wire and install harness 12349873 plug on generator jack.
2. Replace regulator (WP 0257 00).
3. Verify no faults found.

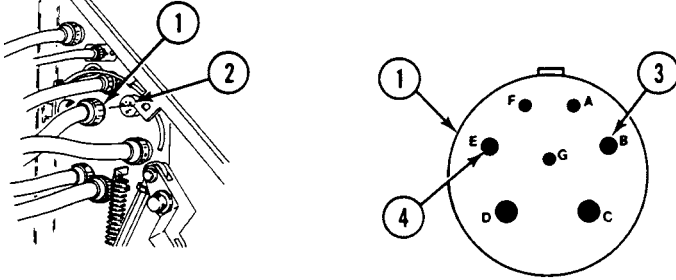
**YES**

**GENERATOR MALFUNCTIONS AS INDICATED BY BATTERY/GENERATOR INDICATOR—Continued**

0025 00

**C6Y**

1. Remove harness 12349873 plug (1) from harness 12349881 jack (2) at bulkhead.
2. Measure resistance between harness 12349873 plug (1) pins B (3) and E (4).
3. Does VTM read 0 ohms?



**NO**

**C6YN**

1. Remove jumper wire and install harness 12349873 plug on generator jack.
2. Faulty harness 12349873 circuit 1/1A. Beyond unit maintenance repair.
3. Notify supervisor.

**YES**

**C7Y**

1. Remove jumper wire and install harness 12349873 plug on generator jack.
2. Faulty harness 12349881 circuit 1/1A. Beyond unit maintenance repair.
3. Notify supervisor.

**ENGINE OIL LOW PRESSURE INDICATOR COMES ON**

**0026 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Pressure Test Kit (WP 0926 00, Item 35)

Personnel Required

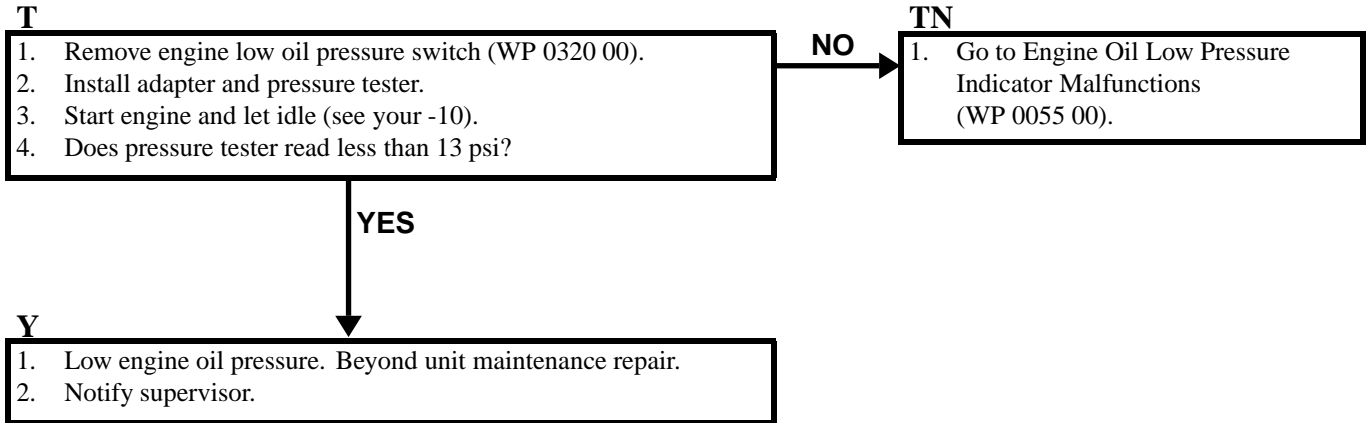
Unit Mechanic 63T10

References

See your -10

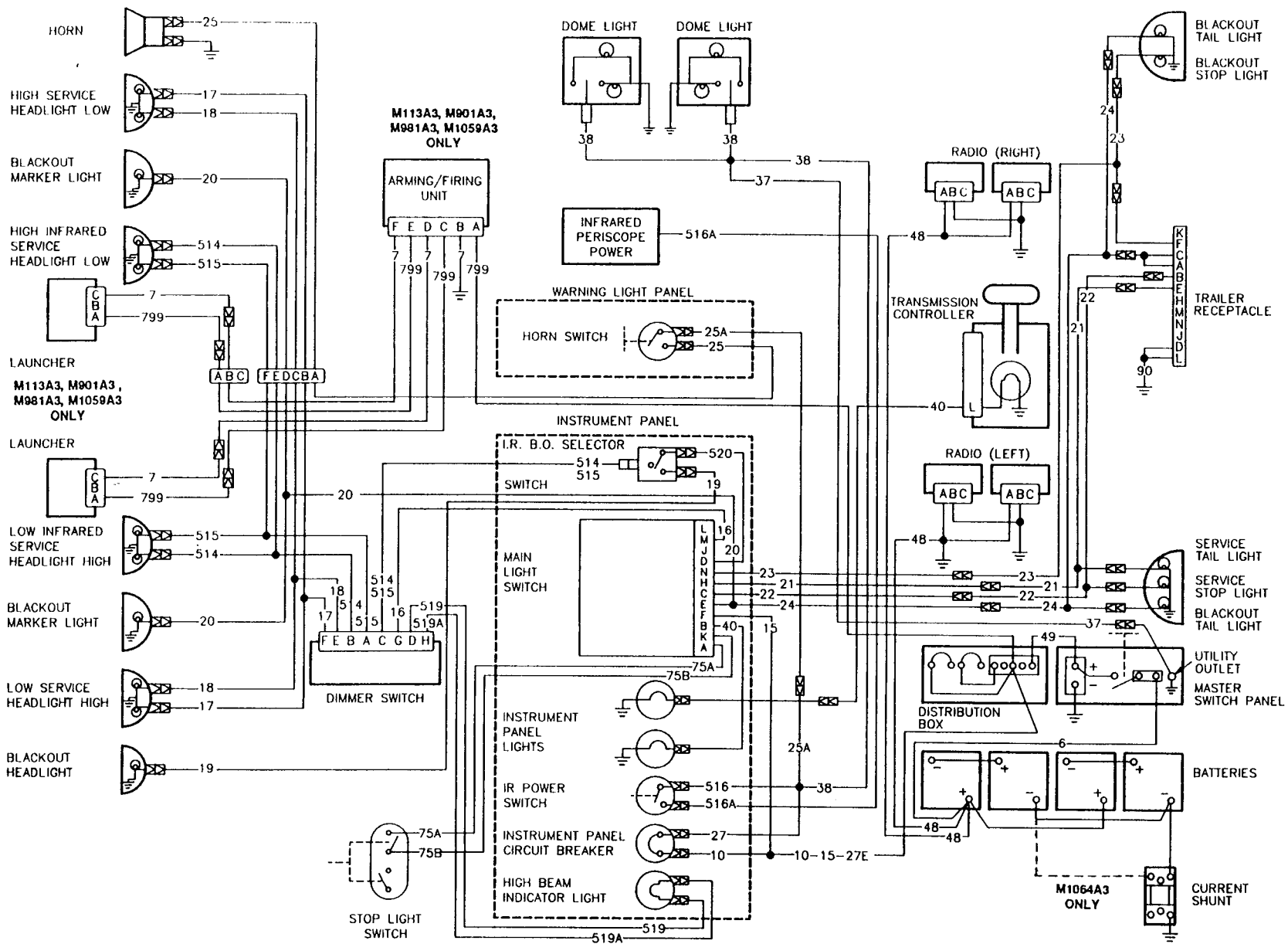
Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Engine warm
- Transmission in SL
- Engine oil level checked (WP 0155 00)
- Engine idle speed checked (WP 0118 00)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)





0027 00-1/2 blank



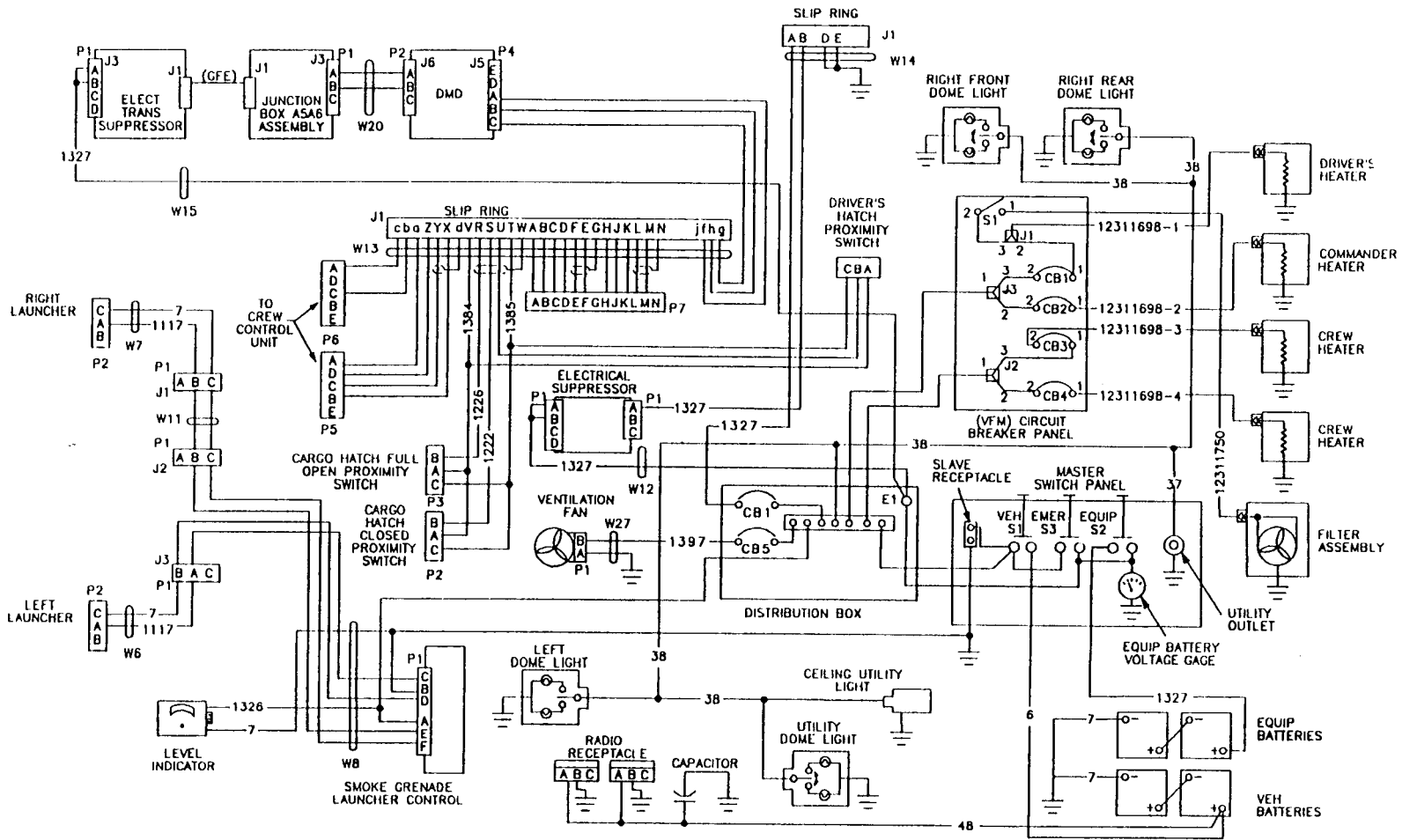
ELECTRICAL SCHEMATIC (ALL EXCEPT M981A3)

0027 00

TM 9-2350-277-20-1



0028 00-1/2 blank



ELECTRICAL SCHEMATIC (M981A3 ONLY)

TM 9-2350-277-20-1

0028 00





**NO EXTERIOR LIGHTS OPERATE**

**0029 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)

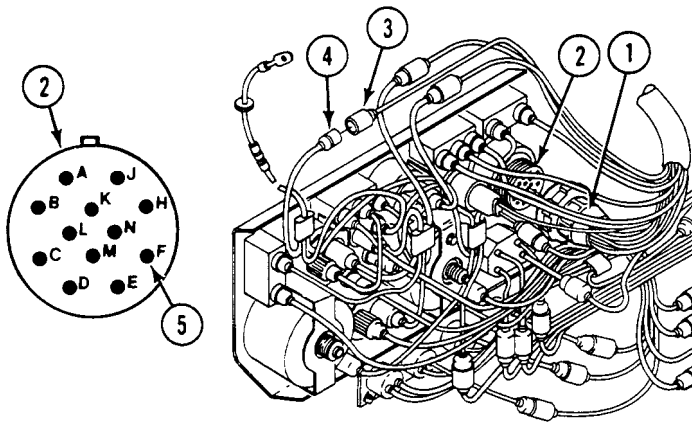
Carrier blocked (see your -10)

Personnel Required

Unit Mechanic 63T10

**T**

1. Remove instrument panel for access. See task: remove instrument panel mounts and ground lead (WP 0295 00).
2. Remove harness 12349881 plug (1) from lighting control switch (2).
3. Remove harness 12349881 circuit 15 plug (3) from harness 10933038 circuit 15 jack (4).
4. Measure resistance between harness 12349881 circuit 15 plug (3) and lighting plug (1) pin F (5).
5. Does multimeter read 0 ohms?



**NO**

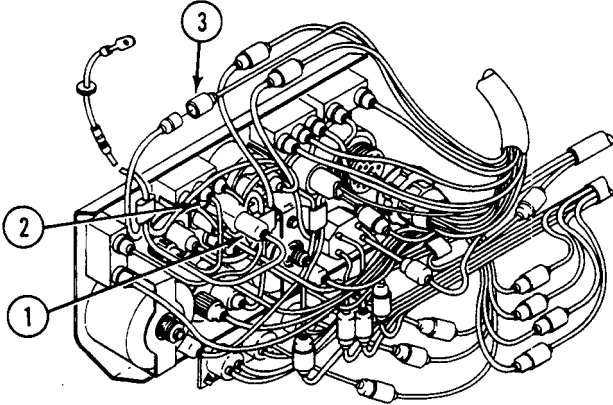
**TN**

1. Repair circuit 15 (WP 0382 00).
2. Verify no faults found.

**YES**

**Y**

1. Remove harness 10933038 circuit 10 plug (1) from instrument panel circuit breaker (2).
2. Measure resistance between harness 10933038 circuit 15 plug (3) and circuit 10 plug (1).
3. Does multimeter read 0 ohms?



**NO**

**YN**

1. Install harness 12349881 lighting control switch plug on switch.
2. Replace harness 10933038 (WP 0289 00).
3. Verify no faults found.

**YES**

**2Y**

1. Install harness 10933038 circuit 10 and 15 plugs.
2. Replace lighting control switch (WP 0282 00).
3. Verify no faults found.

**BLACKOUT DRIVE LIGHT DOESN'T WORK**

**0030 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

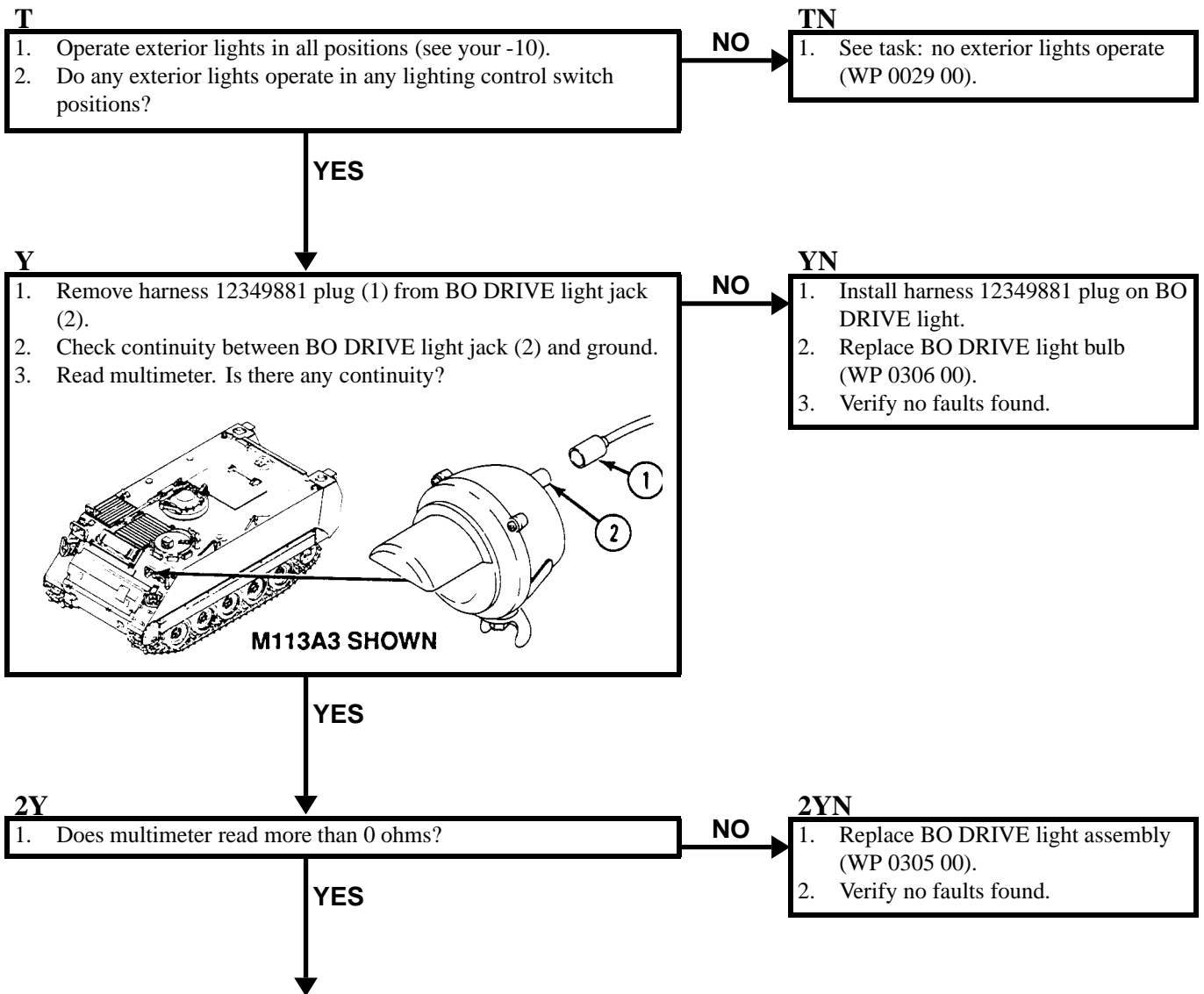
- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- IR/BO selector on BO

Personnel Required

- Unit Mechanic 63T10
- Helper (H)

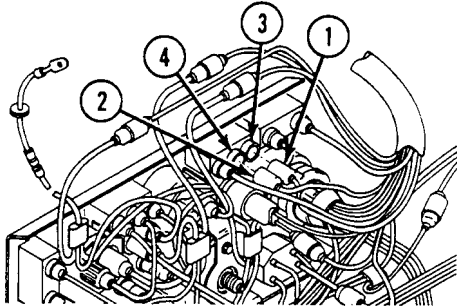


BLACKOUT DRIVE LIGHT DOESN'T WORK—Continued

0030 00

**3Y**

1. Install harness 12349881 plug on BO DRIVE light.
2. Remove instrument panel for access. See task: remove instrument panel mounts and ground lead (WP 0295 00).
3. Remove harness 12349881 circuit 19 (1) and 520 (2) from IR/BO selector jacks (3) and (4).
4. Measure resistance between IR/BO selector jack (3) and (4).
5. Does multimeter read 0 ohms?



NO

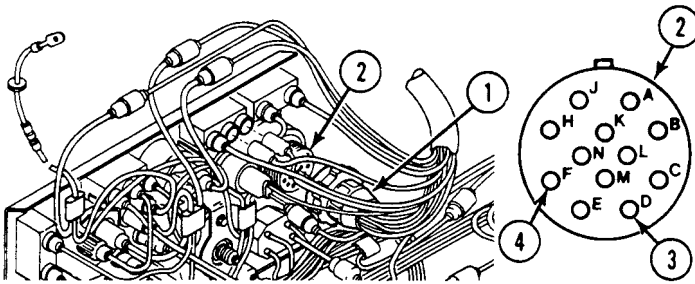
**3YN**

1. Install harness 12349881 plug on BO DRIVE light.
2. Replace IR/BO selector switch (WP 0282 00).
3. Verify no faults found.

YES

**4Y**

1. Remove harness 12349881 plug (1) from light control switch jack (2).
2. Turn switch to BO DRIVE.
3. Measure resistance between light control switch jack (2) pins D (3) and F (4).
4. Does multimeter read 0 ohms?



NO

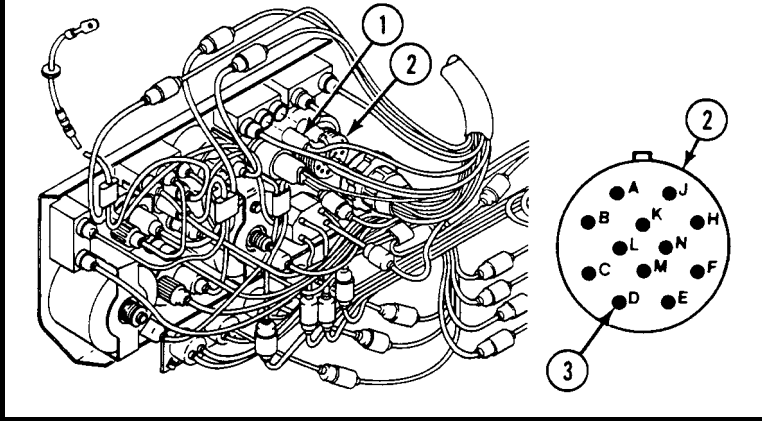
**4YN**

1. Install harness 12349881 plugs on IR/BO selector switch jacks.
2. Replace lighting control switch (WP 0282 00).
3. Verify no faults found.

YES

**5Y**

1. Measure resistance between harness 12349881 circuit 520 plug (1) and lighting control switch plug (2) pin D (3).
2. Does multimeter read 0 ohms?



NO

**5YN**

1. Install harness 12349881 circuit 19 plug on IR/BO selector switch jack.
2. Install harness 12349881 plug on light control switch jack.
3. Repair circuit 520 (WP 0382 00).
4. Verify no faults found.

YES

**6Y**

1. Install harness 12349881 circuit 520 plug on IR/BO selector switch jack.
2. Install harness 12349881 plug on light control switch jack.
3. Repair circuit 19.
4. Verify no faults found.

YES



**SERVICE HEADLIGHTS DON'T WORK**

**0031 00**

**INITIAL SETUP:**

Maintenance Level  
Unit

References  
See your -10

Tools and Special Tools  
General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Multimeter (WP 0926 00, Item 30)

Equipment Condition

Personnel Required  
Unit Mechanic 63T10

Engine stopped (see your -10)  
Carrier blocked (see your -10)

**T**

1. Operate lights in all lighting control positions (see your -10).
2. Do any exterior lights operate in any lighting control switch positions?

**NO**

**TN**

1. Go to No Exterior Lights Operate (WP 0029 00).

**YES**

**Y**

1. Turn master light switch to SER DRIVE.
2. Do both high beams and/or both low beams fail to come on?

**NO**

GO TO AY (PAGE 0031 00-3)

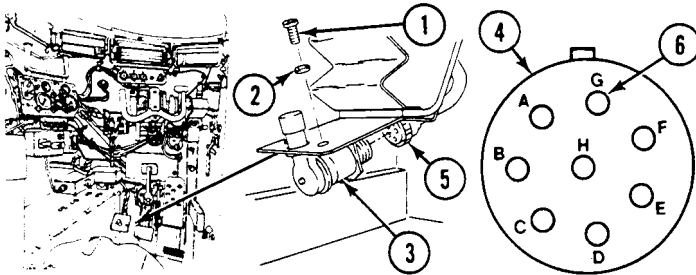
**YES**

**2Y**

1. Turn MASTER SWITCH to OFF.
2. Remove two screws (1), washers (2), and dimmer switch (3).
3. Remove harness 12349881 plug (4) from dimmer switch jack (5).
4. Turn MASTER SWITCH to ON.
5. Measure voltage between harness 12349881 plug (4) pin G (6) and ground.
6. Does multimeter read less than 17 volts?

**NO**

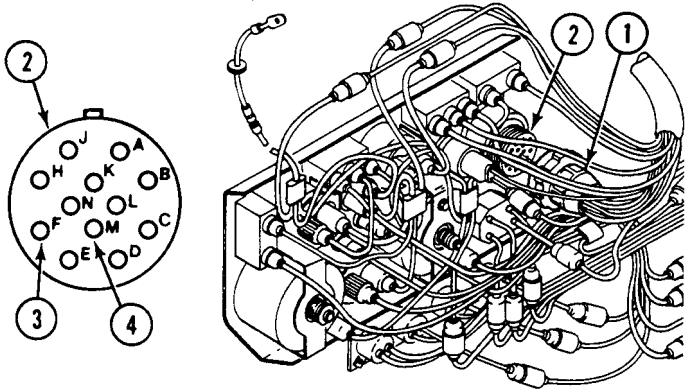
GO TO BY (PAGE 0031 00-4)



**YES**

**3Y**

1. Turn MASTER SWITCH to OFF.
2. Remove instrument panel for access. See task: remove instrument panel mounts and ground lead (WP 0295 00).
3. Remove harness 12349881 plug (1) from lighting control switch jack (2).
4. Measure resistance between lighting control switch jack (2) pins F (3) and M (4).
5. Does multimeter read 0 ohms?



NO

**3YN**

1. Install dimmer switch and harness 12349881 plug on dimmer switch jack.
2. Replace lighting control switch (WP 0283 00).
3. Verify no faults found.

YES

**4Y**

1. Faulty harness 12349881 circuit 16. Beyond unit maintenance repair.
2. Notify supervisor.

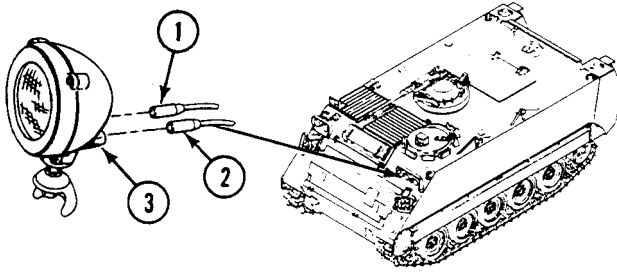


SERVICE HEADLIGHTS DON'T WORK—Continued

0031 00

**AY**

1. Remove circuit 17 (high beam) plug (1) or circuit 18 (low beam) plug (2) from failing service headlight jack (3).
2. Measure voltage between harness 12349881 circuit 17 plug (1) or circuit 18 plug (2) and ground.
3. Does multimeter read less than 17 volts?



**NO**

**AYN**

1. Replace service headlight bulb (WP 0303 00).
2. Verify no faults found.

**YES**

**A2Y**

1. Is failing headlight located on right side of carrier?

**NO**

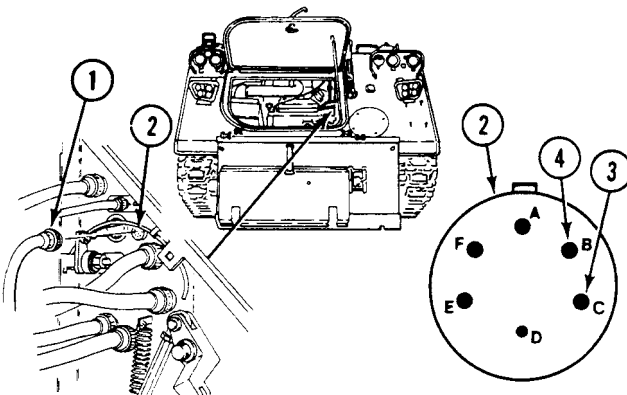
**A2YN**

1. Repair circuit 514 or 515 between left IR headlight and dimmer switch (WP 0382 00).
2. Verify no faults found.

**YES**

**A3Y**

1. Remove harness 8763491 plug (1) from harness 12349881 jack (2) at carrier bulkhead.
2. Measure voltage between harness 12349881 jack (2) pin C (low beam) (3) or pin B (high beam) (4) and ground.
3. Does multimeter read less than 17 volts?



**NO**

**A3YN**

1. Replace faulty harness 8763491 (WP 0373 00).
2. Verify no faults found.

**YES**

SERVICE HEADLIGHTS DON'T WORK—Continued

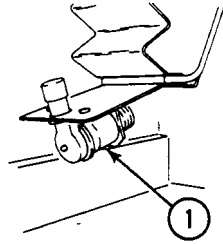
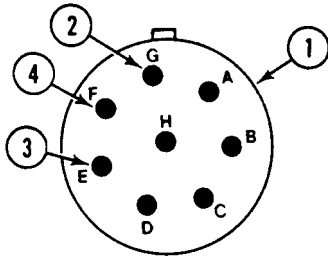
0031 00

**A4Y**

1. Turn MASTER SWITCH to OFF.
2. Install harness 8763491 circuit 17 (high beam) or 18 (low beam) on service headlight.
3. Faulty harness 12349881 circuit 17 or 18 between bulkhead and dimmer switch. Beyond unit maintenance repair.
4. Notify supervisor.

**BY**

1. Measure resistance between dimmer switch jack (1) pins G (2) and E (3) and between pins G (2) and F (4). Use multimeter. Multimeter should read 0 ohms once and infinity once.
2. Click dimmer switch and check continuity between dimmer switch jack (1) pins G (2) and E (3) and between pins G (2) and F (4). Multimeter should read infinity once and 0 ohms once.
3. Is dimmer switch working properly?



NO

**BYN**

1. Replace headlight high beam selector switch (WP 0333 00).
2. Verify no faults found.

YES

**B2Y**

1. Faulty harness 12349881 circuit 18 (low beam) or circuit 17 (high beam). Beyond unit maintenance repair.
2. Notify supervisor.

**INFRARED HEADLIGHT(S) DON'T WORK**

**0032 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

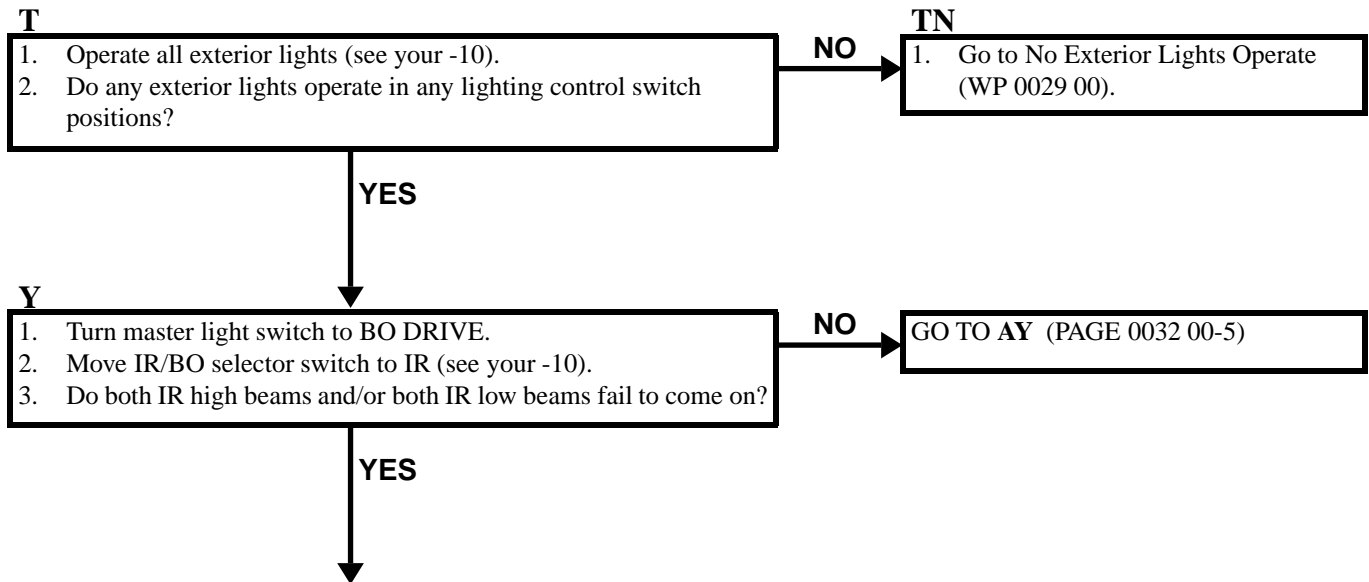
- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)
- Electrical Connector Pliers (WP 0926 00, Item 31)

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)

Personnel Required

- Unit Mechanic 63T10
- Helper (H)

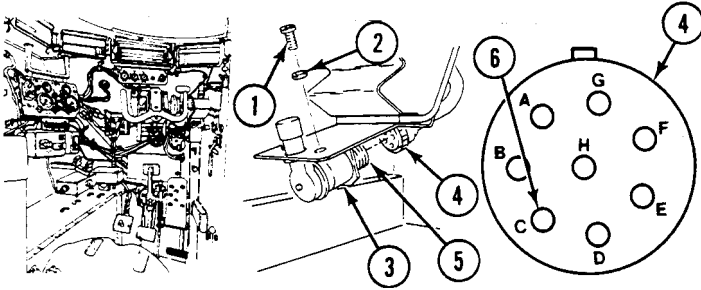


**2Y**

1. Turn MASTER SWITCH to OFF.
2. Remove two screws (1), washers (2), and dimmer switch (3).
3. Remove harness 12349881 plug (4) from dimmer switch jack (5).
4. Turn MASTER SWITCH to ON.
5. Measure voltage between harness 12349881 plug (4) pin C (6) and ground.
6. Does multimeter read less than 17 volts?

NO

GO TO BY (PAGE 0032 00-6)



YES

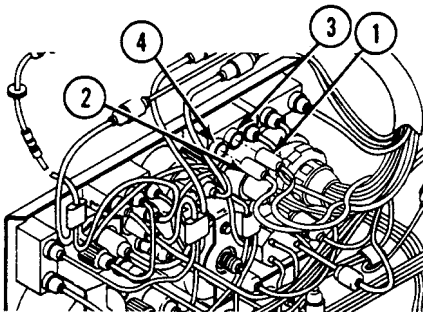
**3Y**

1. Turn MASTER SWITCH to OFF.
2. Remove instrument panel for access. See task: remove instrument panel mounts and ground lead (WP 0295 00).
3. Remove harness 12349881 514/515 (1) and 520 (2) from IR/BO selector switch jacks (3) and (4).
4. Measure resistance between IR/BO selector switch jacks (3) and (4).
5. Does multimeter read 0 ohms?

NO

**3YN**

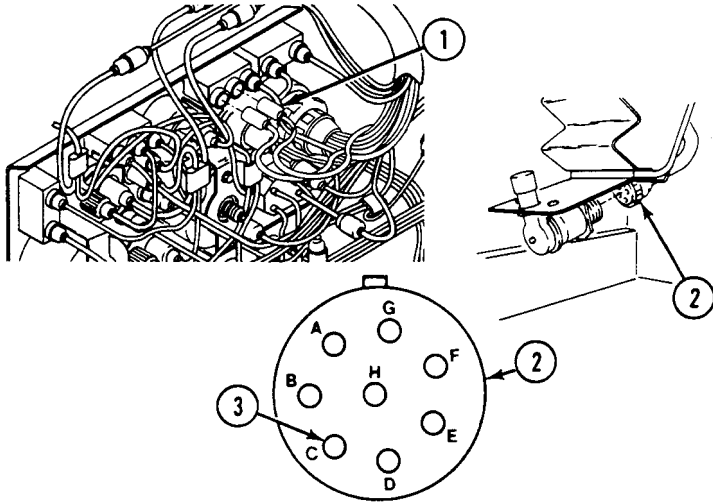
1. Install dimmer switch and harness 12349881 plug on dimmer switch.
2. Replace IR/BO selector switch (WP 0282 00).
3. Verify no faults found.



YES

**4Y**

1. Measure resistance between harness 12349881 circuit 514/515 selector switch plug (1) and dimmer switch plug (2) pin C (3).
2. Does multimeter read 0 ohms?



**NO**

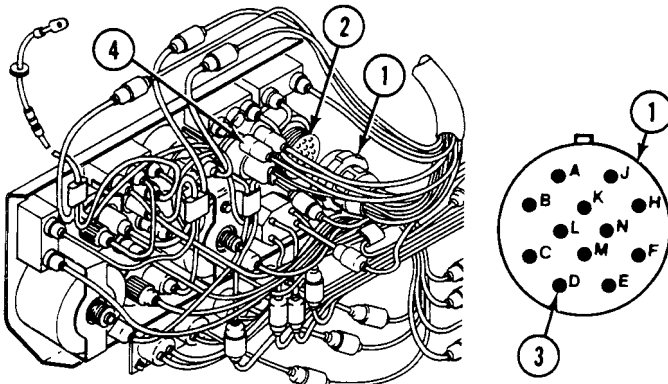
**4YN**

1. Install dimmer switch and harness 12349881 plug on dimmer switch.
2. Repair circuit 514/515 (WP 0382 00).
3. Verify no faults found.

**YES**

**5Y**

1. Install dimmer switch and wiring harness 12349881 plug on dimmer switch.
2. Install wiring harness 12349881 circuit 514/515 plug on IR/BO selector switch jack.
3. Remove harness 12349881 plug (1) from lighting control switch jack (2).
4. Measure resistance between wiring harness 12349881 lighting control switch plug (1) pin D (3) and IR/BO selector circuit 520 plug (4).
5. Does multimeter read 0 ohms?



**NO**

**5YN**

1. Faulty harness 12349881 circuit 520. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**6Y**

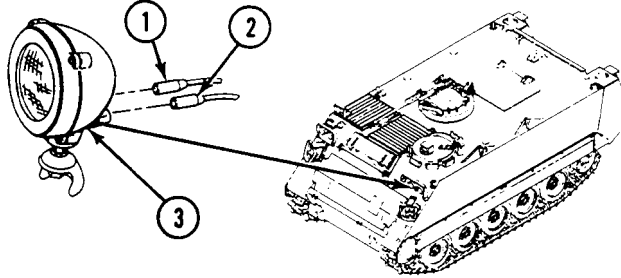
1. Install circuit 520 plug on IR/BO selector switch.
2. Replace lighting control switch (WP 0283 00).
3. Verify no faults found.

INFRARED HEADLIGHT(S) DON'T WORK—Continued

0032 00

**AY**

1. Remove circuit 514 (high beam) plug (1) or 515 (low beam) plug (2) from failing IR service headlight (3).
2. Measure voltage between harness 12349881 circuit 514 plug (1) or 515 plug (2) and ground.
3. Does multimeter read less than 17 volts?



**NO**

**AYN**

1. Replace IR service headlight bulb (WP 0303 00) or (WP 0304 00).
2. Verify no faults found.

**YES**

**A2Y**

1. Is failing IR headlight located on right side of carrier?

**NO**

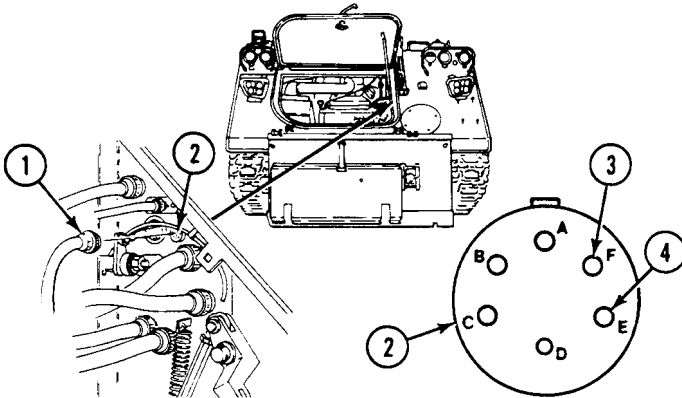
**A2YN**

1. Repair circuit 514 or 515 between left IR head light and dimmer switch (WP 0382 00).
2. Verify no faults found.

**YES**

**A3Y**

1. Remove harness 8763491 plug (1) from harness 12349881 jack (2) at bulk head.
2. Measure voltage between harness 12349881 jack (2) pin F (low beam) (3) or pin E (high beam) (4) and ground.
3. Does multimeter read less than 17 volts?



**NO**

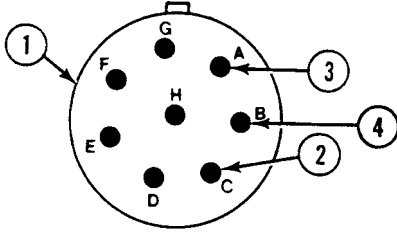
**A3YN**

1. Faulty harness 8763491. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**BY**

1. Install harness 8763491 circuit 514 or 515 plug on IR head light.
2. Measure resistance between dimmer switch jack (1) pins C (2) to A (3) and between pins C (2) to B (4). Multimeter should read 0 ohms once and infinity once.
3. Click dimmer switch and repeat above test. Multimeter should read infinity once and 0 ohms once.
4. Is dimmer switch working properly?



**NO**

**BYN**

1. Replace dimmer switch (WP 0333 00).
2. Verify no faults found.

**YES**

**B2Y**

1. Faulty harness 12349881 circuit 514 or 515. Beyond unit maintenance repair.
2. Notify supervisor.



**SERVICE AND/OR BLACK OUT STOP LIGHTS MALFUNCTION**

**0033 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

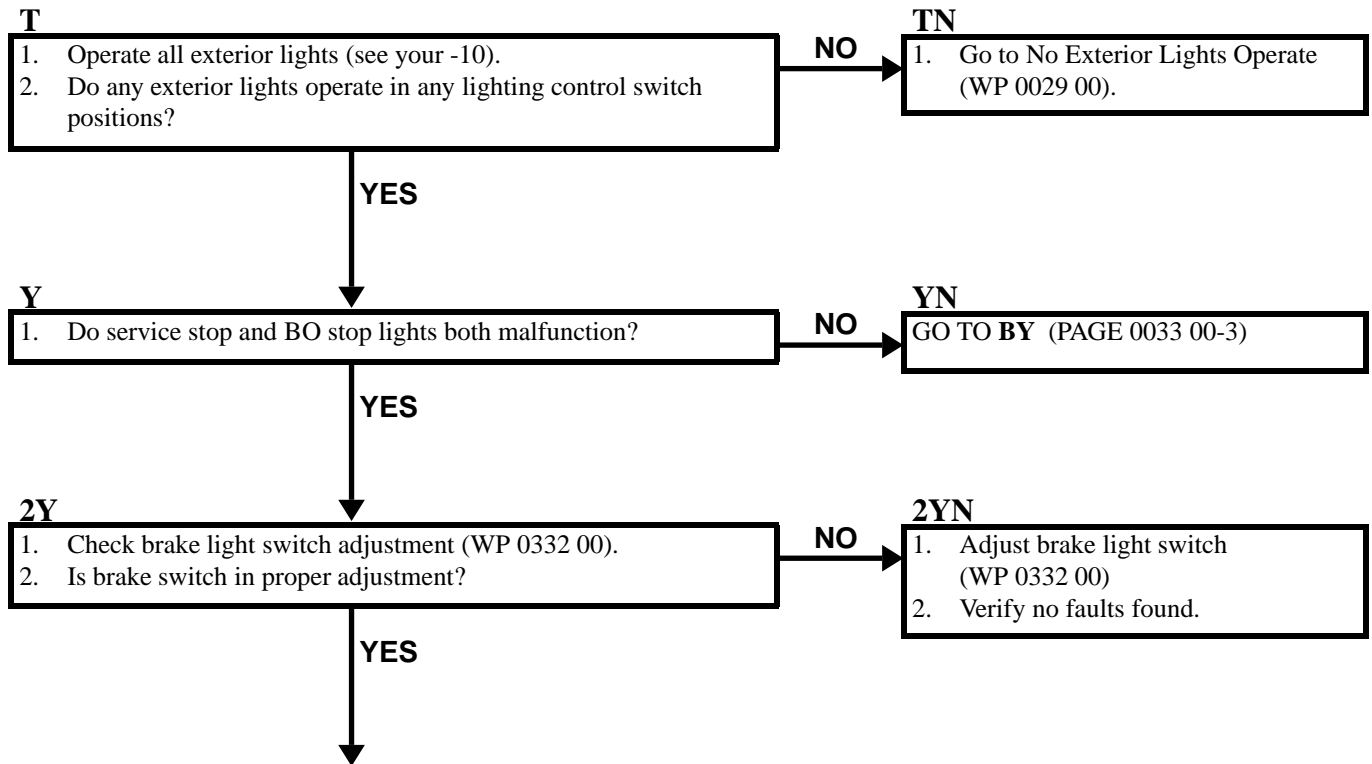
General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)  
Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Vehicle blocked (see your -10)  
Ramp lowered (see your -10)

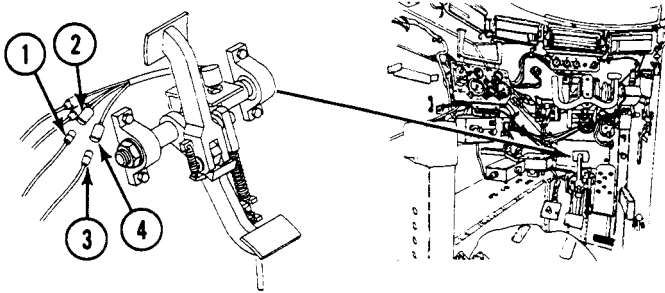
Personnel Required

Unit Mech 63T10  
Helper (H)



**3Y**

1. Turn MASTER SWITCH to OFF.
2. Remove harness 12349881 circuit 75A plug (1) from switch jack (2).
3. Remove harness 12349881 circuit 75B plug (3) from switch jack (4).
4. Measure resistance between switch jacks (2) and (4) with switch depressed and with switch released.
5. Does multimeter read infinity with switch depressed and 0 ohm with switch released?



NO

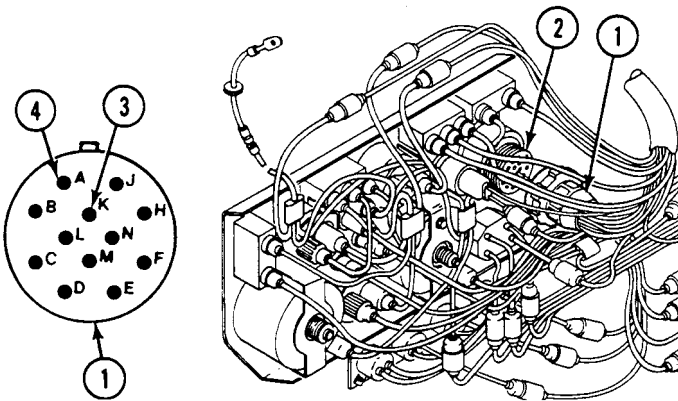
**3YN**

1. Replace brake light switch (WP 0332 00).
2. Verify no faults found.

YES

**4Y**

1. Install harness 12349881 circuit leads 75A and 75B on stop sensitive switch.
2. Remove instrument panel for access (WP 0295 00).
3. Remove harness 12349881 plug (1) from lighting control switch jack (2).
4. Measure resistance between harness 12349881 plug (1) pins K (3) and A (4) with brake pedal depressed.
5. Does multimeter read less than 0 ohm?



NO

**4YN**

1. Faulty harness 12349881 circuit 75A and/or 75B. Beyond unit maintenance repair.
2. Notify supervisor.

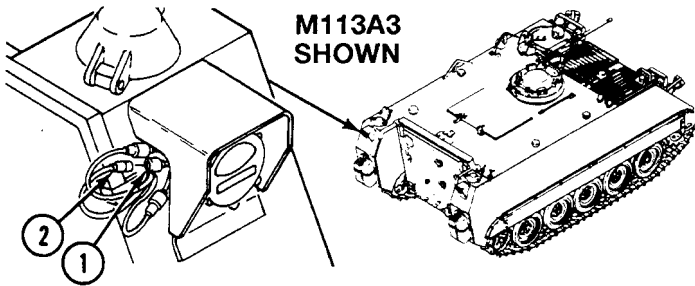
YES

**5Y**

1. Replace main light switch (WP 0283 00).
2. Verify no faults found.

**BY**

1. Remove harness 12268797 circuit 22 plug (1) from jack (2) on malfunctioning left tail light, or circuit 23 plug from jack on malfunctioning right tail light.
2. Turn main switch on lighting control to STOP or to BO.
3. Measure voltage between circuit 22 (left) plug (1) or circuit 23 (right) plug and ground with brake pedal depressed.
4. Does multimeter read less than 17 volts?



NO

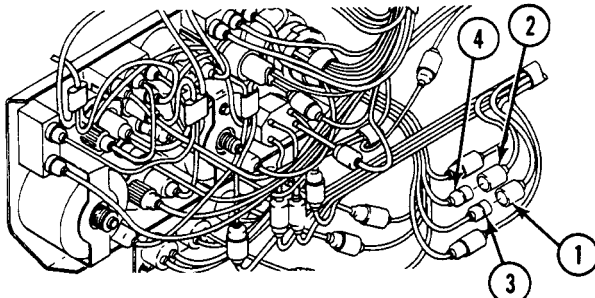
**BYN**

1. Install harness 12268797 jack on tail light.
2. Replace service stop or BO stop light bulb (WP 0301 00) or (WP 0302 00).
3. Verify no faults found.

YES

**B2Y**

1. Remove harness 12268797 circuit 22 plug (left) (1) or circuit 23 plug (right) (2) from harness 12349881 circuit 22 jack (3) or circuit 23 jack (4).
2. Measure voltage between harness 12349881 circuit 22 jack (2) or circuit 23 jack (3) and ground.
3. Does multimeter read less than 17 volts?



NO

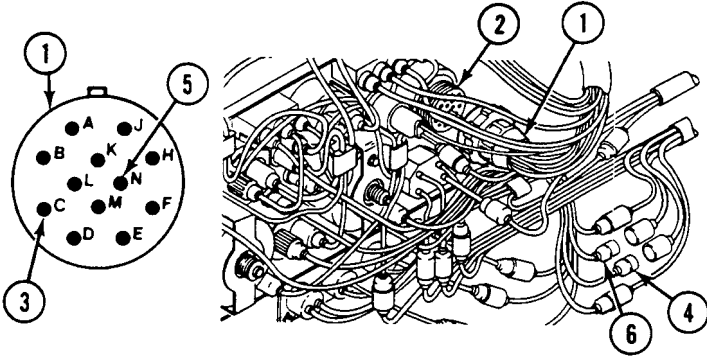
**B2YN**

1. Repair circuit 22 or 23 (WP 0382 00).
2. Verify no faults found.

YES

**B3Y**

1. Remove instrument panel for access (WP 0295 00).
2. Remove harness 12349881 plug (1) from lighting control switch (2).
3. Measure resistance between lighting control switch plug (1) pin C (3) to circuit 22 (service stop) jack (4) or pin N (5) to circuit 23 (BO stop) jack (6).
4. Does multimeter read 0 ohm?



NO

**B3YN**

1. Install harness 12268797 on tail light.
2. Faulty harness 12349881 circuit 22 or 23. Beyond unit maintenance repair.
3. Notify supervisor.

YES

**B4Y**

1. Install harness 12268797 plugs on harness 12349881 jack and tail light.
2. Replace main light switch (WP 0283 00).
3. Verify no faults found.

**BLACKOUT MARKER LIGHT(S) DON'T WORK**

**0034 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)  
Multimeter (WP 0926 00, Item 30)

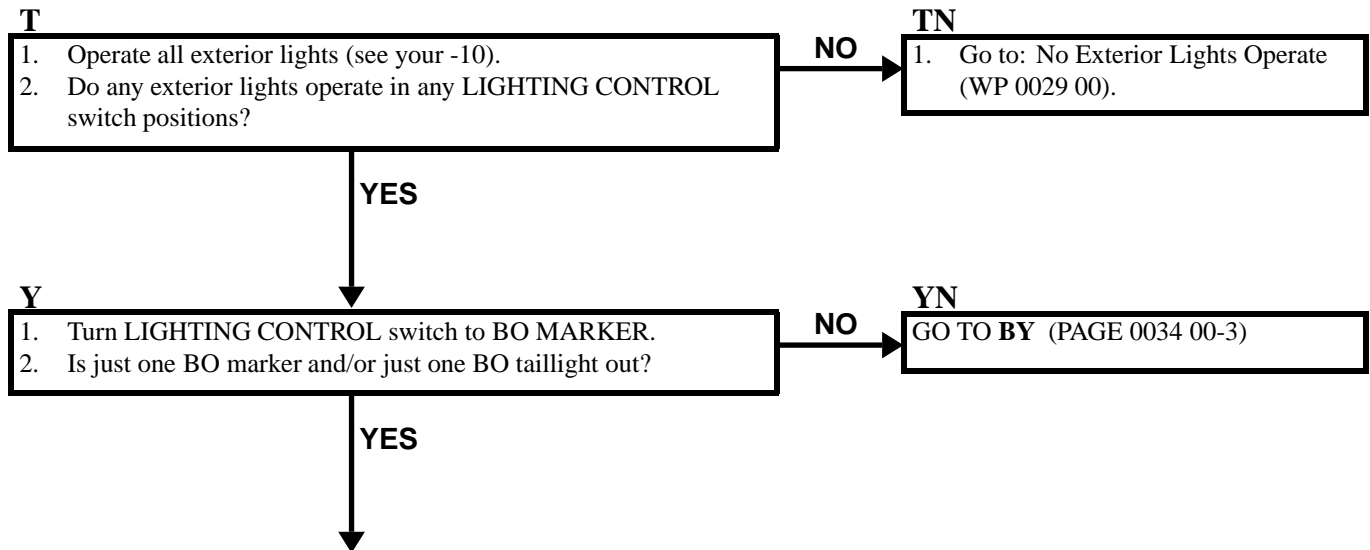
Equipment Condition

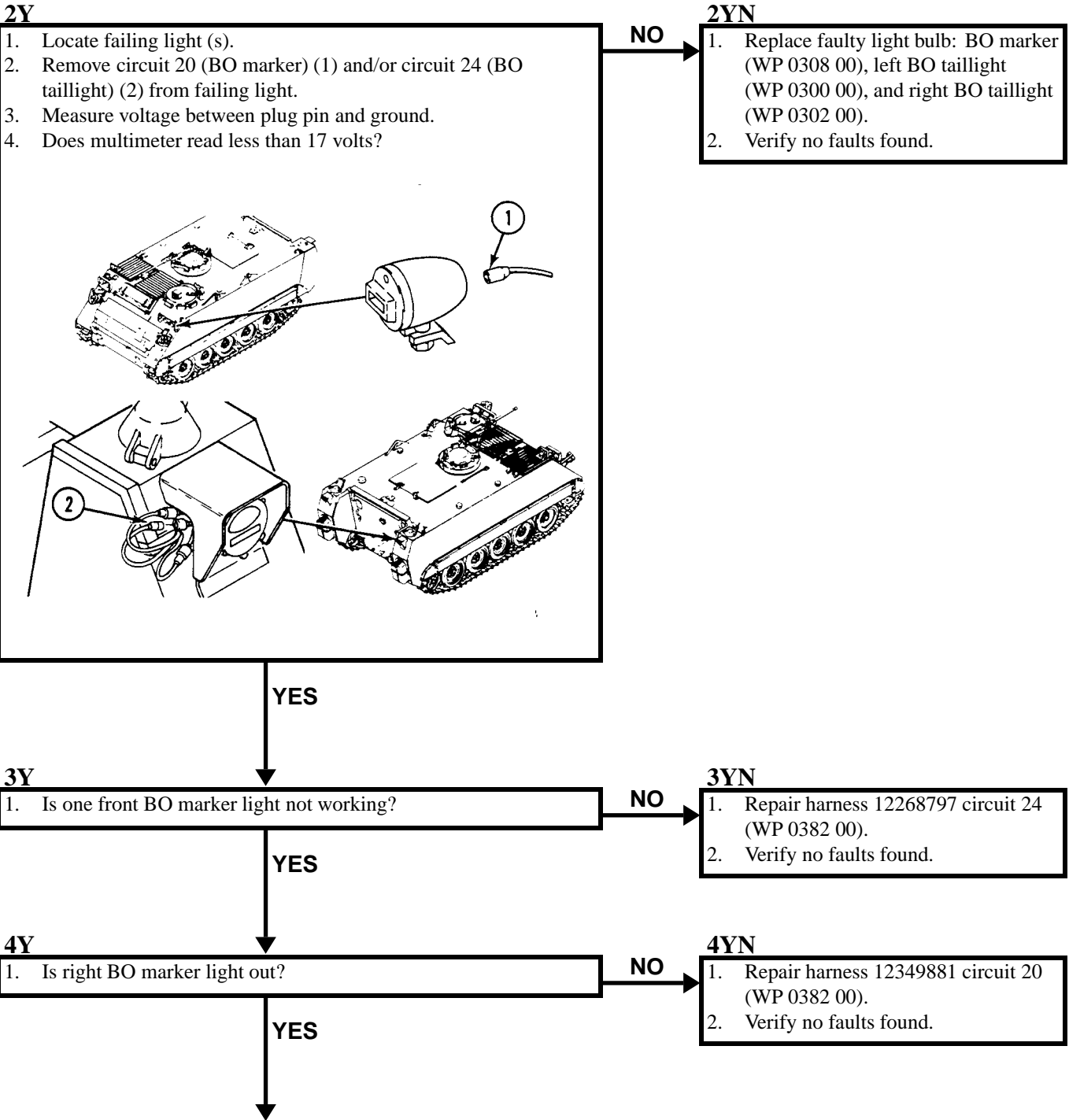
Engine stopped (see your -10)

Personnel Required

Unit Mech 63T10  
Helper (H)

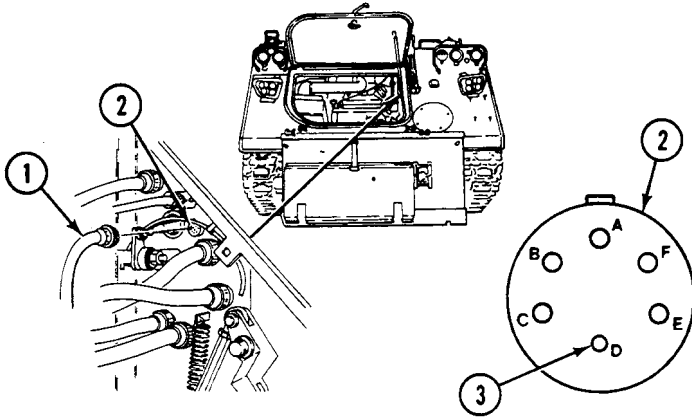
Vehicle blocked (see your -10)





**5Y**

1. Remove harness 8763491 plug (1) from harness 12349881 jack (2) at vehicle bulkhead.
2. Measure voltage between harness 12349881 jack (2), pin D (3), and ground.
3. Does multimeter read less than 17 volts?



NO

**5YN**

1. Replace harness 8763491 (WP 0373 00).
2. Verify no faults found.

YES

**6Y**

1. Install harness 8763491 circuit 20 jack on right BO marker light.
2. Faulty harness 12349881 circuit 20. Beyond unit maintenance repair.
3. Notify supervisor.

**BY**

1. Are only both BO taillights out or only both BO markers out?

NO

**BYN**

GO TO CY (PAGE 0034 00-5)

YES

**B2Y**

1. Are both BO taillights out?

NO

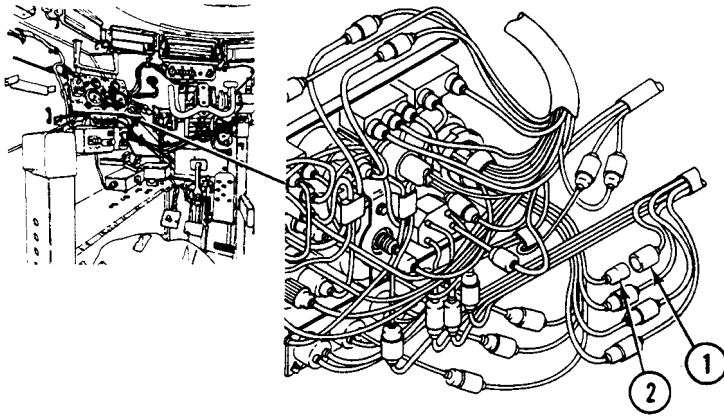
**B2YN**

1. Faulty harness 12349881 circuit 20. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**B3Y**

1. Remove harness 12268797 circuit 24 plug (1) from harness 12349881 circuit 24 jack (2).
2. Measure voltage between harness 12349881 jack pin (2) and ground.
3. Does multimeter read less than 17 volts?



NO

**B3YN**

1. Repair harness 12268797 circuit 24 (WP 0382 00).
2. Verify no faults found.

YES

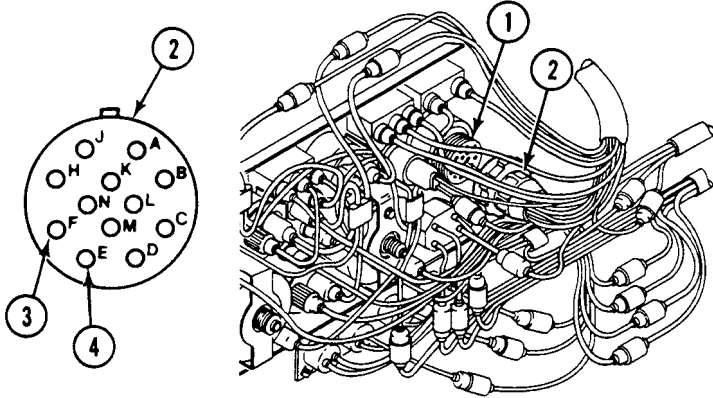
**B4Y**

1. Faulty harness 12349881 circuit 24. Beyond unit maintenance repair.
2. Notify supervisor.



**CY**

1. Turn MASTER SWITCH OFF.
2. Remove instrument panel for access (WP 0295 00).
3. Remove harness 12349881 plug (2) from LIGHTING CONTROL switch jack (1).
4. Measure resistance between LIGHTING CONTROL switch jack (2), pins F (3) and E (4).
5. Does multimeter read 0 ohms?



NO

**CYN**

1. Replace LIGHTING CONTROL switch (WP 0283 00).
2. Verify no faults found.

YES

**C2Y**

1. Faulty harness 12340991 circuit 20/24. Beyond unit maintenance repair.
2. Notify supervisor.



**SERVICE TAILLIGHT DOESN'T WORK**

**0035 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)

Multimeter (WP 0926 00, Item 30)

Equipment Condition

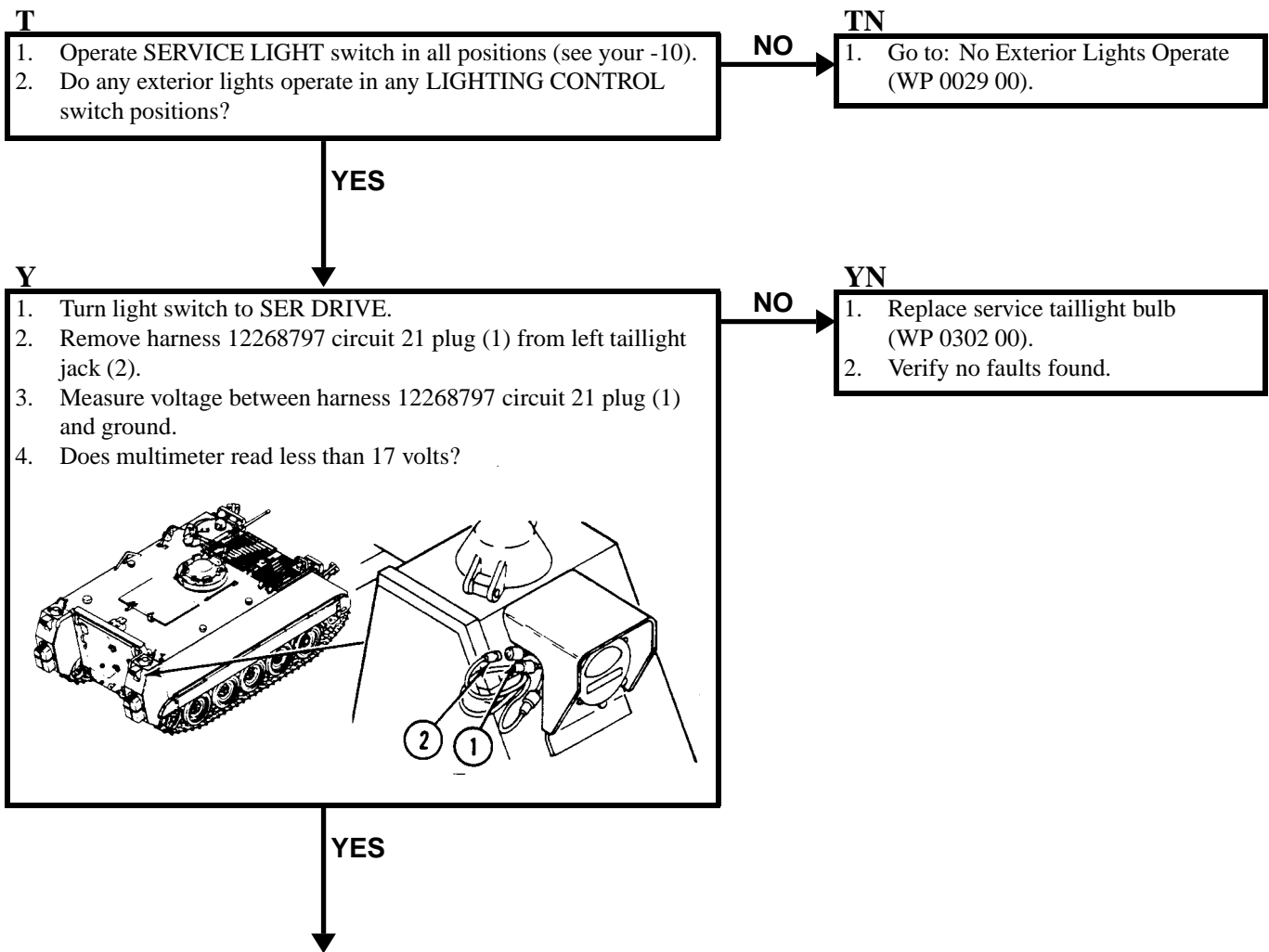
Engine stopped (see your -10)

Vehicle blocked (see your -10)

Personnel Required

Unit Mech 63T10

Helper (H)

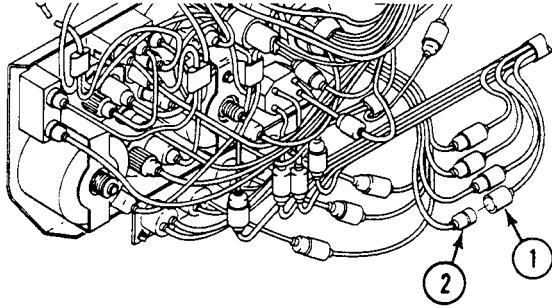


SERVICE TAILLIGHT DOESN'T WORK—Continued

0035 00

**2Y**

1. Remove harness 12268797 circuit 21 plug (1) from harness 12349881 circuit 21 jack (2) on panel.
2. Measure voltage between harness 12349881 jack (2) and ground.
3. Does multimeter read less than 17 volts?



NO

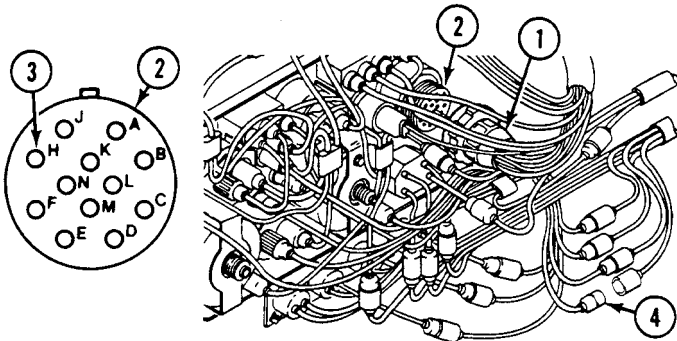
**2YN**

1. Repair harness 12268797 circuit 21 (WP 0382 00).
2. Verify no faults found.

YES

**3Y**

1. Turn MASTER SWITCH OFF.
2. Remove instrument panel for access (WP 0295 00).
3. Remove harness 12349881 plug (1) from LIGHTING CONTROL switch jack (2)
4. Measure resistance between LIGHTING CONTROL switch jack (1), pin H (2), and circuit 21 jack (4).
5. Does multimeter read 0 ohms?



NO

**3YN**

1. Install harness 1268797 circuit 21 plug on left taillight jack.
2. Faulty harness 12349881 circuit 21. Beyond unit maintenance repair.
3. Notify supervisor.

YES

**4Y**

1. Install harness 1268797 circuit 21 plug on left taillight jack.
2. Replace main light switch (WP 0283 00).
3. Verify no faults found.

**TRAILER LIGHTS DON'T WORK**

**0036 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
Trailer TM

Tools and Special Tools

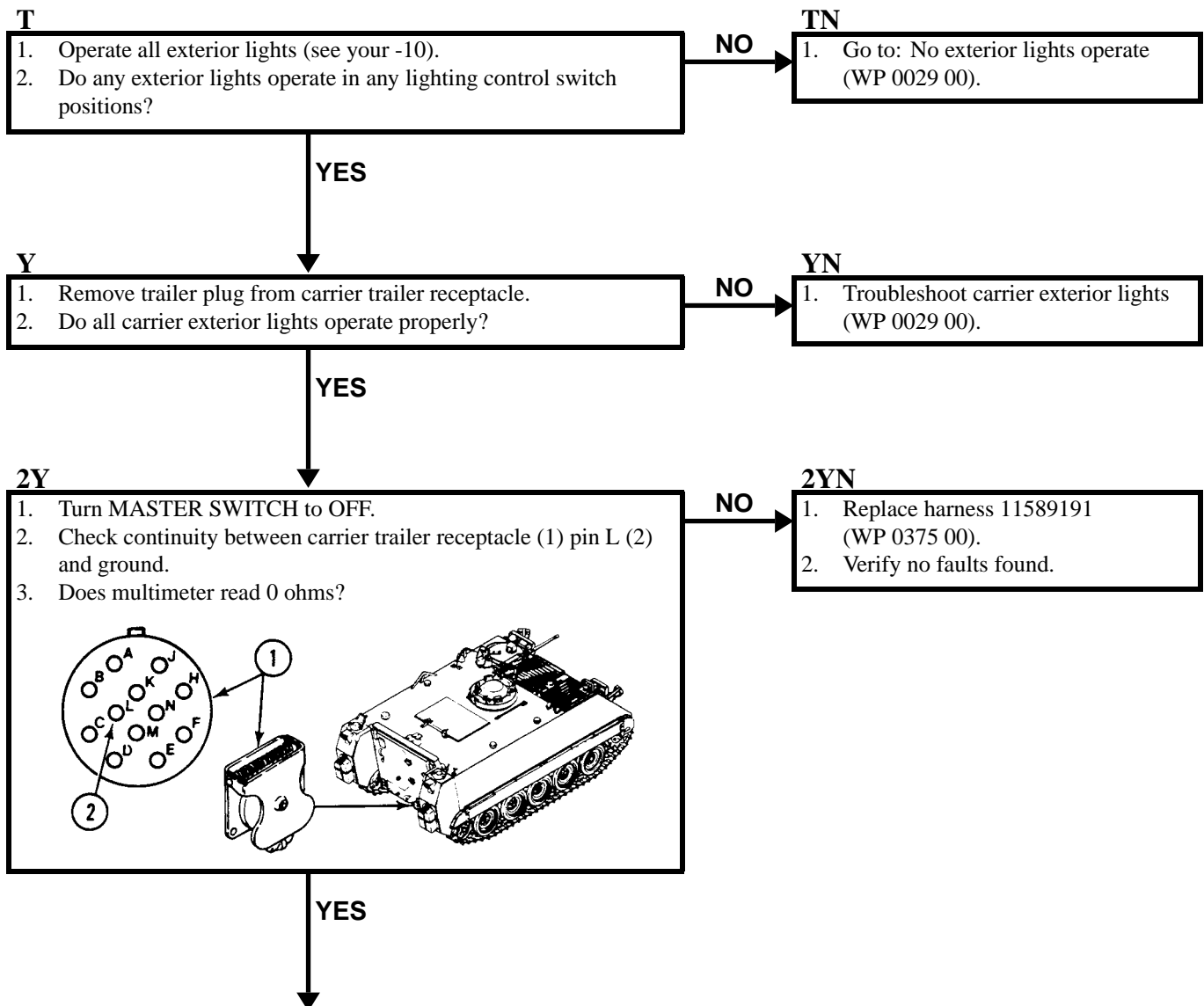
General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

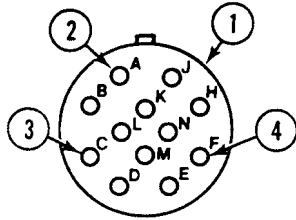
Personnel Required

Unit Mechanic 63T10  
Helper (H)



**3Y**

1. Turn MASTER SWITCH to ON.
2. Turn lighting control switch to BO marker.
3. Measure voltage between trailer receptacle (1) pins A (2), C (3), and F (4) to ground while depressing brake pedal.
4. Does multimeter read 17 volts or more for all readings?



NO

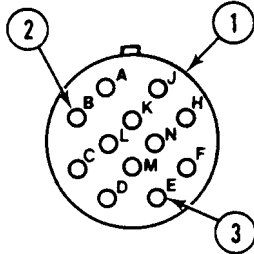
**3YN**

1. Replace harness 11589191 (WP 0375 00).
2. Verify no faults found.

YES

**4Y**

1. Turn lighting control switch to SER DRIVE.
2. Measure voltage between trailer receptacle (1) pins B (2) and E (3) to ground while depressing brake pedal.
3. Does multimeter read 17 volts or more?



NO

**4YN**

1. Replace harness 11589191 (WP 0375 00).
2. Verify no faults found.

YES

**5Y**

1. Faulty trailer harness(es) and/or lights. Beyond unit maintenance repair.
2. Troubleshoot trailer lights. See Trailer TM.

**HORN DOES NOT WORK**

**0037 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)

Multimeter (WP 0926 00, Item 30)

Jumper wire

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

Trim vane removed (see your -10)

Personnel Required

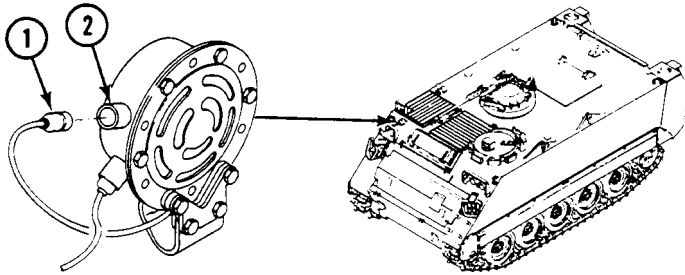
Unit Mech 63T10

Helper (H)

Power plant access panels removed (see your -10)

**T**

1. Remove lead 10863474 plug (1) from horn jack (2).
2. Measure resistance between lead 10863474 plug (1) and ground.
3. Does multimeter read 0 ohms?



**NO**

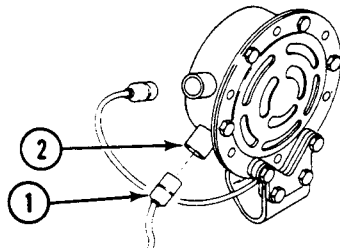
**TN**

1. Replace lead 10863474 and/or connector (WP 0382 00).
2. Verify no faults found.

**YES**

**Y**

1. Remove harness 8763491 circuit 25 plug (1) from horn jack (2).
2. Move MASTER POWER switch to ON.
3. Measure voltage between harness 8763491 circuit 25 plug (1) and ground with horn button depressed.
4. Does multimeter read less than 17 volts?



**NO**

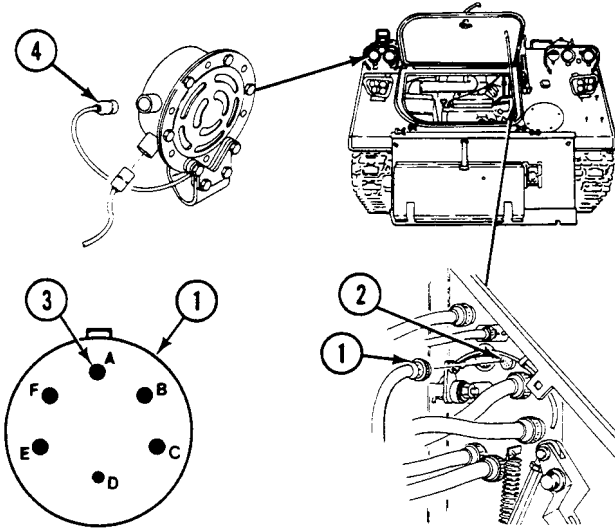
**YN**

1. Replace horn (WP 0336 00).
2. Verify no faults found.

**YES**

**2Y**

1. Release horn button.
2. (H) Move MASTER POWER switch to OFF.
3. Remove harness 8763491 plug (1) from harness 12349881 jack (2) at fire wall.
4. Measure resistance between harness 8763491 plug (1), pin A (3) to lead 25 (4).
5. Does multimeter read 0 ohms?



NO

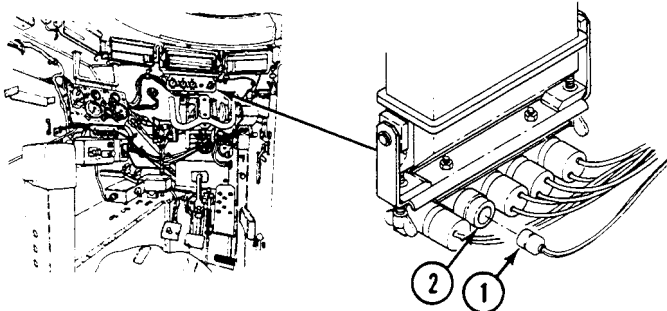
**2YN**

1. Replace wiring harness 8763491 circuit 25 (WP 0373 00).
2. Verify no faults found.

YES

**3Y**

1. Remove circuit 25/25A plug (1) from horn switch jack (2).
2. Measure resistance between horn switch jack pins (2) with horn switch depressed.
3. Does multimeter read 0 ohms?



NO

**3YN**

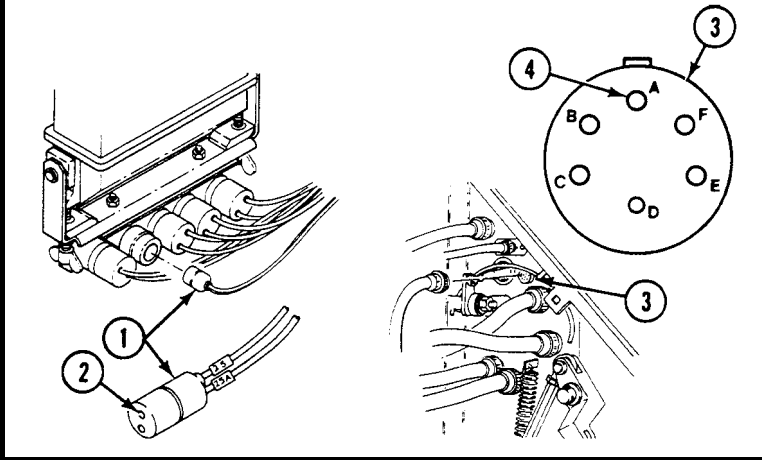
1. Install harness 8763491 plug to harness 12349881 jack at fire wall.
2. Install lead 10863474 plug to horn jack.
3. Install harness 8763491 circuit 25 plug onto horn jack.
4. Replace horn switch (WP 0293 00).
5. Verify no faults found.

YES



**4Y**

1. Install jumper wire between horn switch plug (1), circuit 25 pin (2) and ground.
2. Measure resistance between harness 12349881 jack (3), pin A (4) and ground.
3. Does multimeter read 0 ohms?



**NO**

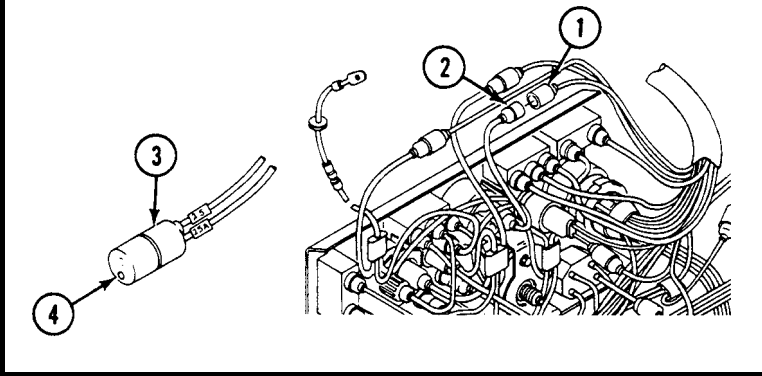
**4YN**

1. Remove jumper wire from horn switch plug.
2. Faulty harness 12349881 circuit 25A. Beyond unit maintenance repair.
3. Notify supervisor.

**YES**

**5Y**

1. Remove jumper wire from horn switch plug.
2. Remove instrument panel for access (WP 0295 00).
3. Remove harness 12349881 circuit 25A plug (1) from cable assembly 12349858 circuit 25A jack (2).
4. Install jumper wire between 12349858 jack, circuit 25A pin (2) and ground.
5. Measure resistance between horn switch plug (3), circuit 25A pin (4) and ground.
6. Does multimeter read 0 ohms?



**NO**

**5YN**

1. Remove jumper wire from harness 12349858 circuit 25A.
2. Faulty harness 12349881 circuit 25A. Beyond unit maintenance repair.
3. Notify supervisor.

**YES**

**6Y**

1. Remove jumper wire from harness 123498558 circuit 25A plug.
2. Install circuits 25 and 25A on horn switch.
3. Install harness 8761491 plug on harness 12349881 jack on fire wall.
4. Repair harness 12349858 circuit 25A (WP 0382 00).
5. Verify no faults found.

**INSTRUMENT PANEL AND/OR TRANS CONTROLLER ILLUMINATION LIGHTS MALFUNCTION**

**0038 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)

Multimeter (WP 0926 00, Item 30)

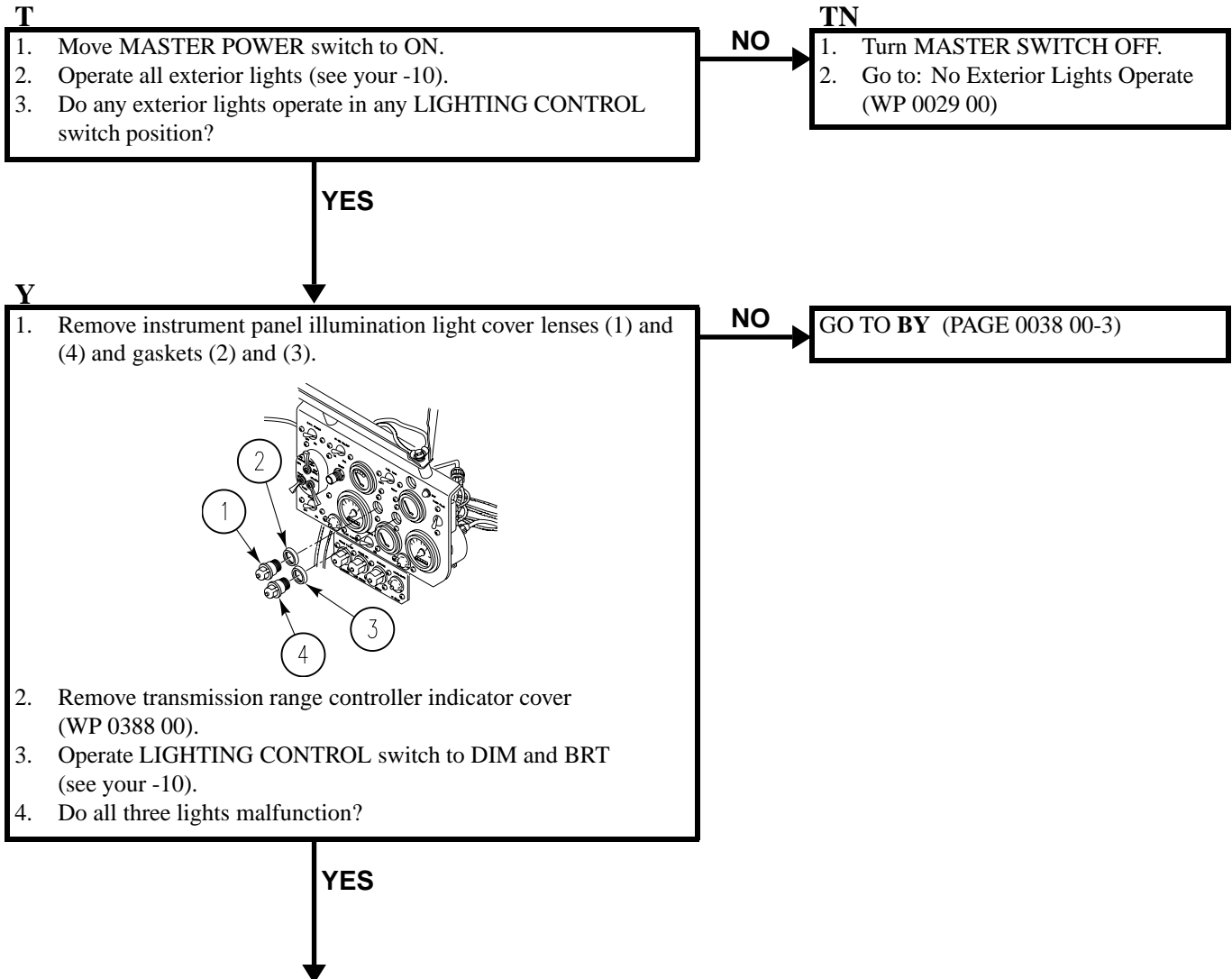
Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

Personnel Required

Unit Mech 63T10

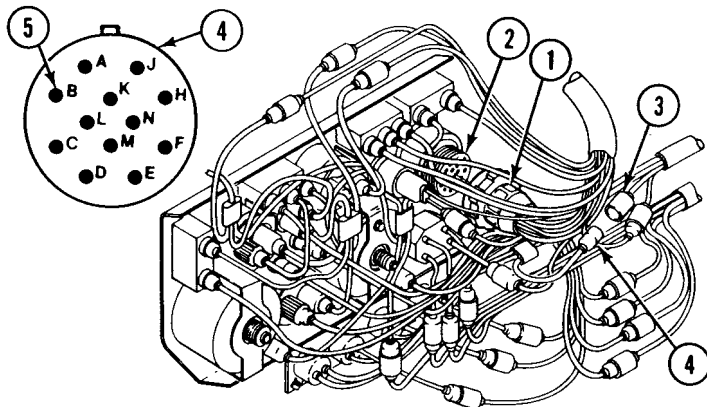
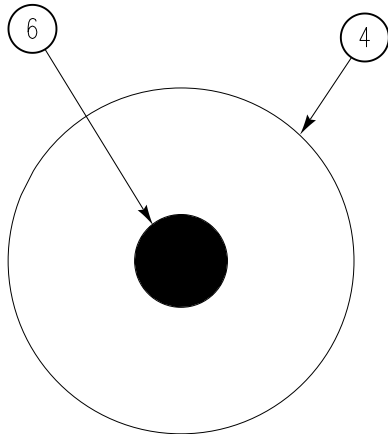


**INSTRUMENT PANEL AND/OR TRANS CONTROLLER ILLUMINATION LIGHTS  
MALFUNCTION—Continued**

0038 00

**2Y**

1. Move MASTER POWER switch to OFF.
2. Install instrument panel illumination light and controller indicator cover lenses and gaskets.
3. Remove instrument panel for access (WP 0295 00).
4. Remove harness 12349881 plug (1) from LIGHTING CONTROL switch jack (2).
5. Remove harness 12349813 circuit 40 plug (3) from harness 12349881 circuit 40 jack (4).
6. Measure resistance between harness 12349881 LIGHTING CONTROL switch plug (1), pin B (5), and circuit 40 jack (4) pin (6).
7. Does multimeter read 0 ohms?



**NO**

**2YN**

1. Faulty harness 12349881, circuit 40. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**3Y**

1. Replace main light switch (WP 0283 00).
2. Verify no faults found.

**INSTRUMENT PANEL AND/OR TRANS CONTROLLER ILLUMINATION LIGHTS  
MALFUNCTION—Continued**

0038 00

**BY**

1. Remove malfunctioning bulb(s) from instrument panel illumination light(s) and/or TRANS CONTROLLER indicator.
2. Check continuity between bulb center contact and bulb base.
3. Does multimeter read less than infinity?

NO

**BYN**

1. Replace light bulb(s), as required (WP 0388 00).
2. Verify no faults found.

YES

**B2Y**

1. Does either instrument panel illumination light malfunction?

NO

**B2YN**

1. Replace harness 12349813 (WP 0374 00).
2. Verify no faults found.

YES

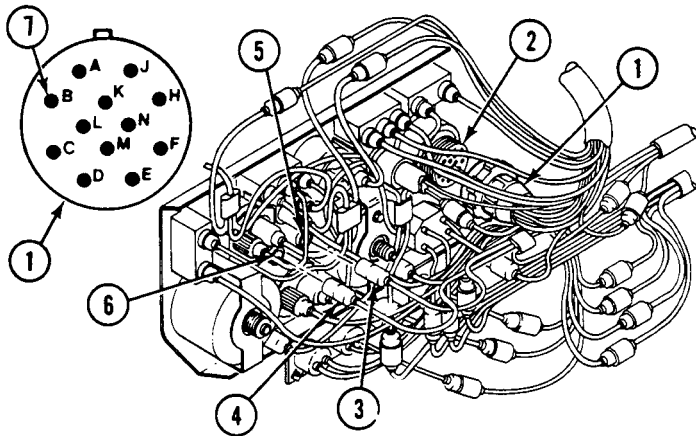
**B3Y**

1. Remove instrument panel for access (WP 0295 00).
2. Remove harness 12349881 plug (1) from LIGHTING CONTROL switch jack (2).
3. Remove harness 12349881 circuit 40 plug (3) or (4) from failing instrument panel light (5) or (6).
4. Measure resistance between harness 12349881 LIGHTING CONTROL switch plug (1), pin B (7), and failing circuit 40 light plug (3) or (4).
5. Does multimeter read 0 ohms?

NO

**B3YN**

1. Install bulbs.
2. Faulty harness 12349881, circuit 40. Beyond unit maintenance repair.
3. Notify supervisor.



YES

---

**INSTRUMENT PANEL AND/OR TRANS CONTROLLER ILLUMINATION LIGHTS  
MALFUNCTION—Continued**

---

0038 00

**B4Y**

1. Install harness 12349881 plug on LIGHTING CONTROL switch jack.
2. Replace instrument panel light assembly (WP 0287 00).
3. Verify no faults found.

**DOME LIGHT(S) DO NOT WORK**

**0039 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your-10

Tools and Special Tools

General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)  
Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)

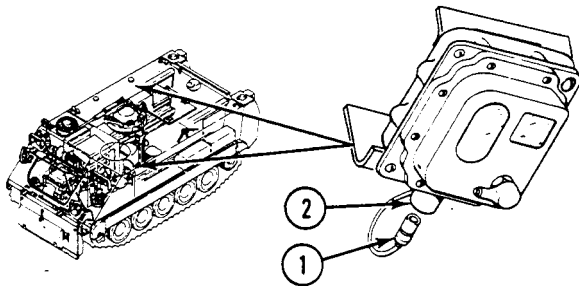
Personnel Required

Unit Mech 63T10  
Helper (H)

Vehicle blocked (see your -10)

**T**

1. Remove harness 12268797 plug (1) from jack (2) on faulty dome light.
2. Turn MASTER SWITCH ON.
3. Measure voltage between harness 12268797 plug (1) and ground.
4. Does multimeter read 17 volts or more?



**NO**

**GO TO BY (PAGE 0039 00-3)**

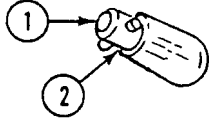
**YES**

DOME LIGHT(S) DO NOT WORK—Continued

0039 00

**Y**

1. Turn MASTER SWITCH OFF.
2. Install harness 12268797 plug on dome light.
3. Remove dome light bulbs from dome light assembly (WP 0309 00) or (WP 0311 00).
4. Check continuity between light bulb center contact (1) and bulb base (1).
5. Is there continuity?



**NO**

**YN**

1. Repair dome light assembly (WP 0310 00) or (WP 0312 00).
2. Verify no faults found.

**YES**

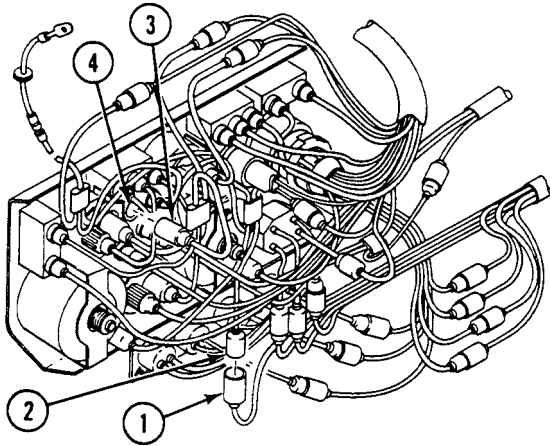
**2Y**

1. Replace dome light bulbs (WP 0310 00) or (WP 0312 00).
2. Verify no faults found.



**BY**

1. Turn MASTER SWITCH OFF.
2. Remove instrument panel for access (WP 0295 00).
3. Remove harness 12268797 circuit 38 plug (1) from harness 12349858 circuit 38 jack (2).
4. Remove harness 12349858 circuit 27 plug (3) from instrument panel circuit breaker jack (4).
5. Measure resistance between harness 12349858 circuit 38 jack (2) and circuit 27 plug (3).



6. Does multimeter read 0 ohms?

NO

**BYN**

1. Install harness 2268797 plug on dome light jack.
2. Repair harness 12349858 circuit 38 (WP 0382 00).
3. Verify no faults found.

YES

**B2Y**

1. Repair harness 12268797 circuit 38 (WP 0382 00).
2. Verify no faults found.



**DOME LIGHT MALFUNCTION (M577A3 ONLY)**

**0040 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your-10

Tools and Special Tools

General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)  
Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Vehicle blocked (see your -10)

Personnel Required

Unit Mech 63T10  
Helper (H)

**T**

1. Turn MASTER SWITCH to ON (see your -10).
2. Turn BLACKOUT BYPASS switch to ON.
3. Do white dome lights come on?

**NO**

**GO TO BY (PAGE 0040 00-4)**

**YES**

**Y**

1. Turn BLACKOUT BYPASS switch to OFF.
2. Operate rear dome light switch.
3. Operate front dome light switch.
4. Do blackout lights malfunction?

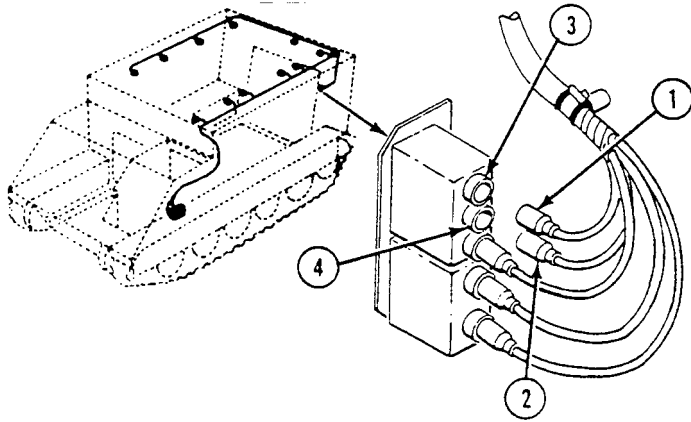
**NO**

**GO TO CY (PAGE 0040 00-4)**

**YES**

**2Y**

1. Remove circuit 38E (1) and 38A (2) plugs form rear dome light switch jacks (3)(4).
2. Install a jumper wire between circuit 38E (1) and 38A (2) plugs.
3. Operate front dome light switch.
4. Do blackout dome lights malfunction?



**NO**

GO TO **DY** (PAGE 0040 00-5)

**YES**

**3Y**

1. Remove jumper from circuit 38E and 38A plugs.
2. Measure voltage at circuit 38E plug.
3. Does multimeter read 17 volts or more?

**NO**

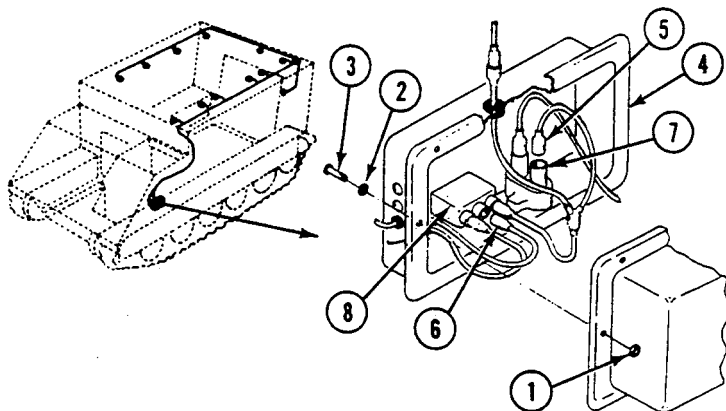
**3YN**

1. Turn MASTER SWITCH to OFF.
2. Repair rear main harness circuit 38E (WP 0382 00).
3. Verify no faults found.

**YES**

**4Y**

1. Turn MASTER SWITCH to OFF.
2. Install circuit 38E and 38A plugs on rear dome light.
3. Remove eight nuts (1), washers (2), and screws (3) from master switch panel (4). Pull panel away from distribution box.
4. Remove circuits 10 (5) and 38A (6) plugs from circuit breaker (7) and front dome light switch (8).
5. Install a jumper wire between circuit 10 and 38A plugs.
6. Turn MASTER SWITCH to ON.
7. Operate rear dome light switch.
8. Do blackout dome lights still malfunction?



**NO** → GO TO EY (PAGE 0040 00-5)

**YES**

**5Y**

1. Remove jumper wire from circuits 10 and 38A plugs.
2. Measure voltage at circuit 10 plug.
3. Does multimeter read 17 volts or more?

**NO** → **5YN**  
 1. Turn MASTER SWITCH to OFF.  
 2. Repair/replace wiring harness 10917788 (WP 0382 00).  
 3. Verify no faults found.

**YES**

**6Y**

1. Turn MASTER SWITCH to OFF.
2. Repair wiring harness circuit 38A (WP 0382 00).
3. Verify no faults found.

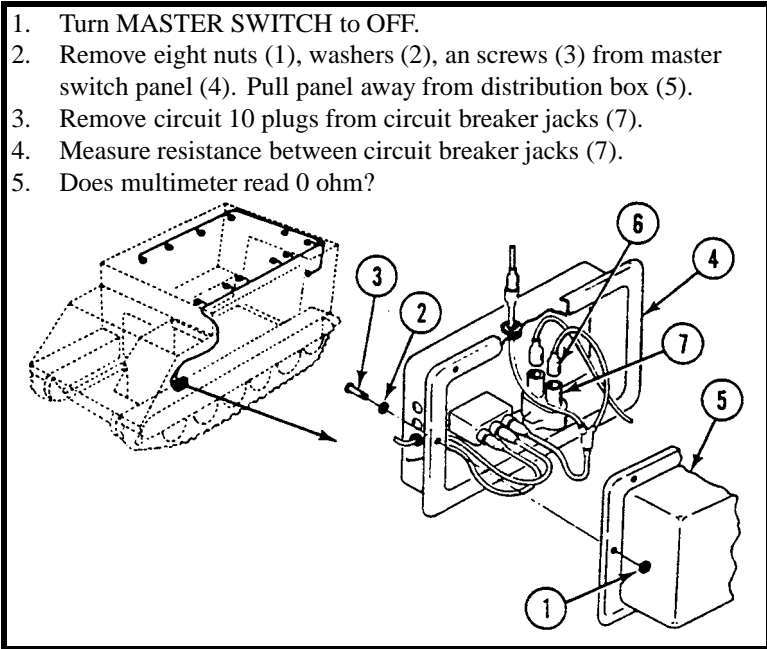
**BY**

1. Turn MASTER SWITCH to OFF.
2. Remove eight nuts (1), washers (2), and screws (3) from master switch panel (4). Pull panel away from distribution box (5).
3. Remove circuit 10 plugs from circuit breaker jacks (7).
4. Measure resistance between circuit breaker jacks (7).
5. Does multimeter read 0 ohm?

NO

**BYN**

1. Replace circuit breaker (WP 0316 00).
2. Verify no faults found.



YES

**B2Y**

1. Repair circuit 10 lead assembly from the circuit breaker to the front dome light switch (WP 0382 00).
2. Verify no faults found.

**CY**

1. Has the ramp door switch been adjusted?

NO

**CYN**

1. Adjust ramp door switch (WP 0335 00).
2. Verify no faults found.

YES

**C2Y**

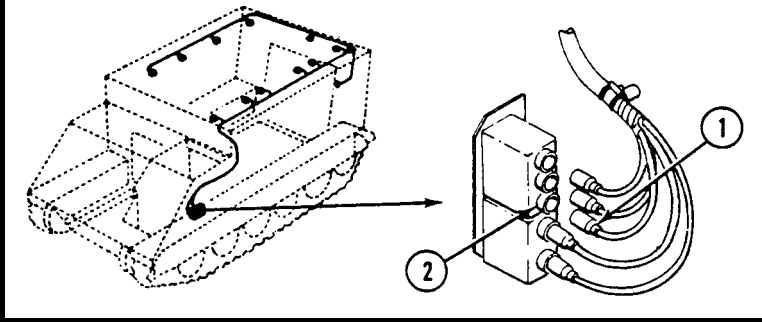
1. Replace ramp door switch (WP 0335 00).
2. Verify no faults found.

**DOME LIGHT MALFUNCTION (M577A3 ONLY)—Continued**

0040 00

**DY**

1. Turn blackout dome lights on using front dome light switch.
2. Remove circuit 38 plug (1) from rear dome light switch jack (2).
3. Measure voltage between circuit 38 plug (1) and ground.
4. Does multimeter read 17 volts or more?



**NO**

**DYN**

1. Turn MASTER SWITCH to OFF.
2. Repair rear main harness circuit 38 (WP 0382 00).
3. Verify no faults found.

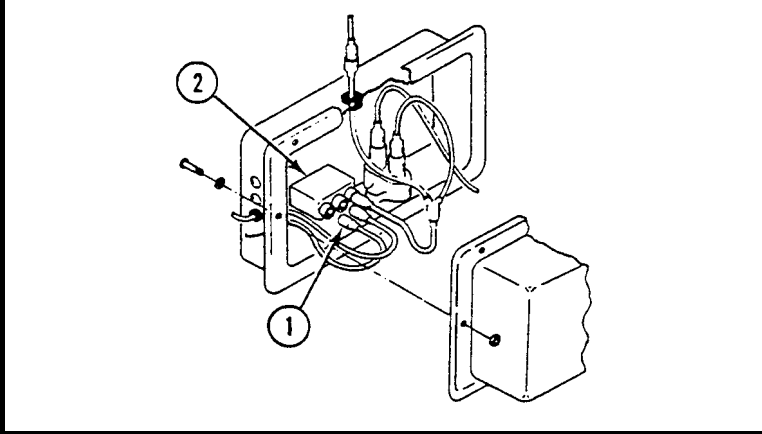
**YES**

**D2Y**

1. Turn MASTER SWITCH to OFF.
2. Replace rear dome light switch (WP 0315 00).
3. Verify no faults found.

**EY**

1. Turn dome lights on using rear dome light switch.
2. Remove circuit 38 plug (1) from front dome light switch jack.
3. Measure voltage between circuit 38 plug (1) and ground.
4. Does multimeter read 17 volts or more?



**NO**

**EYN**

1. Turn MASTER SWITCH to OFF.
2. Repair wiring harness circuit 38 (WP 0382 00).
3. Install master switch panel on distribution box (WP 0261 00).
4. Verify no faults found.

**YES**

**E2Y**

1. Turn MASTER SWITCH to OFF.
2. Remove jumper wire from circuit 10 and 38 plugs.
3. Replace front dome light switch (WP 0314 00).
4. Verify no faults found.



**BLACKOUT DOME LIGHTS DO NOT WORK (M1068A3 ONLY)**

**0041 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Digital Multimeter (WP 0926 00, Item 30)

Equipment Condition

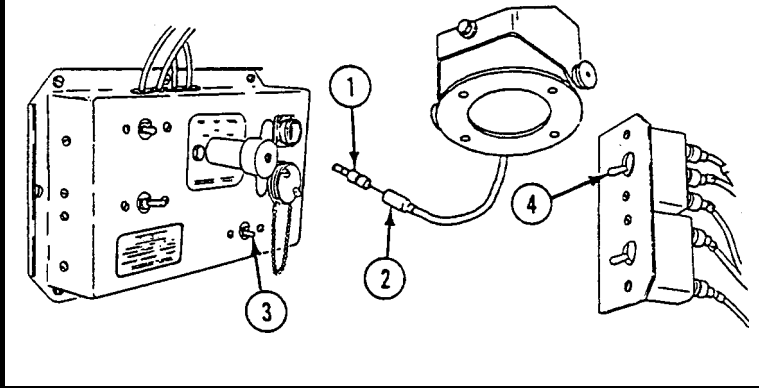
- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Ramp lowered or ramp door open (see your -10)

Personnel Required

Unit Mechanic

**T**

1. Disconnect W28 plug P2 (1) from dome light lead (2).
2. Turn MASTER SWITCH to ON.
3. Turn on front dome light switch (3) (master switch panel in driver's compartment); or rear dome light switch (4) (switch panel next to ramp).
4. Measure voltage between plug P2 (1) and ground.
5. Does multimeter read 17 volts or more?



**NO**

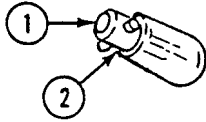
**GO TO AY (PAGE 0041 00-2)**

**YES**



**Y**

1. Turn MASTER SWITCH to OFF.
2. Remove light bulbs from dome light (WP 0312 00).
3. Check continuity between light bulb center contact (1) and bulb base (2).
4. Is there continuity?



**NO**

**YN**

1. Replace dome light bulbs (WP 0312 00).
2. Verify no faults found.

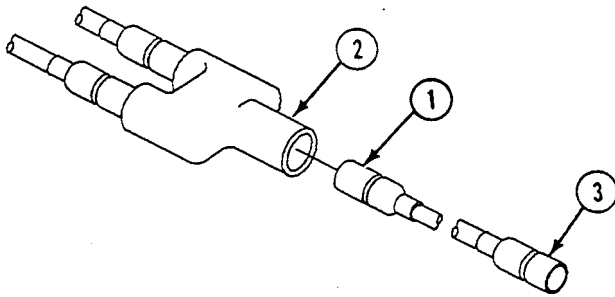
**YES**

**2Y**

1. Repair dome light assembly (WP 0312 00).
2. Verify no faults found.

**AY**

1. Turn MASTER SWITCH to OFF.
2. Remove cable W28 plug P1 (1) from adapter plug (2).
3. Measure resistance between cable W28 plugs P1 (1) and P2 (3).
4. Does multimeter read zero ohms?



**NO**

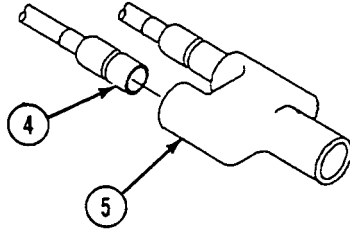
**AYN**

1. Replace cable W28 (WP 0849 00).
2. Verify no faults found.

**YES**

**A2Y**

1. Remove lead 38B (1) from adapter plug P3 (5).
2. Turn MASTER SWITCH to ON.
3. Measure voltage between lead 38B (4) and ground.
4. Does multimeter read 17 volts or more?



NO

**A2YN**

1. Go to Dome Lights Malfunction (M577A3 Only) (WP 0040 00).

YES

**A3Y**

1. Replace adapter (WP 0849 00).
2. Verify no faults found.



**RIGHT REAR UTILITY OUTLET/ADMITTANCE BUZZER WORKS IMPROPERLY (M577A3 AND M1068A3 ONLY)**

**0042 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

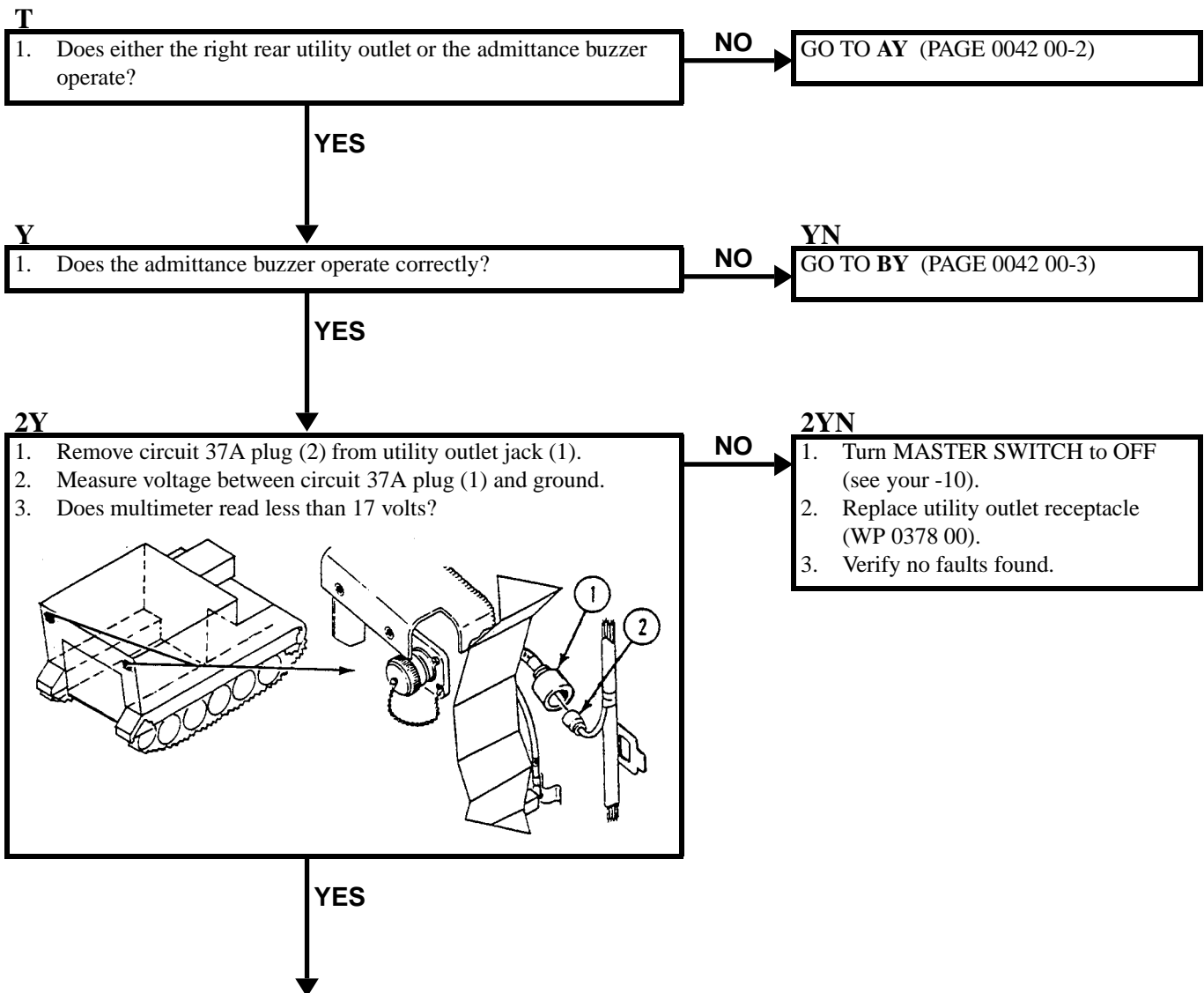
- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Digital Multimeter (WP 0926 00, Item 30)
- Jumper Wire

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- MASTER SWITCH turned to ON (see your -10)

Personnel Required

- Unit Mechanic
- Helper (H)



**RIGHT REAR UTILITY OUTLET/ADMITTANCE BUZZER WORKS IMPROPERLY (M577A3 AND M1068A3 ONLY)—Continued**

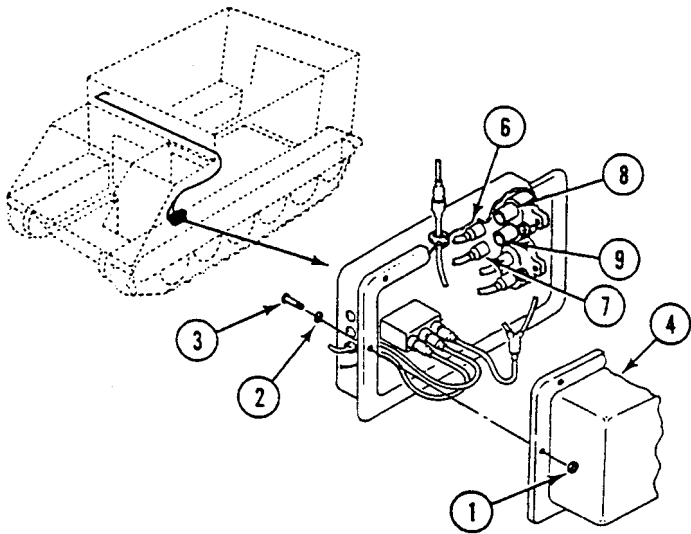
0042 00

**3Y**

1. Turn MASTER SWITCH to OFF.
2. Faulty rear main wiring harness. Beyond unit maintenance repair.
3. Notify supervisor.

**AY**

1. Remove eight nuts (1), washers (2), and screws (3) from master switch panel (4). Pull panel away from distribution box (5).
2. Remove circuit 10 and 37A plugs (6) and (7) from circuit breaker jacks (8) and (9).
3. Measure resistance between circuit breaker jacks (8) and (9).
4. Does multimeter read 0 ohms?



NO

**AYN**

1. Replace circuit breaker (WP 0280 00).
2. Verify no faults found.

YES

**A2Y**

1. Turn MASTER SWITCH to ON.
2. Measure voltage at circuit 10 plug.
3. Does multimeter read less than 17 volts?

NO

**A2YN**

1. Turn MASTER SWITCH to OFF.
2. Faulty rear main wiring harness circuit 37A. Beyond unit maintenance repair.
3. Notify supervisor.

YES

**RIGHT REAR UTILITY OUTLET/ADMITTANCE BUZZER WORKS IMPROPERLY (M577A3 AND M1068A3 ONLY)—Continued**

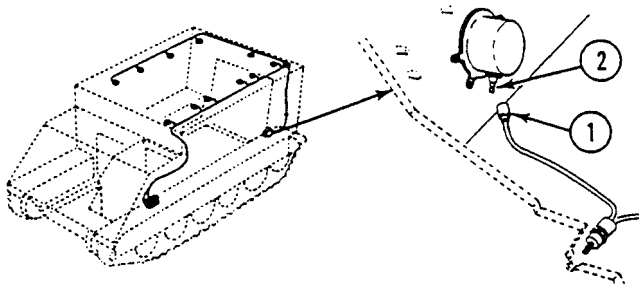
0042 00

**A3Y**

1. Turn MASTER SWITCH to OFF.
2. Replace circuit 10 in master switch panel from the bus bar to the circuit breaker (WP 0382 00).
3. Verify no faults found.

**BY**

1. Remove circuit 509 plug (1) from admittance buzzer jack (2).
2. (H): Depress admittance buzzer switch.
3. Measure voltage between circuit 509 plug (1) and ground.
4. Does multimeter read less than 17 volts?



NO

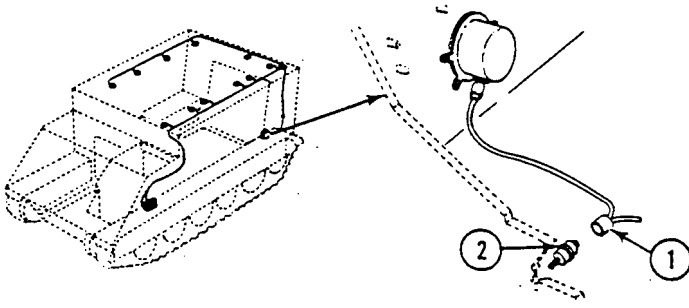
**BYN**

1. Turn MASTER SWITCH to OFF.
2. Replace admittance buzzer (WP 0334 00).
3. Verify no faults found.

YES

**B2Y**

1. Remove rear main harness circuit 509 plug (1) from admittance buzzer switch (2).
2. Install a jumper wire between admittance buzzer circuit 509 plug (1) and ground.
3. Measure voltage across two pin contacts of circuit 509 plug (1) from admittance buzzer switch.
4. Does multimeter read less than 17 volts?



NO

**B2YN**

1. Turn MASTER SWITCH to OFF.
2. Replace admittance buzzer switch (WP 0334 00).
3. Verify no faults found.

YES

---

**RIGHT REAR UTILITY OUTLET/ADMITTANCE BUZZER WORKS IMPROPERLY (M577A3  
AND M1068A3 ONLY)—Continued**

---

0042 00

**B3Y**

1. Turn MASTER SWITCH to OFF.
2. Remove jumper wire.
3. Faulty rear main wiring harness circuit 509. Beyond unit maintenance repair.
4. Notify supervisor.



**LEFT REAR UTILITY OUTLET/BLOWER DOES NOT WORK (M577A3 AND M1068A3 ONLY)**

**0043 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Digital Multimeter (WP 0926 00, Item 30)

Jumper wire

Equipment Condition

Engine stopped (see your -10)

Carrier blocked (see your -10)

MASTER SWITCH turned to ON (see your -10)

Personnel Required

Unit Mechanic

Helper (H)

**T**

1. Does either the blower or the left rear utility outlet work?

**NO**

GO TO **BY** (PAGE 0043 00-3)

**YES**

**Y**

1. Does the blower operate normally?

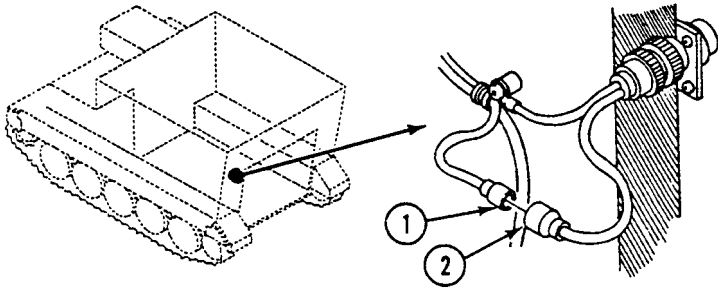
**NO**

GO TO **CY** (PAGE 0043 00-4)

**YES**

**2Y**

1. Remove rear main harness circuit 37B plug (1) from left rear utility outlet jack (2).
2. Measure voltage between circuit 37B plug (1) and ground.
3. Does multimeter read less than 17 volts?



**NO**

**2YN**

1. Turn MASTER SWITCH to OFF.
2. Replace utility outlet receptacle (WP 0378 00).
3. Verify no faults found.

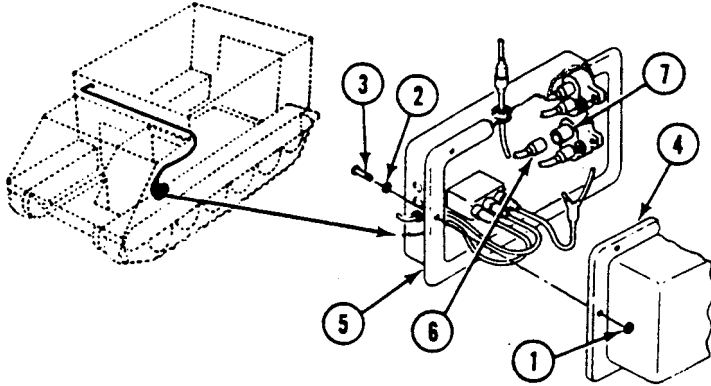
**YES**

**LEFT REAR UTILITY OUTLET/BLOWER DOES NOT WORK (M577A3 AND M1068A3 ONLY)—Continued**

0043 00

**3Y**

1. Turn MASTER SWITCH to OFF.
2. Remove eight nuts (1), washers (2), and screws (3) from master switch panel (4) and distribution box (5). Pull panel away from distribution box.
3. Remove circuit 37B plug (6) from circuit breaker jack (7).
4. Turn MASTER SWITCH to ON.
5. Measure voltage between circuit breaker jack (7) and ground.
6. Does multimeter read less than 17 volts?



**NO**

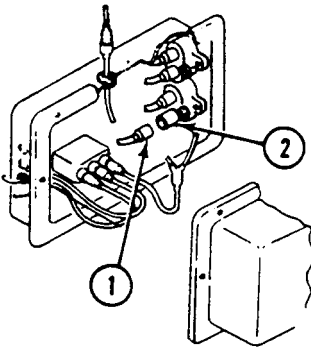
**3YN**

1. Turn MASTER SWITCH to OFF.
2. Faulty rear main wiring harness circuit 37B. Beyond unit maintenance repair.
3. Notify supervisor.

**YES**

**4Y**

1. Remove circuit 10 plug (1) from circuit breaker jack (2).
2. Measure voltage between circuit 10 plug (1) and ground.
3. Does multimeter read less than 17 volts?



**NO**

**4YN**

1. Turn MASTER SWITCH to OFF.
2. Replace circuit breaker (WP 0280 00).
3. Verify no faults found.

**YES**

**LEFT REAR UTILITY OUTLET/BLOWER DOES NOT WORK (M577A3 AND M1068A3 ONLY)—Continued**

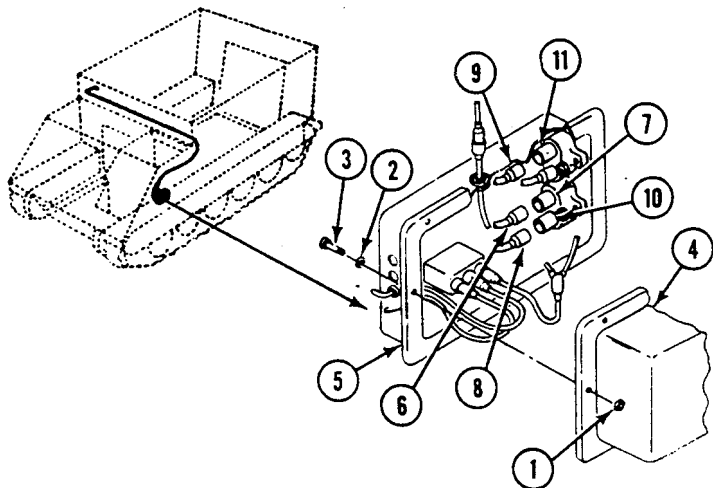
0043 00

**5Y**

1. Turn MASTER SWITCH to OFF.
2. Faulty circuit 10 lead from bus bar to circuit breaker. Beyond unit maintenance repair.
3. Install master switch panel on distribution box (WP 0261 00).
4. Notify supervisor.

**BY**

1. Turn MASTER SWITCH to OFF.
2. Remove eight nuts (1), washers (2), and screws (3) from master switch panel (4) and distribution box (5). Pull panel away from distribution box.
3. Remove circuit 37B plug (6) from circuit breaker jack (7) and two circuit 10 plugs (8) and (9) from circuit breaker jacks (10) and (11).
4. Measure resistance between circuit breaker contacts.
5. Does multimeter read 0 ohms?



YES

**B2Y**

1. Faulty circuit 10 from bus bar to circuit breaker. Beyond unit maintenance repair.
2. Install master switch panel on distribution box (WP 0261 00).
3. Notify supervisor.

**BYN**

1. Replace circuit breaker (WP 0280 00).
2. Verify no faults found.

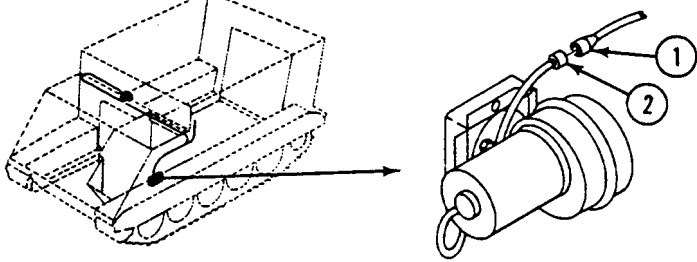
NO

**LEFT REAR UTILITY OUTLET/BLOWER DOES NOT WORK (M577A3 AND M1068A3 ONLY)—Continued**

0043 00

**CY**

1. Turn BLOWER SWITCH to OFF.
2. Remove circuit 59 plug (1) from blower motor jack (2).
3. Turn BLOWER SWITCH to ON.
4. Measure voltage between circuit 59 plug (1) and ground.
5. Does multimeter read less than 17 volts?



NO

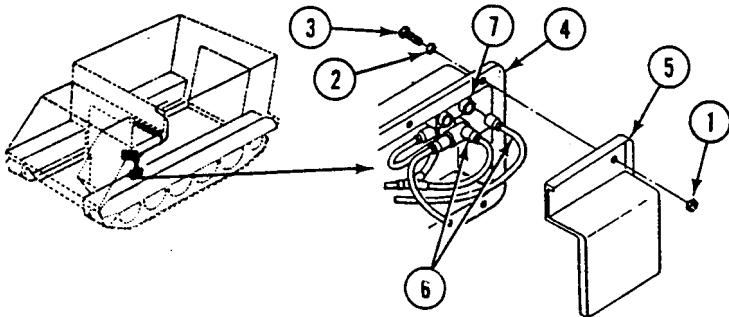
**CYN**

1. Replace blower motor (WP 0383 00).
2. Verify no faults found.

YES

**C2Y**

1. Turn MASTER SWITCH to OFF.
2. Install a jumper wire between circuit 59 plug at blower motor and ground.
3. Remove eight nuts (1), washers (2), and screws (3) from master switch panel (4) and distribution box (5). Pull panel away from distribution box.
4. Remove circuit 59 plugs (6) from blower switch (7).
5. Check for continuity between circuit 59 plugs (6).
6. Does multimeter read 0 ohms?



NO

**C2YN**

1. Replace blower switch (WP 0278 00).
2. Install master switch panel on distribution box.
3. Verify no faults found.

YES

---

**LEFT REAR UTILITY OUTLET/BLOWER DOES NOT WORK (M577A3 AND M1068A3 ONLY)—Continued**

---

**0043 00**

**C3Y**

1. Faulty wiring harness circuit 59 from circuit breaker to blower switch. Beyond unit maintenance repair.
2. Install master switch panel on distribution box (WP 0261 00).
3. Notify supervisor.



**RADIO(S) DON'T WORK**

**0044 00**

**INITIAL SETUP:**

Maintenance Level  
Unit

References  
See your -10

Tools and Special Tools  
General Mechanic's Tool Kit (WP 0926 00, Item 65)

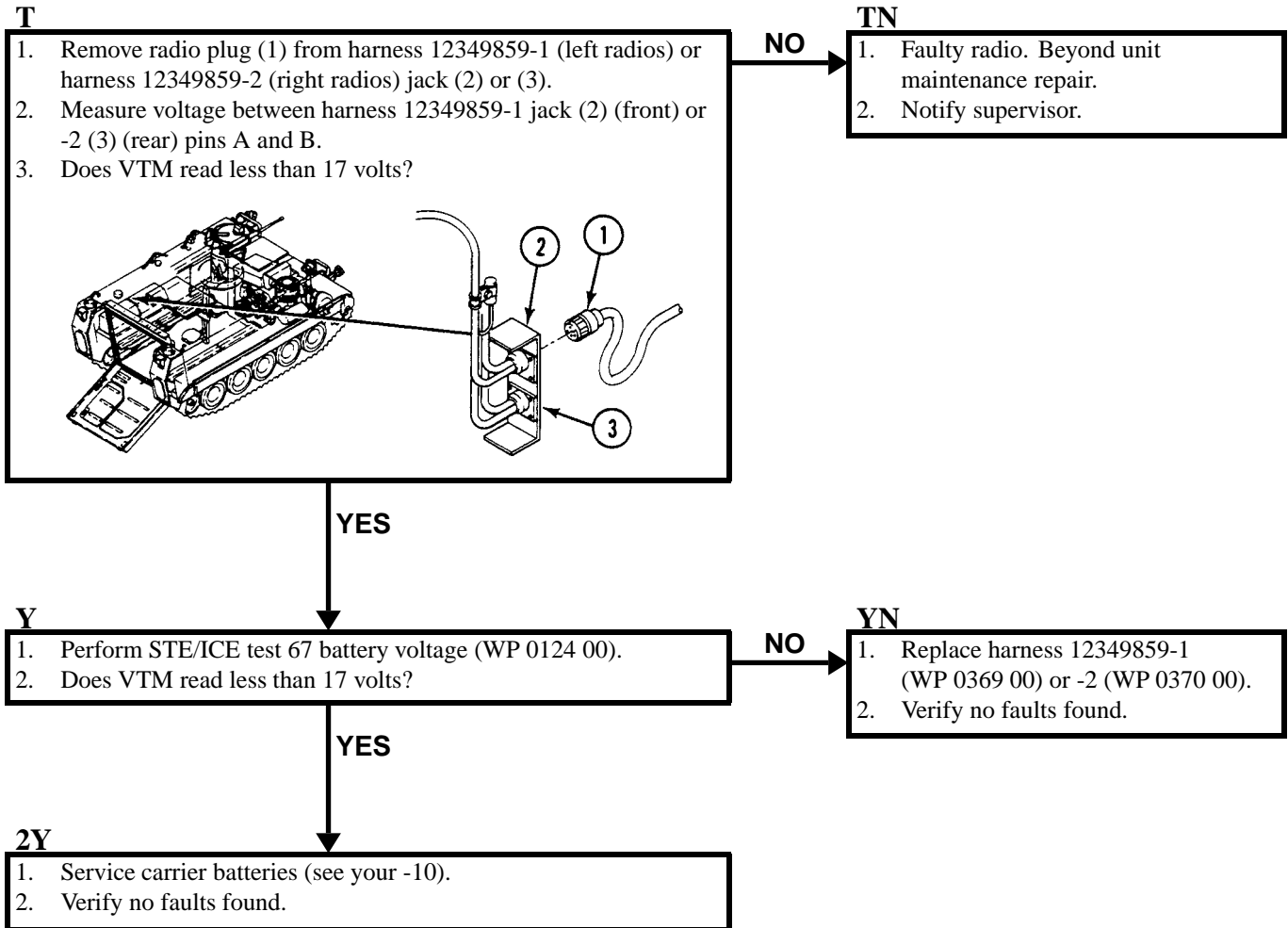
Equipment Condition

Personnel Required  
Unit Mechanic 63T10  
Helper (H)

Engine stopped (see your -10)  
Carrier blocked (see your -10)

**NOTE**

Location varies by model.







**SMOKE GRENADE LAUNCHER(S) MALFUNCTION (M113A3, M901A3, M981A3, AND M1059A3 ONLY)**

**0045 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)
- Jumper wire

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)
- Harness 12313235 removed from launcher arming/firing unit (WP 0366 00)

Personnel Required

- Unit Mechanic
- Helper (H)

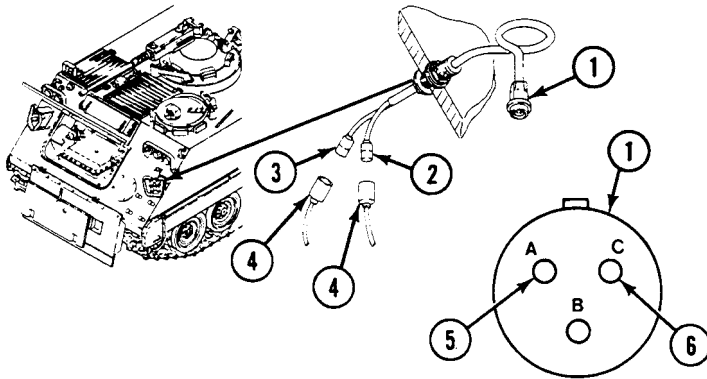
**T**

1. Does either launcher operate properly? NO → GO TO BY (PAGE 0045 00-3)

YES ↓

**Y**

1. Remove harness 12313237 launcher plug (1) from failing right launcher.
2. Remove harness 12313237 circuit 7 (2) and 799 plugs (3) from harness 12313236 (right launcher) or harness 12313235 (left launcher) jacks (4).
3. Measure resistance between harness 12313237 launcher plug (1) pin A (5) and plug 7 (3) circuit.
4. Measure resistance between harness 12313237 launcher plug (1) pin C (6) and circuit 7 plug (2).
5. Does multimeter read 0 ohms for both measurements?



NO →

**YN**

1. Replace harness 12313237 for left or right grenade launcher (WP 0366 00).
2. Verify no faults found.

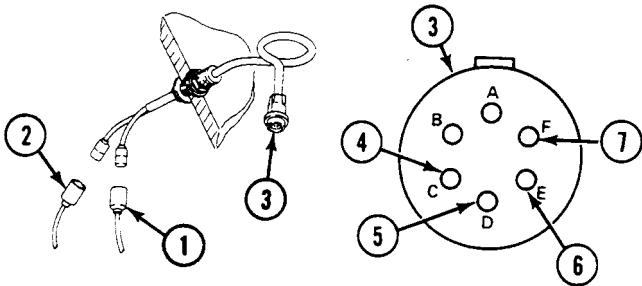
YES ↓

**SMOKE GRENADE LAUNCHER(S) MALFUNCTION (M113A3, M901A3, M981A3, AND M1059A3 ONLY)—Continued**

0045 00

**2Y**

1. Install jumper wire between harness 12313236 (right launcher) or harness 12313235 (left launcher) and circuit 7 (1) or 799 jacks (2).
2. Remove smoke grenade wiring harness from arming/firing unit.
3. Measure resistance between harness 12313235 arming/firing unit plug (4) pins C (5) and D (6) (left launcher check) or pins E (7) and F (8) (right launcher check).
4. Does multimeter read more than 0 ohms for both measurements?



**NO**

**2YN**

1. Smoke grenade wiring harness is OK. Faulty launcher or arming firing unit. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**3Y**

1. Is failing launcher on right side of carrier?

**NO**

**3YN**

1. Smoke grenade wiring harness is OK. Faulty launcher or arming/firing unit. Beyond unit maintenance repair.
2. Notify supervisor.

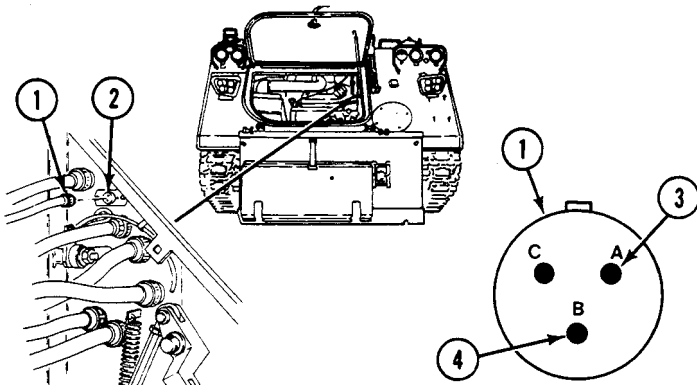
**YES**

**SMOKE GRENADE LAUNCHER(S) MALFUNCTION (M113A3, M901A3, M981A3, AND M1059A3 ONLY)—Continued**

0045 00

**4Y**

1. Remove harness 12313236 plug (1) from harness 12313235 jack (2) at vehicle bulkhead.
2. Measure resistance between harness 12313236 plug (1) pins A (3) and B (4).
3. Does multimeter read continuity?



**NO**

**4YN**

1. Replace harness 12313236 (WP 0366 00).
2. Verify no faults found.

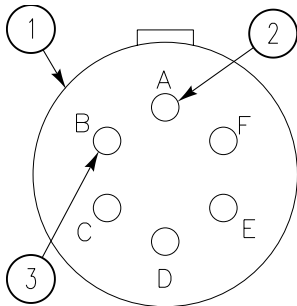
**YES**

**5Y**

1. Carrier wiring is OK. Faulty launcher or arming/firing unit. Beyond unit maintenance repair.
2. Notify supervisor.

**BY**

1. Turn MASTER SWITCH to ON.
2. Measure voltage between harness 12313235 firing/arming unit plug (1) pin A (2) and B (3).
3. Does multimeter read at least 17 volts?



**NO**

**BYN**

1. Replace harness 12313235 (WP 0366 00).
2. Verify no faults found.

**YES**

---

**SMOKE GRENADE LAUNCHER(S) MALFUNCTION (M113A3, M901A3, M981A3, AND  
M1059A3 ONLY)—Continued**

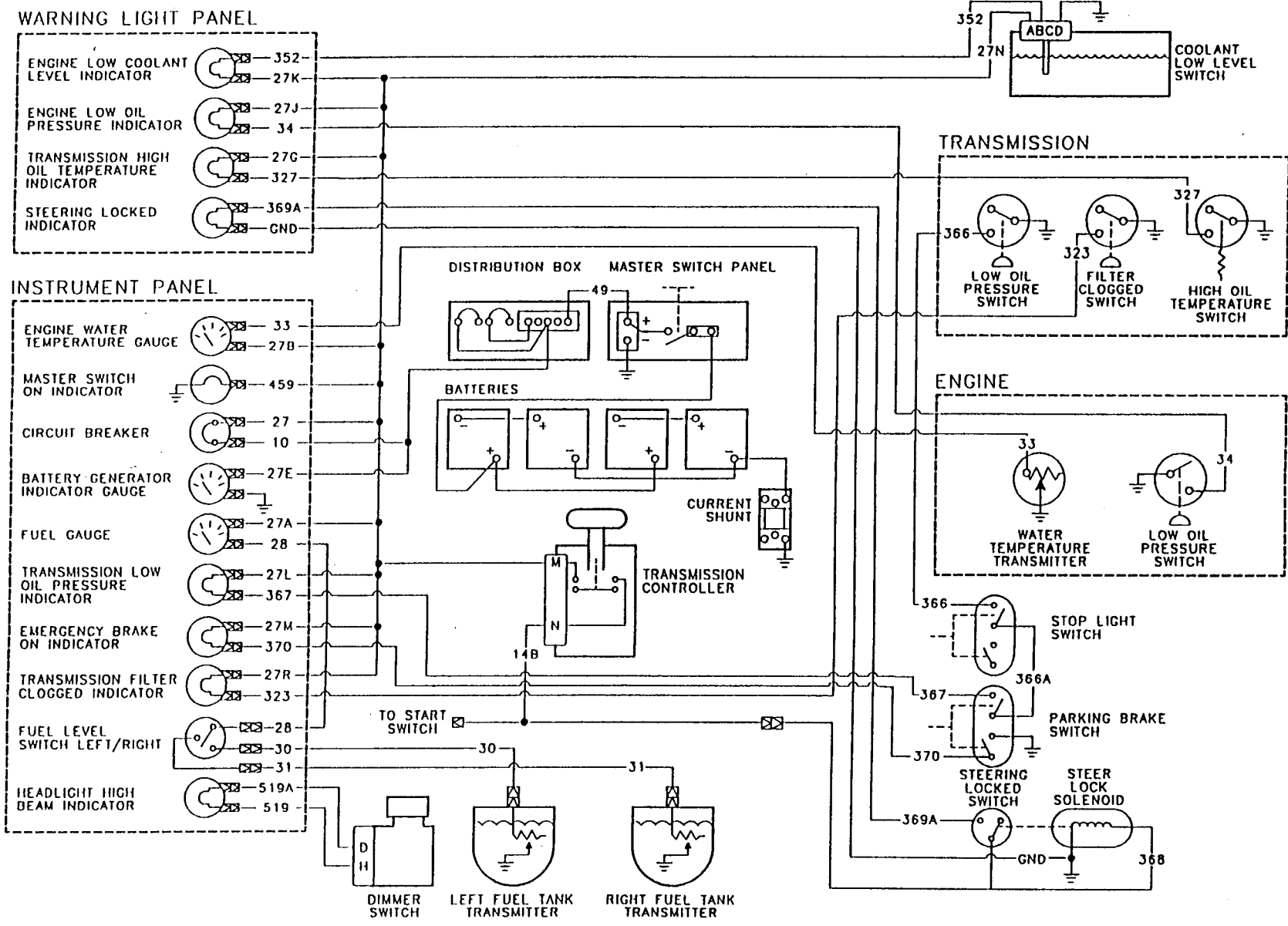
---

0045 00

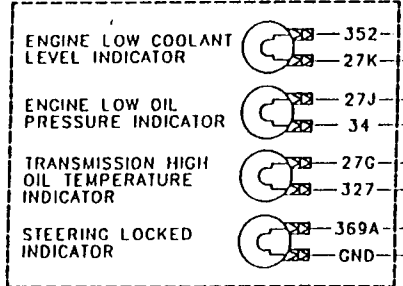
**B2Y**

1. Faulty arming/firing unit. Beyond unit maintenance repair.
2. Notify supervisor.

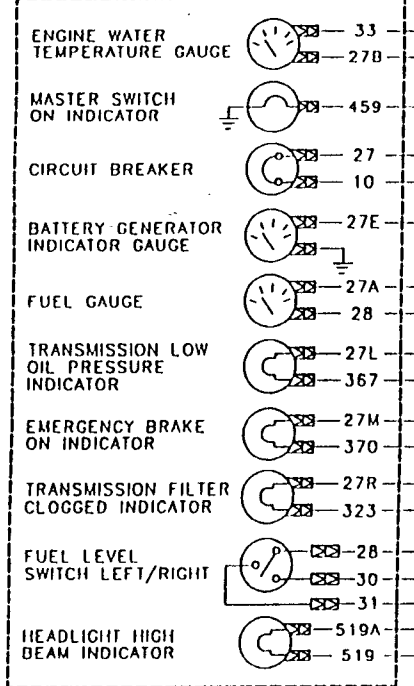
0046 00-1/2 blank



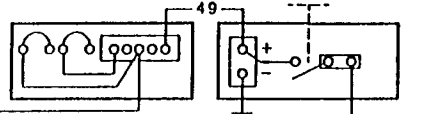
WARNING LIGHT PANEL



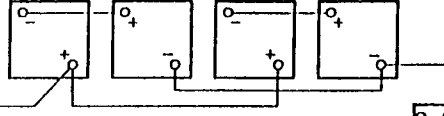
INSTRUMENT PANEL



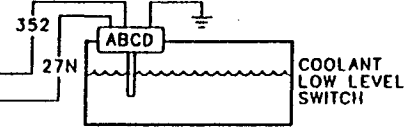
DISTRIBUTION BOX MASTER SWITCH PANEL



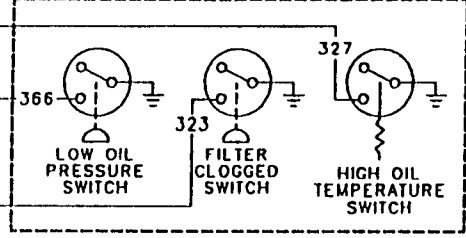
BATTERIES



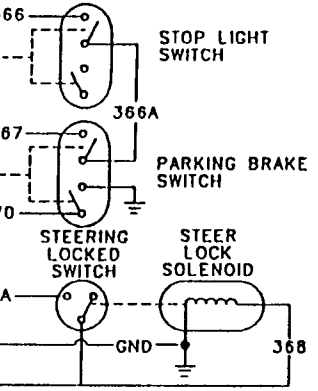
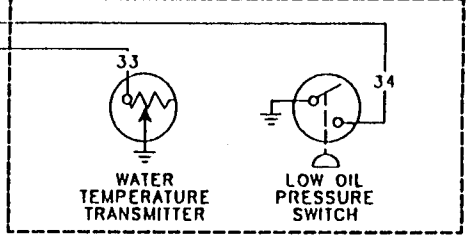
TRANSMISSION CONTROLLER



TRANSMISSION



ENGINE



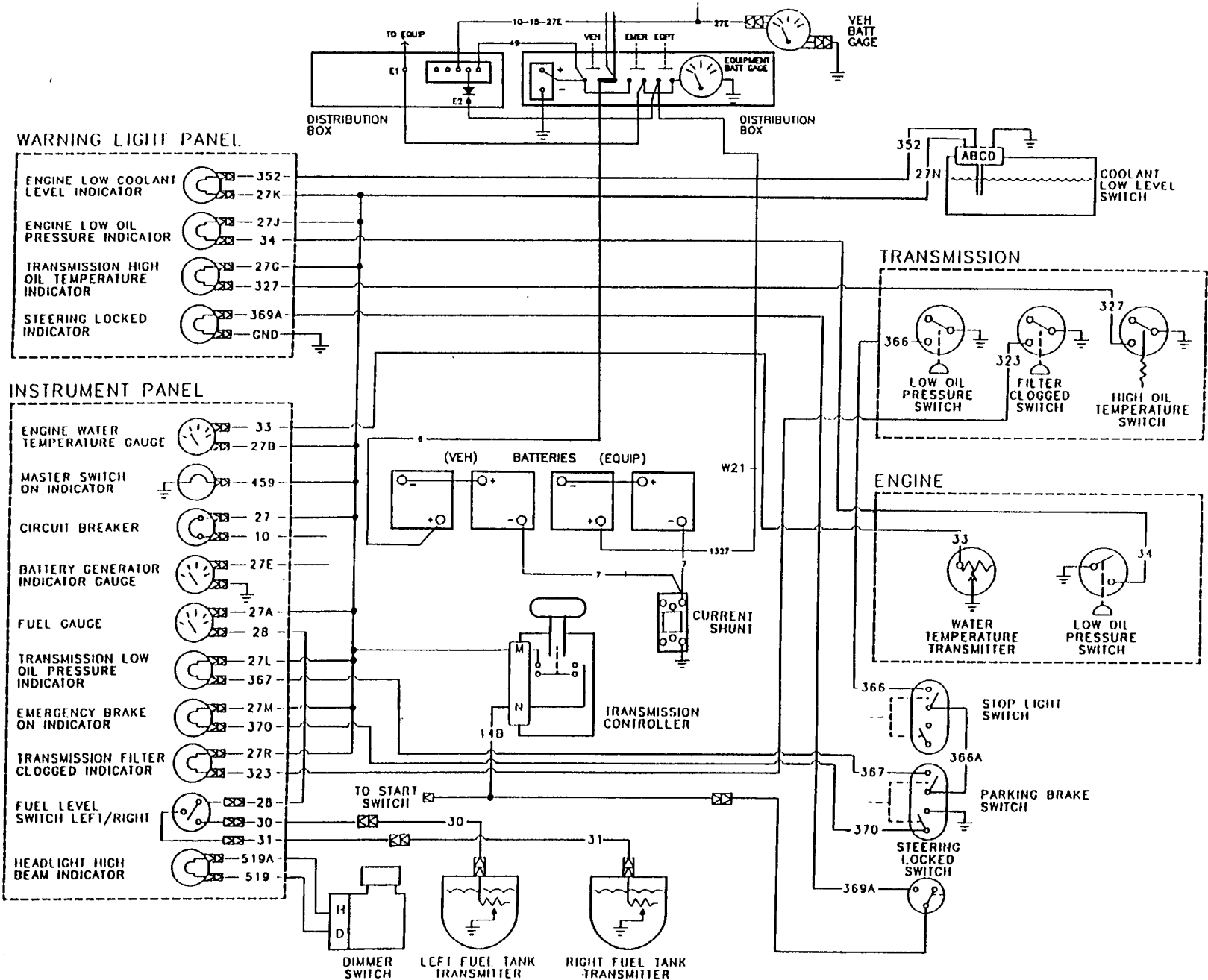
D H DIMMER SWITCH

LEFT FUEL TANK TRANSMITTER

RIGHT FUEL TANK TRANSMITTER



INDICATORS SCHEMATIC (M981A3 ONLY)



0047 00-1/2 blank





**MASTER SWITCH ON INDICATOR DOESN'T LIGHT**

**0048 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)

Equipment Condition

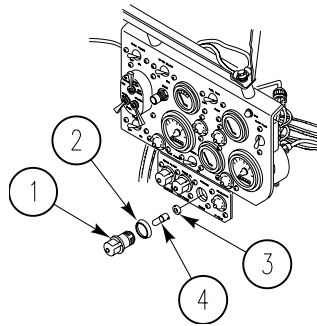
- Engine stopped (see your -10)
- Carrier blocked (see your -10)

Personnel Required

- Unit Mechanic 63T10
- Helper (H)

**T**

1. Remove MASTER SWITCH ON indicator cover lens (1) gasket (2), bulb (3), and gasket (4).
2. Check continuity between bulb center contact and bulb base.
3. Read multimeter. Is there continuity?



**NO**

**TN**

1. Replace master switch bulb (WP 0286 00).
2. Verify no faults found.

**YES**

**Y**

1. Turn MASTER SWITCH to ON.
2. Is BATTERY/GENERATOR indicator in the green zone?

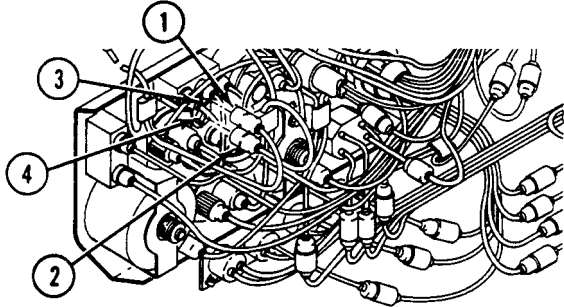
**NO**

**GO TO BY (PAGE 0048 00-3)**

**YES**

**2Y**

1. Turn MASTER SWITCH to OFF.
2. Remove instrument panel for access (WP 0296 00).
3. Remove harness 10933038 circuit 10 plug (1) and cable assembly 12349858 circuit 27 plug (2) from instrument panel circuit breaker jacks (3) and (4).
4. Measure resistance between circuit breaker jacks (3) and (4).
5. Does multimeter read 0 ohms?



NO

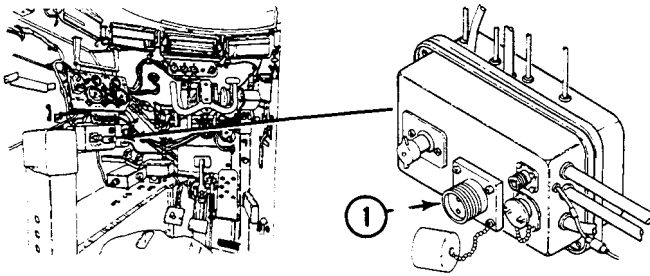
**2YN**

1. Replace instrument panel circuit breaker (WP 0280 00).
2. Verify no faults found.

YES

**3Y**

1. Measure resistance between harness 10933038 circuit 10 plug pin and master switch panel power receptacle positive jack pin (1).
2. Does multimeter read 0 ohms?



NO

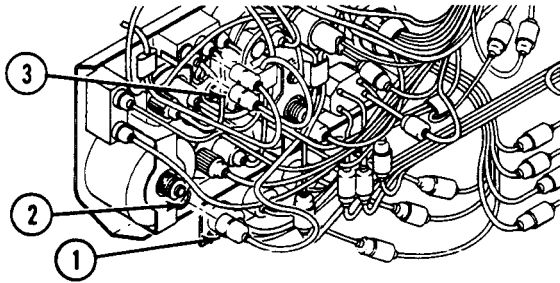
**3YN**

1. Replace harness 10933038 (WP 0266 00).
2. Verify no faults found.

YES

**4Y**

1. Remove cable assembly 12349858 circuit 459 plug (1) from MASTER SWITCH indicator jack (2)
2. Measure resistance between cable assembly circuit 27 plug (3) and circuit 459 plug (1).
3. Does multimeter read 0 ohms?



**NO**

**4YN**

1. Repair/replace cable 12349858 (WP 0382 00), (WP 0289 00).
2. Verify no faults found.

**YES**

**5Y**

1. Replace indicator light assembly (WP 0286 00).
2. Verify no faults found.

**BY**

1. Turn MASTER SWITCH to OFF.
2. Inspect carrier batteries (see your —10).
3. Are batteries in proper maintenance and well charged?

**NO**

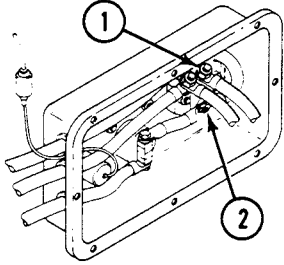
**BYN**

1. Service carrier batteries (see your -10).
2. Verify no faults found.

**YES**

**B2Y**

1. Remove master switch panel (WP 0260 00) or (WP 0261 00).
2. Turn MASTER SWITCH to ON.
3. Measure resistance between master switch terminals (1) and (2).
4. Does multimeter read 0 ohms?



NO

**B2YN**

1. Replace master switch (WP 0262 00).
2. Verify no faults found.

YES

**B3Y**

1. Replace harness 10933038 (WP 0266 00).
2. Verify no faults found.

**FUEL LEVEL INDICATOR MALFUNCTIONS**

**0049 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Multimeter (WP 0926 00, Item 30)

Jumper Wire

Equipment Condition

Personnel Required

Unit Mechanic

Helper (H)

Engine stopped (see your -10)

Carrier blocked (see your -10)

**T**

1. Does indicator malfunction with FUEL TANK indicator switch on LEFT and on RIGHT?

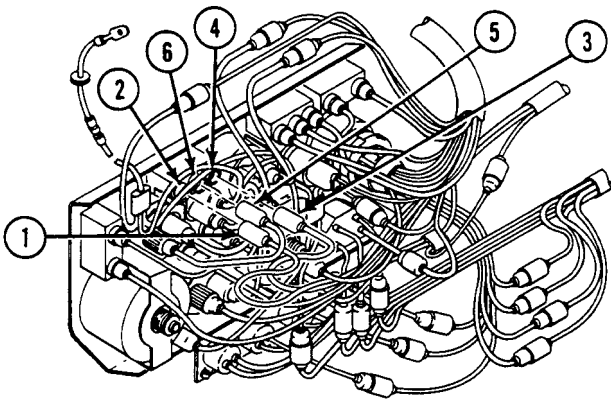
**NO**

**GO TO BY (PAGE 0049 00-3)**

**YES**

**Y**

1. Remove instrument panel for access (WP 0295 00).
2. Remove circuit 30 plug (1) from FUEL TANK switch jack (2).
3. Remove circuit 31 plug (3) from FUEL TANK switch jack (4).
4. Remove circuit 28 plug (5) from FUEL TANK switch jack (6).
5. Turn FUEL TANK switch to LEFT and measure resistance between FUEL TANK switch jack (6) and FUEL TANK switch jack (2).
6. Turn FUEL TANK switch to RIGHT and measure resistance between FUEL TANK switch jack (6) and FUEL TANK switch jack (4).
7. Did multimeter read 0 ohms both times?



**NO**

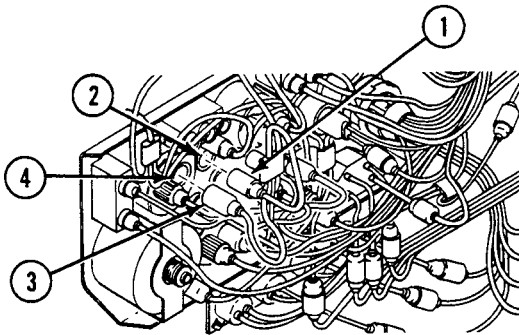
**YN**

1. Replace FUEL TANK select switch (WP 0277 00) or (WP 0282 00).
2. Verify no faults found.

**YES**

**2Y**

1. Remove circuit 27 plug (1) from instrument panel circuit breaker jack (2).
2. Remove circuit 27A plug (3) from fuel level indicator jack (4).
3. Check continuity between circuit 27 plug (1) and circuit 27A plug (3).
4. Does multimeter read 0 ohms?



**NO**

**2YN**

1. Install circuit 30 and 31 leads on FUEL TANK switch.
2. Replace cable assembly 12349858 circuit 27A (WP 0290 00).
3. Verify no faults found.

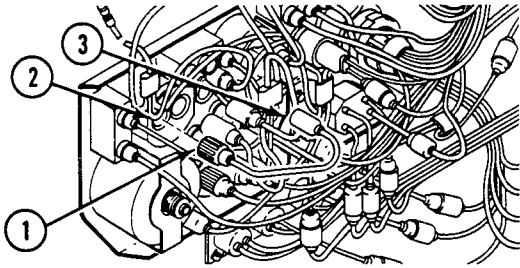
**YES**

FUEL LEVEL INDICATOR MALFUNCTIONS—Continued

0049 00

**3Y**

1. Install circuit 30 and 31 plugs on FUEL TANK switch.
2. Remove circuit 28 plug (1) from FUEL LEVEL indicator jack (2).
3. Check continuity between circuit 28 plugs (1) and (3).
4. Does multimeter read 0 ohms?



NO

**3YN**

1. Replace lead 12268805 (WP 0281 00).
2. Verify no faults found.

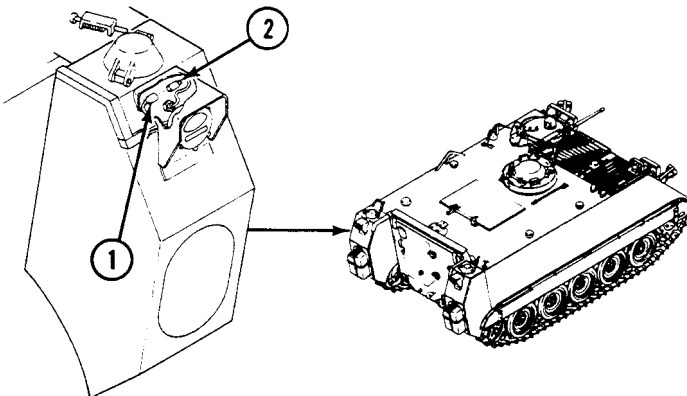
YES

**4Y**

1. Install circuit 28 plug on FUEL TANK switch jack.
2. Replace FUEL LEVEL indicator (WP 0285 00).
3. Verify no faults found.

**BY**

1. Remove harness 12268797 circuit 30 (left tank) plug (1) or circuit 31 (right tank) plug from failing fuel tank jack (2).
2. Turn FUEL TANK switch to failing side.
3. Does indicator read full scale?



NO

**BYN**

1. Do steps Step 2 and Step 3 for all carriers except M577A3 and M1068A3. Do steps Step 4 and Step 5 for M577A3 and M1068A3.
2. Replace harness 12268797 circuit 30 or 31 (WP 0290 00).
3. Verify no faults found.
4. Faulty circuit 29 or 30. Beyond unit maintenance repair.
5. Notify supervisor.

YES

**B2Y**

1. Install jumper wire between harness 12268797 circuit 30 or 31 and ground.
2. Does fuel indicator read empty?

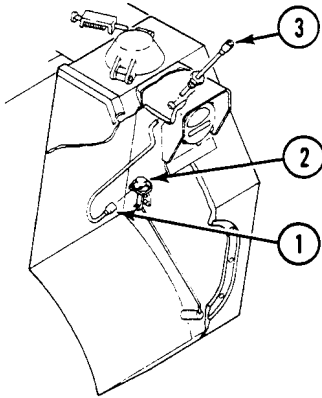
NO

GO TO CY (PAGE 0049 00-5)

YES

**B3Y**

1. Access failing fuel level transmitter (WP 0190 00).
2. Remove lead 12268804 -1 (or -2) plug (1) from failing transmitter jack (2).
3. Check continuity between plugs (1) and (3).
4. Does multimeter read 0 ohms?



NO

**B3YN**

1. Replace FUEL QUANTITY transmitter lead, 12268804 -1 (WP 0190 00) or 12268804-2 (for M577A3/M1068A3) (WP 0191 00).
2. Verify no faults found.

YES

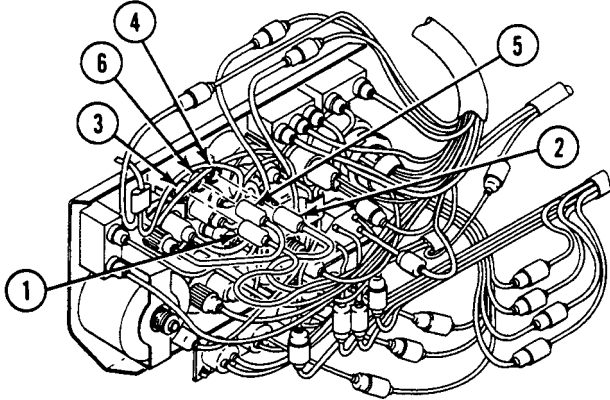
**B4Y**

1. Replace FUEL QUANTITY transmitter (WP 0190 00) or (for M577A3/M1068A3) (WP 0191 00).
2. Verify no faults found.



**CY**

1. Remove instrument panel for access (WP 0295 00).
2. Remove harness 12268797 circuit 30 plug (1) (left tank) or circuit 31 plug (2) (right tank) from FUEL TANK switch jack (3) or jack (4).
3. Remove circuit 28 plug (5) from FUEL TANK switch jack (6).
4. Check continuity between exposed jack pins on FUEL TANK switch (3).
5. Does multimeter read 0 ohms?



**NO**

**CYN**

1. Install harness circuit 30 or 31 on fuel tank transmitter.
2. Replace FUEL TANK switch (WP 0277 00 or WP 0282 00).
3. Verify no faults found.

**YES**

**C2Y**

1. Do Step 2 and Step 3 for all carriers except M577A3 and M1068A3. Do Step 4 and Step 5 for M577A3 and M1068A3.
2. Replace harness 12268797 circuit 30 or 31 (WP 0290 00).
3. Verify no faults found.
4. Faulty harness circuit 29 or 30. Beyond unit maintenance repair.
5. Notify supervisor.



**HIGH BEAM INDICATOR LIGHT DOESN'T WORK**

**0050 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

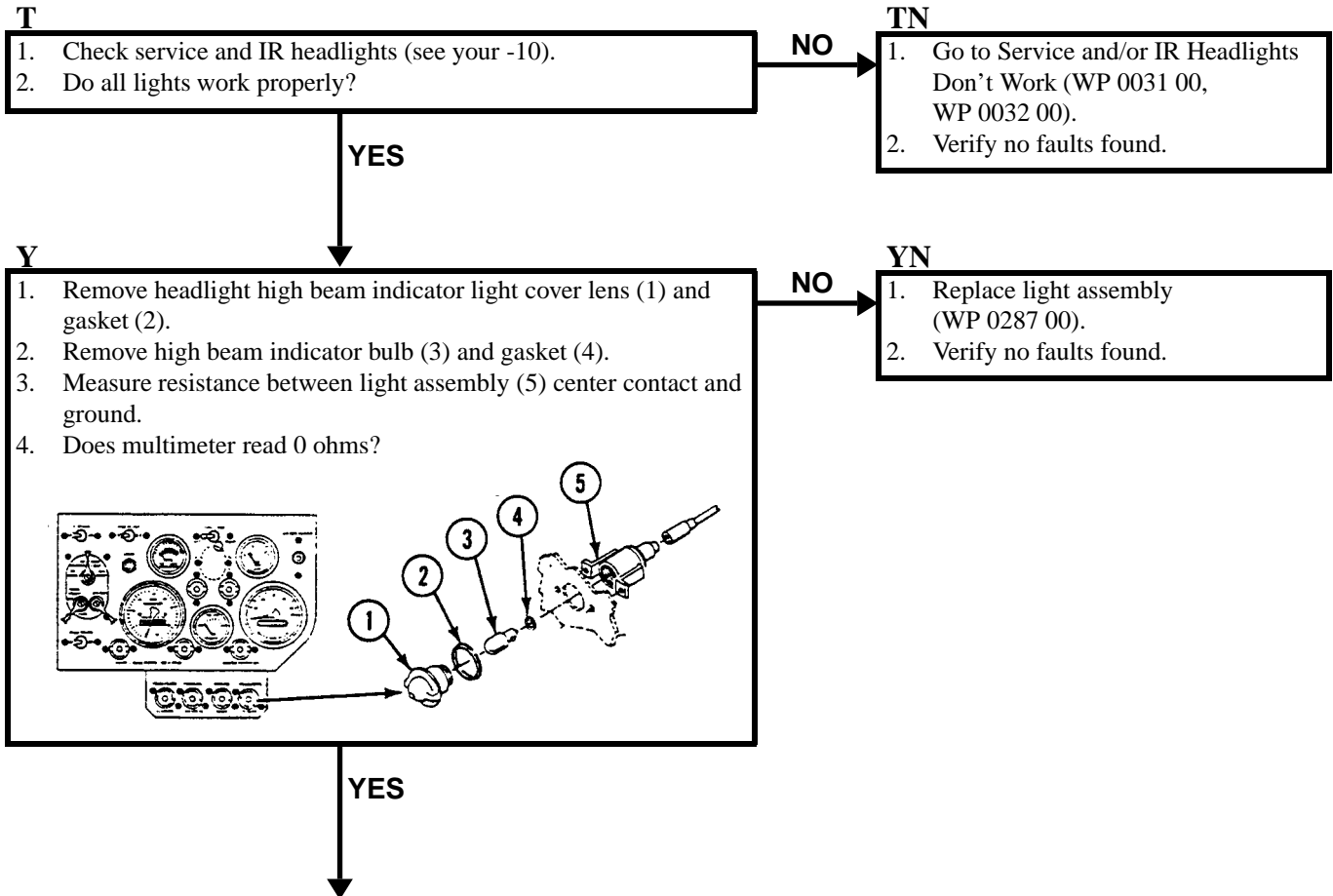
- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)
- Jumper Wire

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)

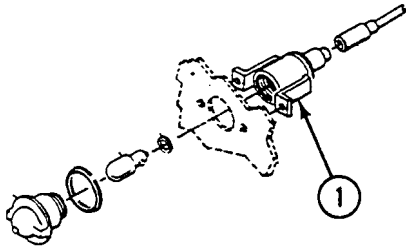
Personnel Required

- Unit Mechanic
- Helper (H)



2Y

1. Check continuity between light assembly (1) bulb base contact and ground.
2. Is there continuity?



NO

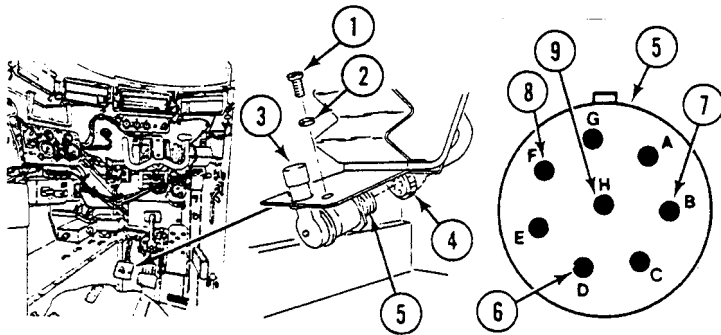
2YN

1. Replace headlight high beam indicator bulb (WP 0287 00).
2. Verify no faults found.

YES

3Y

1. Remove two screws (1), washers (2), and dimmer switch (3).
2. Remove harness 12349881 plug (4) from dimmer switch jack (5).
3. Measure resistance between dimmer switch jack (5) pins D (6) and B (7) and between pins F (8) and H (9).
4. Did multimeter read 0 ohms for both measurements?



NO

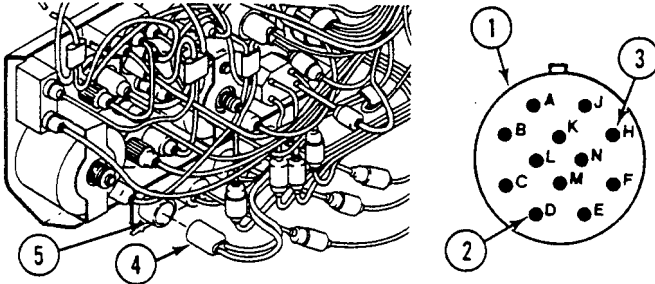
3YN

1. Replace dimmer switch (WP 0333 00).
2. Verify no faults found.

YES

**4Y**

1. Install jumper wire between harness 12349881 dimmer switch plug (1) pins D (2) and H (3).
2. Remove instrument panel for access (WP 0295 00).
3. Remove harness 12349881 circuit 519/519A plug (4) from high beam indicator light jack (5).
4. Measure resistance between harness 12349881 circuit 519/519A plug (4) pins.
5. Does multimeter read 0 ohms?



**NO**

**4YN**

1. Faulty harness 12349881 circuits 519 and 519A. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**5Y**

1. Install dimmer switch and plug (WP 0333 00).
2. Replace high beam indicator light assembly (WP 0287 00).
3. Verify no faults found.



**BATTERY/GENERATOR INDICATOR MALFUNCTIONS**

**0051 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)

Equipment Condition

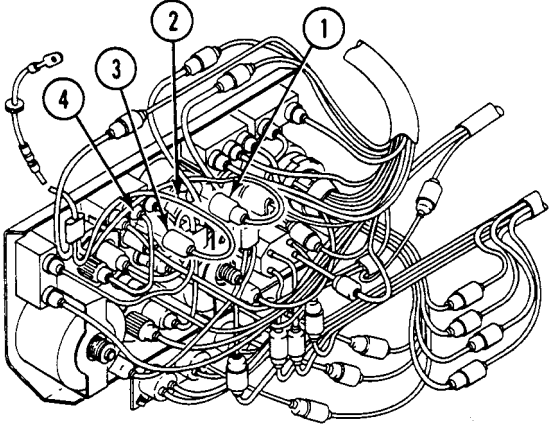
- Engine stopped (see your -10)
- Carrier blocked (see your -10)

Personnel Required

Unit Mechanic

**T**

1. Remove instrument panel for access (WP 0295 00).
2. Remove circuit 27E plug (1) from battery generator indicator jack (2).
3. Remove circuit 10 plug (3) from instrument panel circuit breaker jack (4).
4. Check continuity between circuit 27E plug (1) and circuit 10 plug (3).
5. Read multimeter. Is there continuity?



**NO**

**TN**

1. Replace harness 10933038 (WP 0289 00).
2. Verify no faults found.

**YES**

**Y**

1. Replace BATTERY/GENERATOR indicator (WP 0285 00).
2. Verify no faults found.





**PARKING BRAKE INDICATOR MALFUNCTIONS**

**0052 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Multimeter (WP 0926 00, Item 30)

Jumper Wire

Equipment Condition

Engine stopped (see your -10)

Personnel Required

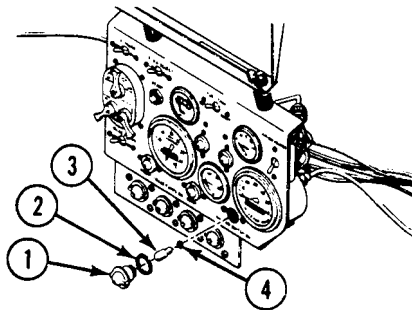
Unit Mechanic

Helper (H)

Carrier blocked (see your -10)

**T**

1. Remove PARKING BRAKE indicator cover lens (1), gasket (2), bulb (3), and gasket (4).
2. Check continuity between bulb center contact and bulb base.
3. Read multimeter. Is there continuity?



**YES**



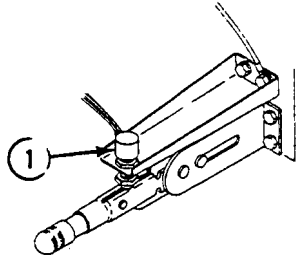
**NO**

**TN**

1. Replace indicator bulb (WP 0286 00).
2. Verify no faults found.

**Y**

1. Install PARKING BRAKE indicator cover lens, bulb and gaskets.
2. Release parking brake (see your -10).
3. Manually depress hand brake indicator switch (1).
4. Observe parking brake indicator.
5. Release hand brake indicator switch (1).
6. Did indicator fail to light with switch depressed, or fail to go off with switch released?



**NO**

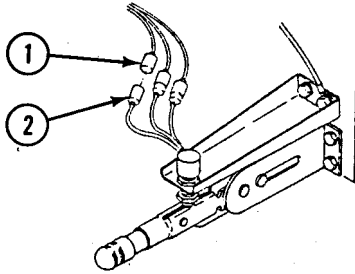
**YN**

1. Adjust parking brake indicator switch (WP 0331 00).
2. Verify no faults found.

**YES**

**2Y**

1. Remove harness 12349881 circuit 370 plug (1) from parking brake light switch jack (2).
2. Check continuity between parking brake light switch jack (2) and ground with parking brake switch depressed.
3. Read multimeter. Is there continuity?



**NO**

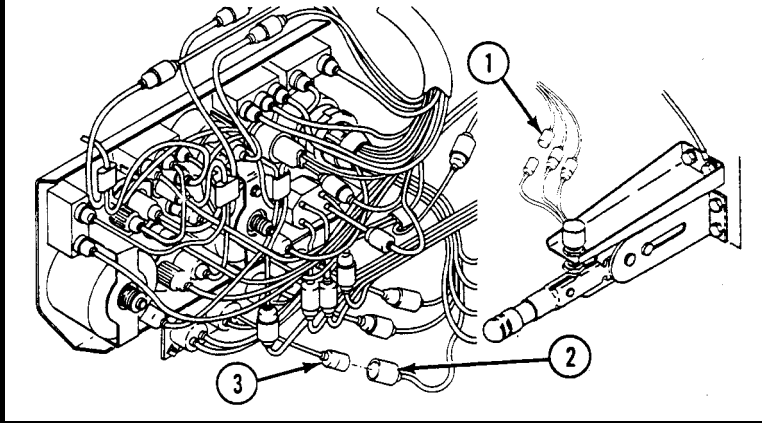
**2YN**

1. Replace parking brake switch (WP 0331 00).
2. Verify no faults found.

**YES**

**3Y**

1. Install jumper wire between parking brake light switch harness 12349881 circuit 370 plug (1) and ground.
2. Remove instrument panel for access (WP 0295 00).
3. Remove harness 12349881 circuit 370 (2) from cable assembly 12349858 circuit 370 (3).
4. Check continuity between harness 12349881 circuit 370 (2) and ground.
5. Read multimeter. Is there continuity?



YES



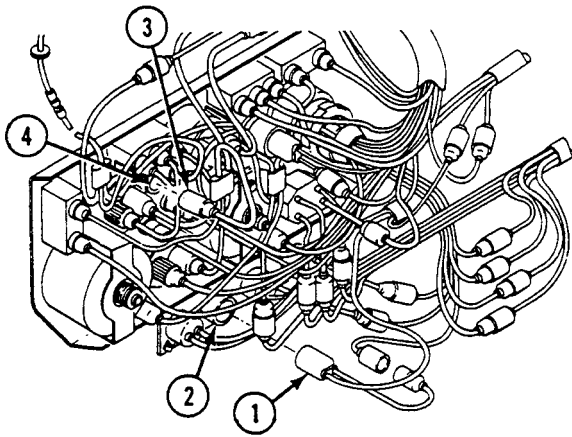
NO

**3YN**

1. Faulty harness 12349881 circuit 370. Beyond unit maintenance repair.
2. Notify supervisor.

**4Y**

1. Remove jumper wire from harness 12349881 circuit 370.
2. Install harness 12349881 on brake light switch.
3. Remove cable assembly 12349858 circuit 27M plug (1) from parking brake indicator jack (2).
4. Remove cable assembly 12349858 circuit 27 plug (3) from instrument panel circuit breaker jack (4).
5. Check continuity between cable assembly 12349858 circuit 27 plug (3) and circuit 27M plug (1). Use multimeter.
6. Check continuity between cable assembly 12349858 circuit 27 (3) and circuit 370 plugs.
7. Read multimeter. Is there continuity both times?



**NO**

**4YN**

1. Replace cable assembly 12349858 (WP 0290 00).
2. Verify no faults found.

**YES**

**5Y**

1. Replace indicator light assembly 8729063 (WP 0286 00).
2. Verify no faults found.

**COOLANT TEMP INDICATOR MALFUNCTIONS**

**0053 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Jumper Wire
- Multimeter (WP 0926 00, Item 30)
- STE/ICE Test Set (WP 0926 00, Item 61)

Personnel Required

Unit Mechanic

References

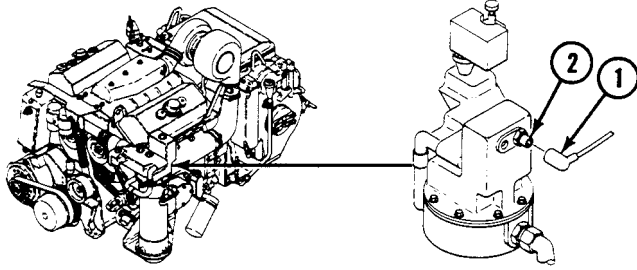
See your -10

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)
- Driver's power plant access panel removed (WP 0441 00)
- Power plant rear access panel removed (WP 0439 00)

**T**

1. Remove harness 12349873 circuit 33 plug (1) from water temperature transmitter jack (2).
2. Turn MASTER SWITCH to ON (see your -10).
3. Is TEMP indicator needle in full left (cold) position?



**NO**

**GO TO AY (PAGE 0053 00-2)**

**YES**

**Y**

1. Turn MASTER SWITCH to OFF.
2. Install jumper wire between harness 12349873 circuit 33 plug and ground.
3. Observe TEMP indicator needle.
4. Turn MASTER SWITCH to ON for two seconds.
5. Did TEMP indicator needle move to full right (hot) position?

**NO**

**GO TO BY (PAGE 0053 00-3)**

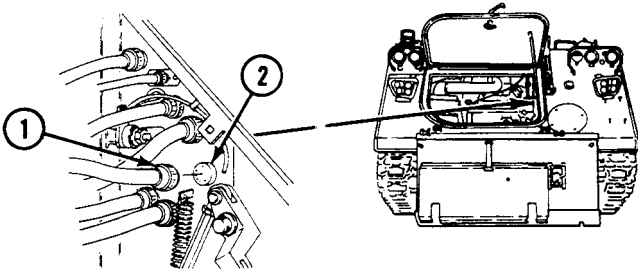
**YES**

**2Y**

1. Remove jumper wire.
2. Replace water temperature transmitter (WP 0321 00).
3. Verify no faults found.

**AY**

1. Turn MASTER SWITCH to OFF.
2. Remove harness 12349873 plug (1) from harness 12349881 jack (2) at carrier bulkhead.
3. Turn MASTER SWITCH to ON.
4. Is TEMP indicator still not in full left (cold) position?



NO

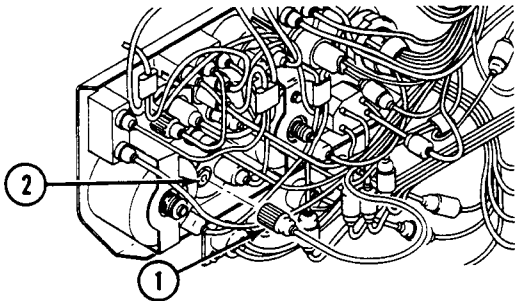
**AYN**

1. Replace harness 12349873 circuit 33 (WP 0359 00).
2. Verify no faults found.

YES

**A2Y**

1. Turn MASTER SWITCH to OFF.
2. Remove instrument panel for access (WP 0295 00).
3. Remove harness 12349881 circuit 33 plug (1) from TEMP indicator jack (2).
4. Measure resistance between harness 12349881 circuit 33 plug (1) and ground.
5. Is reading 0 ohms?



NO

**A2YN**

1. Faulty harness 12349881 circuit 33. Beyond unit maintenance repair.
2. Notify supervisor.

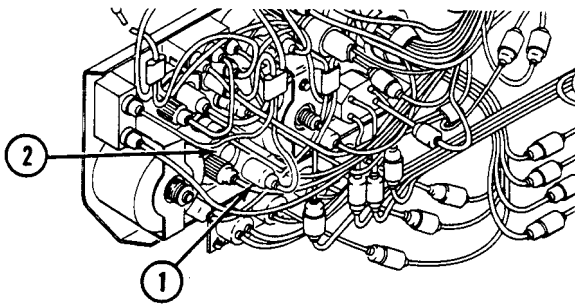
YES

**A3Y**

1. Install harness 12349881 plug on harness 12349881 jack at carrier bulkhead.
2. Install harness 12349873 circuit 33 plug on TEMP transmitter jack.
3. Replace TEMP indicator (WP 0285 00).
4. Verify no faults found.

**BY**

1. Remove special purpose cable 12349858 circuit 27B plug (1) from coolant temperature gauge (2).
2. Turn MASTER SWITCH to ON.
3. Measure voltage between harness 12349858 circuit 27B plug (1) pin and ground.
4. Does multimeter read at least 17 volts?



YES



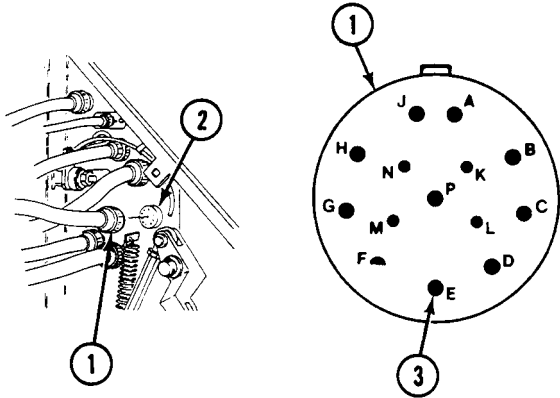
NO

**BYN**

1. Repair/replace faulty special purpose cable 12349858 circuit 27B (WP 0290 00).
2. Verify no faults found.

**B2Y**

1. Turn MASTER SWITCH to OFF.
2. Remove harness 12349873 plug (1) from harness 12349881 jack (2) at carrier bulkhead.
3. Check continuity between harness 12349873 plug (1) pin E (3) and ground.
4. Is there continuity?



NO

**B2YN**

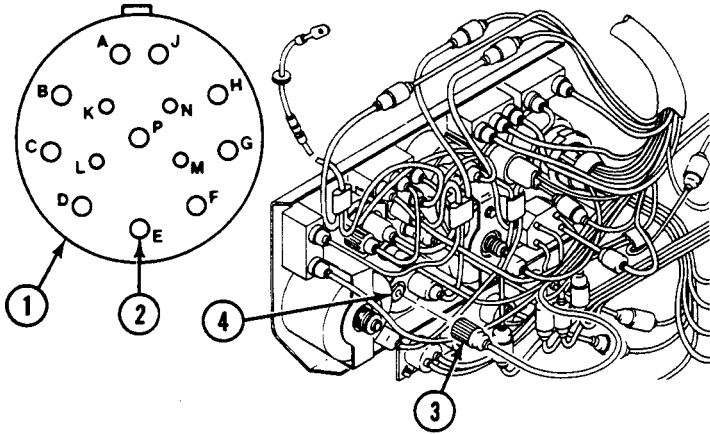
1. Repair harness 12349873 circuit 33 (WP 0382 00).
2. Verify no faults found.

YES



**B3Y**

1. Remove jumper wire.
2. Install harness 12349873 circuit 33 plug on water temperature transmitter.
3. Install jumper wire between harness 12349881 jack (1) pin E (2) and ground.
4. Remove harness 12349881 circuit 33 plug (3) from TEMP indicator jack (4).
5. Check continuity between harness 12349881 circuit 33 (3) and ground.
6. Is there continuity?



NO

**B3YN**

1. Remove jumper wire.
2. Repair harness 12349881 circuit 33 (WP 0382 00).
3. Verify no faults found.

YES

**B4Y**

1. Remove jumper wire.
2. Install harness 12349873 plug onto harness 12345881 jack at carrier bulkhead.
3. Replace TEMP indicator (WP 0285 00).
4. Verify no faults found.



**STEERING LOCKED INDICATOR MALFUNCTIONS**

**0054 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)

Equipment Condition

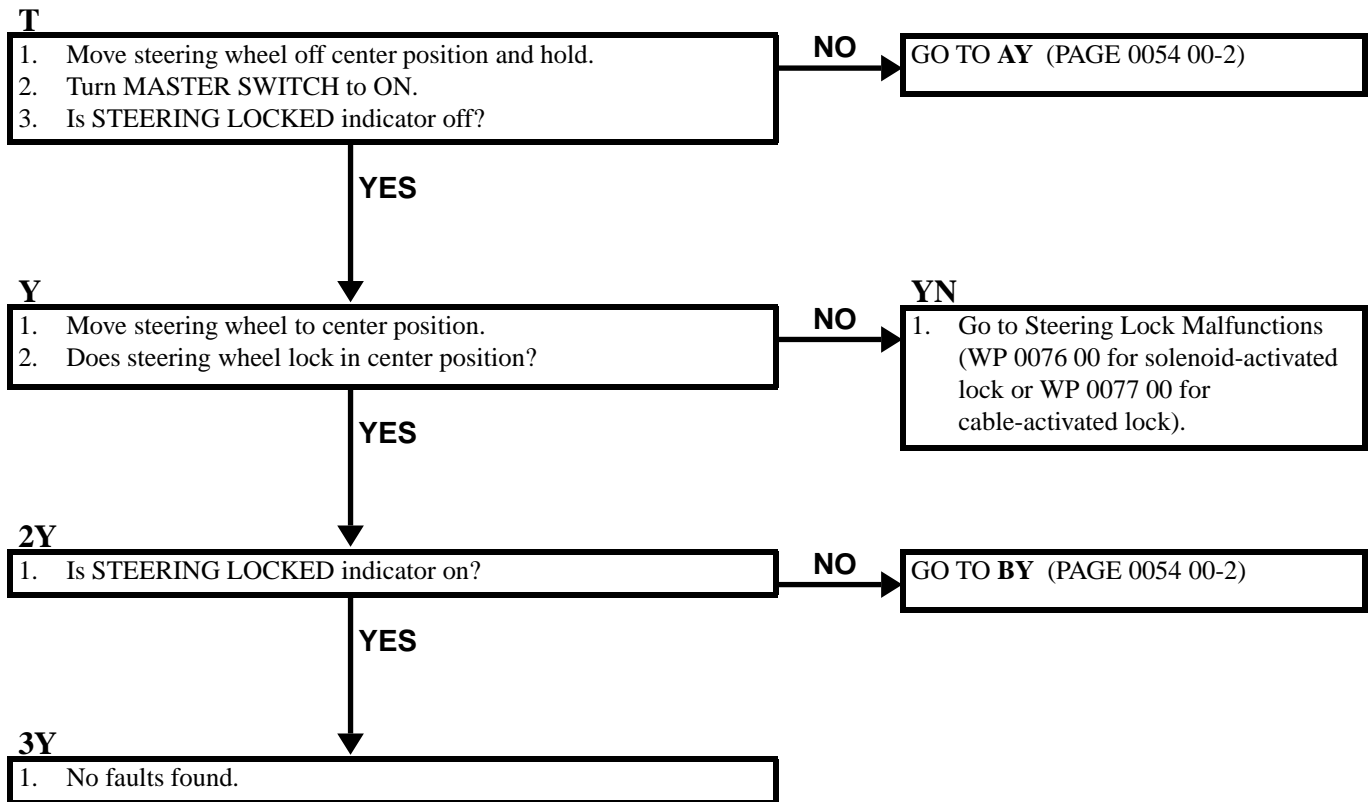
- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)

Personnel Required

- Unit Mechanic
- Helper (H)

**NOTE**

**Some vehicles are equipped with a solenoid-activated steering lock and some with a cable-activated lock. Unless noted otherwise, the steps in this procedure apply to both configurations.**



STEERING LOCKED INDICATOR MALFUNCTIONS—Continued

0054 00

**AY**

1. Check adjustment of steering locked indicator switch. See WP 0428 00 for solenoid-activated lock. See WP 0429 00 for cable-activated lock.
2. Is switch properly adjusted?

**NO** → **AYN**

1. Adjust steering locked switch. See WP 0428 00 for solenoid-activated lock. See WP 0429 00 for cable-activated lock.
2. Verify no faults found.

**YES** ↓

**A2Y**

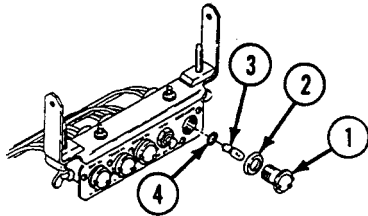
1. Replace steering lock switch (WP 0330 00).
2. Verify no faults found.

**BY**

1. Remove STEERING LOCKED indicator light cover lens (1), gasket (2), bulb (3), and gasket (4).
2. Check continuity between bulb center contact and base.
3. Does multimeter indicate continuity?

**NO** → **BYN**

1. Replace STEERING LOCKED indicator bulb (WP 0294 00).
2. Verify no faults found.

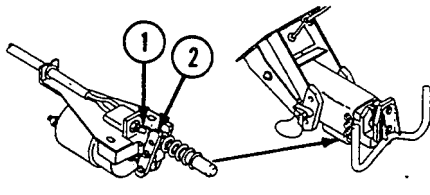


**YES** ↓

**B2Y**

1. Install STEERING LOCKED indicator cover lens, bulb, and gaskets.
2. Inspect distance between steering locked switch (1) and steering locked lever (2).
3. Is steering locked switch touching steering locked lever?

**NO** → GO TO CY (PAGE 0054 00-3)



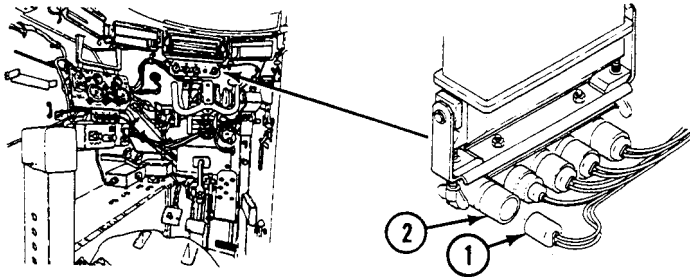
**YES** ↓

**B3Y**

1. Adjust steering locked switch. See WP 0428 00 for solenoid-activated lock. See WP 0429 00 for cable-activated lock.
2. Verify no faults found.

**CY**

1. Remove harness 12354722 (for solenoid-activated lock) or 12369685 (for cable-activated lock) plug (1) from STEERING LOCKED indicator assembly jack (2) on back side of warning light panel.
2. Measure voltage between plug (1) pins.
3. Does multimeter read less than 17 volts?



YES



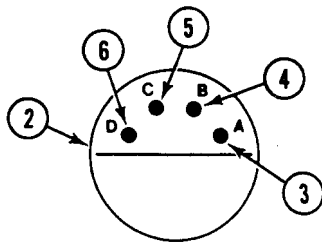
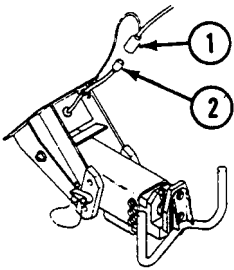
NO

**CYN**

1. Replace STEERING LOCKED warning light assembly (WP 0294 00).
2. Verify no faults found.

**C2Y**

1. Turn MASTER SWITCH to OFF.
2. For solenoid-activated lock, remove harness 12354722 plug (1) from harness 12349911 jack (2). For cable-activated lock, remove harness 12369685 plug (1) from harness 1236984 jack (2).
3. H: For solenoid-activated lock, push and hold solenoid plunger while measuring resistance.
4. For solenoid-activated lock, measure resistance between harness 12349911 jack (2) pins A (3) to B (4) and pins C (5) to D (6). For cable-activated lock, measure resistance between harness 12369684 jack (2) pins A (3) to B (4).
5. Did multimeter read more than 0 ohms either time?



**NO**

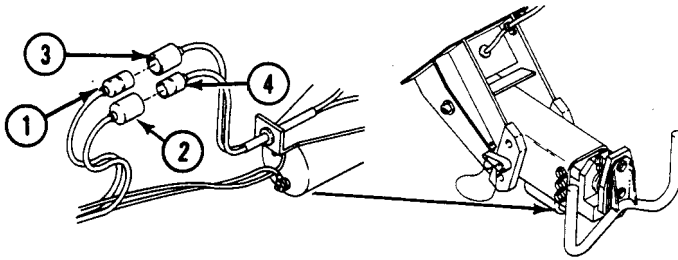
**C2YN**

1. Replace harness 12354722 (for solenoid-activated lock) or 12369685 (for cable- activated lock) circuit 369A and/or ground circuit (WP 0374 00).
2. Verify no faults found.

**YES**

**C3Y**

1. Install harness 12369685 (for cable-activated lock) plug on STEERING LOCKED indicator jack.
2. For solenoid-activated lock, remove harness 12349911 lead 369A plug (1) and lead 369 plug (2) from steering locked switch jacks (3) and (4). For cable-activated lock, remove harness 12369684 lead 368 plug (1) and lead 369A plug (2) from steering locked switch jacks (3) and (4).
3. H: For solenoid-activated lock, push and hold solenoid plunger while measuring resistance.
4. Measure resistance between steering locked switch jacks (3) and (4).
5. Does multimeter read 0 ohms?



YES

**C4Y**

1. Replace harness 12349911 (for solenoid-activated lock) circuit 369, 369A, 368, 368A, or harness 12369684 (for cable-activated lock) circuit 369A and 368, and/or ground (WP 0367 00).
2. Verify no faults found.

NO

**C3YN**

1. Replace steering locked switch (WP 0330 00).
2. Verify no faults found.





**ENGINE OIL LOW PRESSURE INDICATOR MALFUNCTIONS**

**0055 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Multimeter (WP 0926 00, Item 30)

Jumper Wire

Equipment Condition

Engine stopped (see your -10)

Carrier blocked (see your -10)

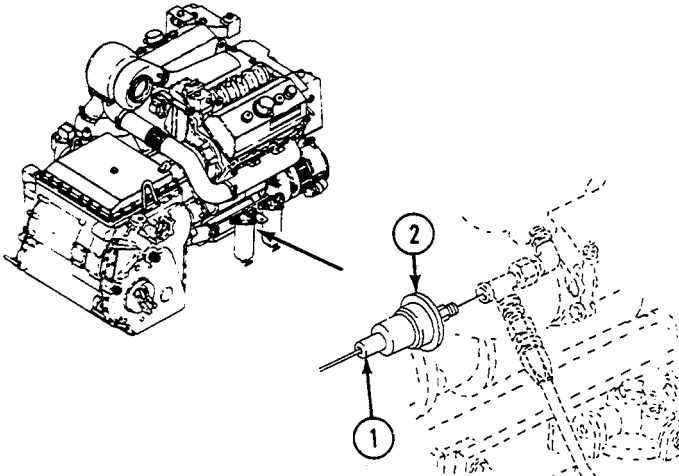
Personnel Required

Unit Mechanic

Front power plant access door open (see your -10)

**T**

1. Remove harness 12349873 circuit 34 plug (1) from engine oil low pressure transmitter (2).
2. Turn MASTER SWITCH to ON (see your -10).
3. Is ENGINE OIL LOW PRESSURE indicator off?



**NO**

**GO TO AY (PAGE 0055 00-2)**

**YES**

**Y**

1. Install jumper wire between harness 12349873 circuit 34 plug pin and ground.
2. Is ENGINE OIL LOW PRESSURE indicator on?

**NO**

**GO TO BY (PAGE 0055 00-3)**

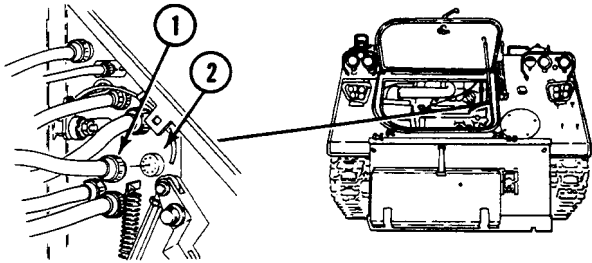
**YES**

**2Y**

1. Replace the engine oil low pressure transmitter (WP 0320 00).
2. Verify no faults found.

**AY**

1. Remove harness 12349873 plug (1) from harness 12349881 jack (2) at carrier bulkhead.
2. Is ENGINE OIL LOW PRESSURE indicator still on?



NO

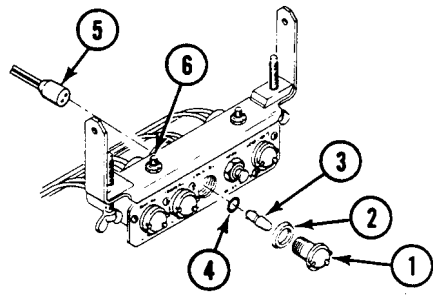
**AYN**

1. Replace harness 12349873 circuit 34 (WP 0382 00).
2. Verify no faults found.

YES

**A2Y**

1. Remove ENGINE OIL LOW PRESSURE indicator cover lens (1) gasket (2), bulb (3), and gasket (4).
2. Remove harness 12349881 circuit 27J/34 plug (5) from ENGINE OIL LOW PRESSURE indicator jack (6).
3. Measure resistance between indicator jack (6) pins and ground one at a time.
4. Did multimeter read 0 ohms for either measurement?



NO

**A2YN**

1. Faulty harness 12349881 circuit 34. Beyond unit maintenance repair.
2. Notify supervisor

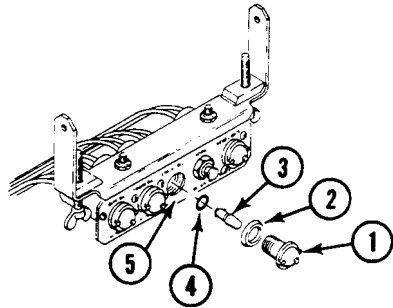
YES

**A3Y**

1. Replace ENGINE OIL LOW PRESSURE indicator light assembly (WP 0320 00).
2. Verify no faults found.

**BY**

1. Remove ENGINE OIL LOW PRESSURE indicator cover lens (1), gasket (2), bulb (3), and gasket (4) from indicator assembly (5).
2. Measure voltage between indicator assembly (5) center contact and ground.
3. Does multimeter read less than 17 volts?



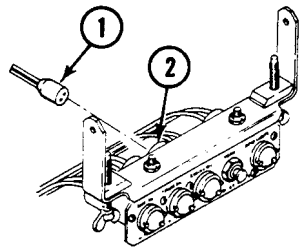
NO

GO TO CY (PAGE 0055 00-5)

YES

**B2Y**

1. Remove harness 12349881 circuit 27J/34 plug (1) from ENGINE OIL LOW PRESSURE indicator assembly jack (2).
2. Measure voltage between circuit 27J plug pin and ground.
3. Does multimeter read less than 17 volts?



NO

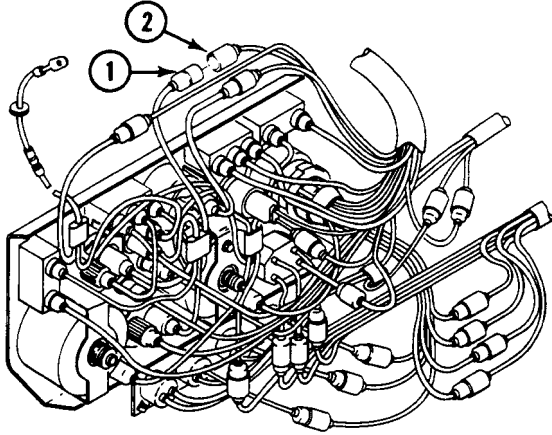
**B2YN**

1. Replace ENGINE OIL LOW PRESSURE indicator assembly (WP 0320 00).
2. Verify no faults found.

YES

**B3Y**

1. Turn MASTER SWITCH to OFF.
2. Remove instrument panel for access. See task: remove instrument panel mounts and ground lead (WP 0295 00).
3. Remove harness 12349881 circuit 27F plug (1) from cable assembly 12349858 circuit 27F jack (2).
4. Measure resistance between harness 12349881 circuit 27J plug and circuit 27F plug (1).
5. Does multimeter read 0 ohms?



NO

**B3YN**

1. Faulty harness 12349881 circuit 27F/27J. Beyond unit maintenance repair.
2. Notify supervisor

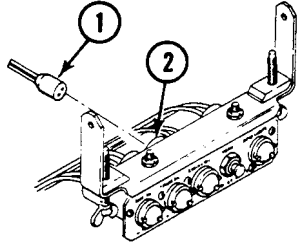
YES

**B4Y**

1. Repair special purpose cable 12349858 circuit 27F (WP 0382 00).
2. Verify no faults found.

**CY**

1. Remove harness 12349881 circuit 27J/34 plug (1) from ENGINE OIL LOW PRESSURE indicator assembly jack (2).
2. Measure resistance between circuit 34 plug pin and ground.
3. Does multimeter read more than 0 ohms?



**NO**

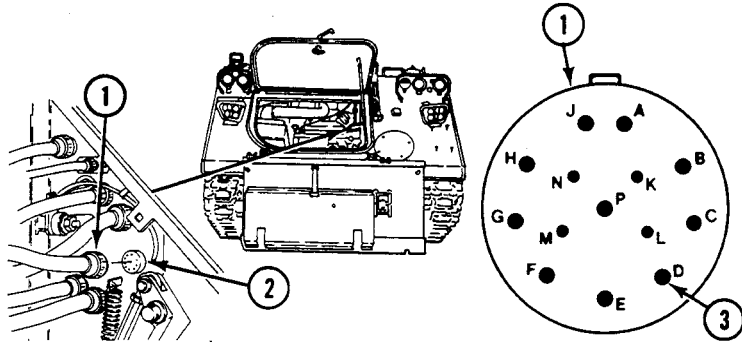
**CYN**

1. Install harness 12349881 plug on ENGINE OIL LOW PRESSURE indicator jack.
2. Remove jumper wire.
3. Replace engine oil low pressure switch (WP 0320 00).
4. Verify no faults found.

**YES**

**C2Y**

1. Remove harness 12349873 plug (1) from harness 12349881 jack (2) at carrier bulkhead.
2. Measure resistance between harness 12349873 plug (1) pin D (3) and ground.
3. Does multimeter read 0 ohms?



**NO**

**C2YN**

1. Remove jumper wire.
2. Install harness 12349881 plug on ENGINE OIL LOW PRESSURE indicator assembly jack.
3. Install indicator cover lens and bulb.
4. Replace harness 12349873 circuit 34 (WP 0382 00).
5. Verify no faults found.

**YES**

**C3Y**

1. Remove jumper wire.
2. Install harness 12349873 onto ENGINE OIL LOW PRESSURE switch.
3. Faulty harness 12349881 circuit 34. Beyond unit maintenance repair.
4. Notify supervisor.

**TRANSMISSION OIL LOW PRESSURE INDICATOR MALFUNCTIONS**

**0056 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Jumper Wire
- Multimeter (WP 0926 00, Item 30)

Equipment Condition

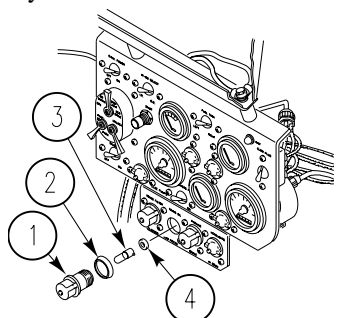
- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)
- Parking brake off (see your -10)
- Service brake off (see your -10)

Personnel Required

- Unit Mechanic
- Helper (H)

**T**

1. Remove TRANS OIL LOW PRESS indicator lens (1), gasket (2), bulb (3), and gasket (4).
2. Check continuity between bulb base and bulb center contact.
3. Is there continuity?



**NO**

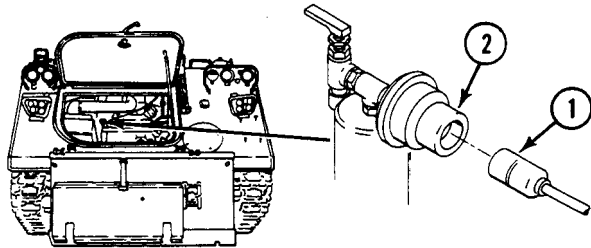
**TN**

1. Replace TRANS OIL LOW PRESS bulb (WP 0287 00).
2. Verify no faults found.

**YES**

**Y**

1. Install TRANS OIL LOW PRESS bulb and cover lens.
2. Remove harness 12349810 circuit 366 plug (1) from TRANS OIL LOW PRESS switch assembly jack (2).
3. Turn MASTER SWITCH to ON (see your -10).
4. Is TRANS OIL LOW PRESS indicator off?



**NO** → GO TO AY (PAGE 0056 00-2)

**YES**

**2Y**

1. Install jumper wire between harness 12349810 circuit 366 plug and ground.
2. Is TRANS OIL LOW PRESS indicator on?

**NO** → GO TO BY (PAGE 0056 00-6)

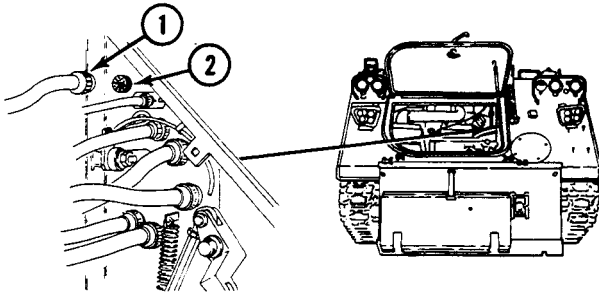
**YES**

**3Y**

1. Replace TRANS OIL LOW PRESS switch (WP 0400 00).
2. Verify no faults found.

**AY**

1. Remove harness 12349810 plug (1) from harness 12349813 jack (2) at carrier bulkhead.
2. Is TRANS OIL LOW PRESS indicator still on?



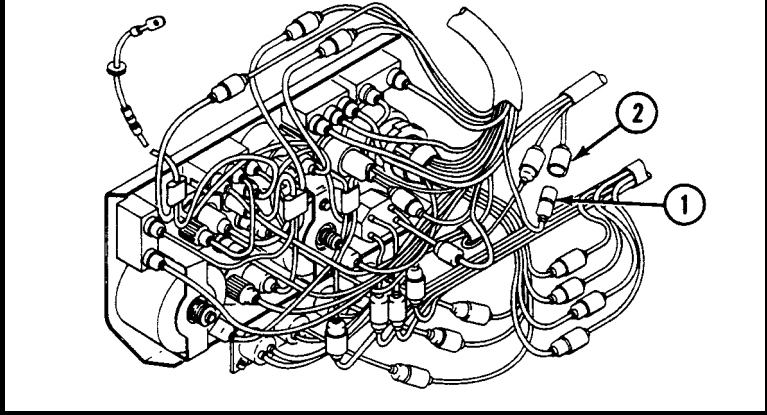
**NO** → **AYN**  
 1. Replace harness 12349810 (WP 0361 00).  
 2. Verify no faults found.

**YES**



**A2Y**

1. Remove harness 12349813 circuit 366 plug (1) from harness 12349881 circuit 366 jack (2) behind instrument panel.
2. Is TRANS OIL LOW PRESS indicator still on?



**NO**

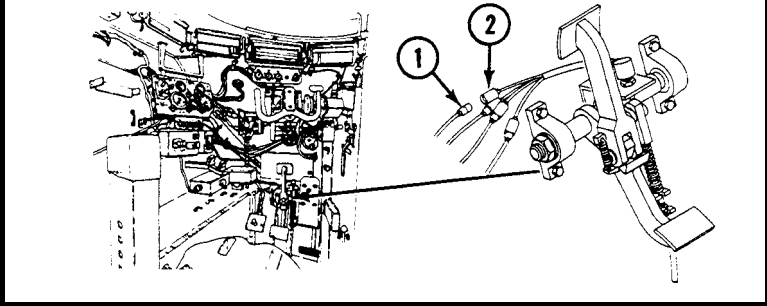
**A2YN**

1. Replace harness 12349813 (WP 0360 00).
2. Verify no faults found.

**YES**

**A3Y**

1. Install harness 12349810 plug on harness 12349813 at carrier bulkhead.
2. Install harness 12349810 circuit 366 on trans oil low press switch.
3. Remove harness 12349881 circuit 366 plug (1) from stop light switch jack (2).
4. Is TRANS OIL LOW PRESS indicator still on?



**NO**

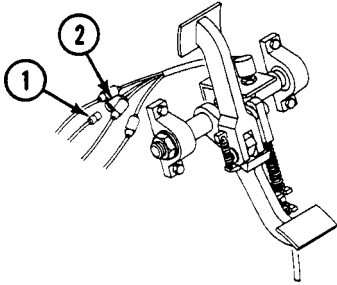
**A3YN**

1. Shorted harness 12349881 circuit 366. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**A4Y**

1. Install harness 12349813 circuit 366 plug onto harness 12349881 circuit 366 jack.
2. Remove harness 12349881 circuit 366A plug (1) from stop light switch jack (2).
3. Is TRANS OIL LOW PRESS indicator still on?



NO

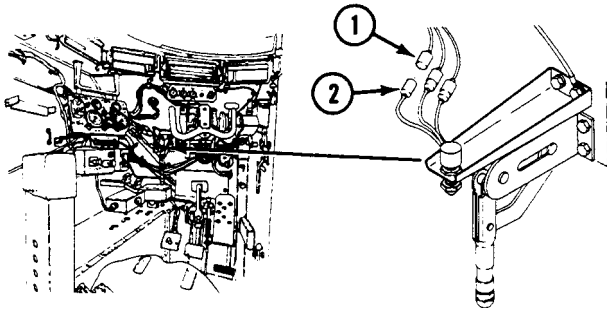
**A4YN**

1. Replace brake light switch (WP 0332 00).
2. Verify no faults found.

YES

**A5Y**

1. Install harness 12349881 circuit 366 plug on stop light switch circuit 366 jack.
2. Remove harness 12345881 circuit 366A plug (1) from parking brake switch 366A jack (2).
3. Is TRANS OIL LOW PRESS indicator still on?



NO

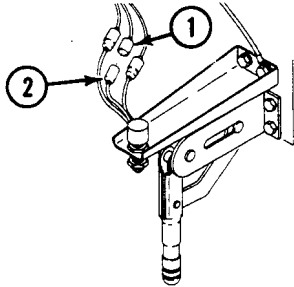
**A5YN**

1. Faulty harness 12349881 circuit 366A. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**A6Y**

1. Install harness 12349881 circuit 366A on stop light switch 366A jack.
2. Remove harness 12349881 circuit 367 plug (1) from parking brake switch jack (2).
3. Is TRANS OIL LOW PRESS indicator still on?



NO

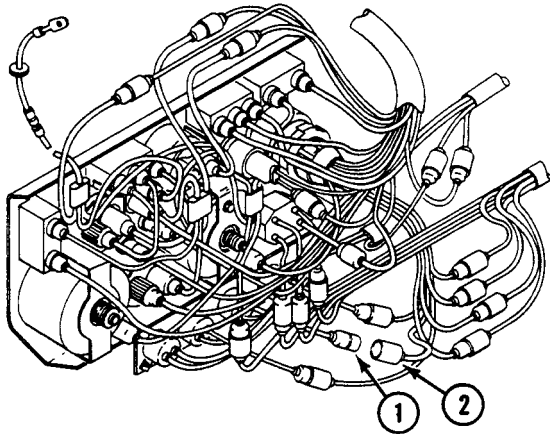
**A6YN**

1. Replace parking brake switch (WP 0331 00).
2. Verify no faults found.

YES

**A7Y**

1. Install harness 12349881 circuit 366A on stop light switch circuit 366 jack.
2. Remove harness 12349881 circuit 367 plug (1) from cable assembly 12349858 circuit 367 jack (2).
3. Is TRANS OIL LOW PRESS indicator still on?



NO

**A7YN**

1. Faulty harness 12349881 circuit 367. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**A8Y**

1. Install harness 12349881 circuit 367 plug on parking brake switch circuit 366 jack.
2. Replace TRANS OIL LOW PRESS indicator assembly (WP 0287 00).
3. Verify no faults found.

**BY**

1. Remove TRANS OIL LOW PRESS lens, gasket, bulb, and gasket from indicator assembly.
2. Measure voltage between center contact on indicator assembly and ground.
3. Does multimeter read 17 volts or more?

NO

GO TO CY (PAGE 0056 00-9)

YES

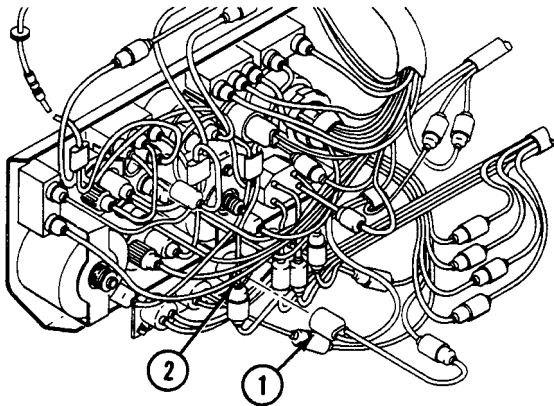
**B2Y**

1. Remove cable assembly 12349858 circuit 367/27L plug (1) from TRANS OIL LOW PRESS indicator assembly (2).
2. Check continuity between cable assembly 12349858 circuit 367/27L plug (1) circuit 367 pin and ground.
3. Is there continuity?

NO

**B2YN**

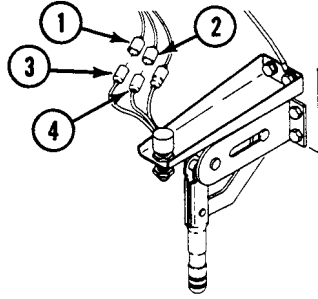
1. Remove jumper wire and install harness 12349881 circuit 366 plug on trans oil low press switch.
2. Replace TRANS OIL LOW PRESS indicator assembly (WP 0287 00).
3. Verify no faults found.



YES

**B3Y**

1. Remove harness 12349881 circuits 367 plug (1) and 366A (2) plug from parking brake switch jacks (3) and (4).
2. Check continuity between parking brake switch jacks (3) and (4).
3. Is there continuity?



NO

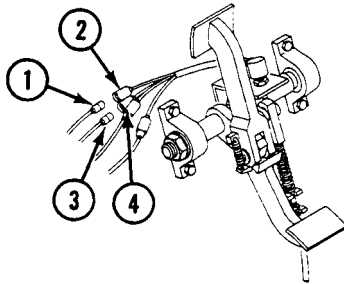
**B3YN**

1. Install harness 12349881 circuit 367/27L plug on TRANS OIL LOW PRESS indicator.
2. Remove jumper wire and install harness 12349881 circuit 366 plug on trans oil low press switch.
3. Replace parking brake switch (WP 0331 00).
4. Verify no faults found.

YES

**B4Y**

1. Remove harness 12349881 circuit 366A (1) and circuit 366 (2) from stop light switch circuit jack 366A (3) and jack 366 (4).
2. Check continuity between switch circuit jack 366A (3) and jack 366 (4).
3. Is there continuity?



NO

**B4YN**

1. Remove jumper and install harness 12349810 circuit 366 plug.
2. Install harness 12349881 circuit 367/27L, 366A and 367 plugs.
3. Replace stop light switch (WP 0331 00).
4. Verify no faults found.

YES

**B5Y**

1. Check continuity between harness 12349881 circuit 366 plug pin at stop light switch and ground.
2. Is there continuity?

NO

GO TO **DY** (PAGE 0056 00-10)

YES

**B6Y**

1. Remove jumper wire and install harness 12349881 circuit 366 plug on trans oil low pressure switch.
2. Check continuity between harness 12349881 circuit 366A plug at brake switch and circuit 366A plug at parking brake light switch.
3. Is there continuity?

NO

**B6YN**

1. Faulty harness 12349881 circuit 366A. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**B7Y**

1. Check continuity between harness 12349881 circuit 367 plugs.
2. Is there continuity?

NO

**B7YN**

1. Install harness 12349881 circuit 366 plugs.
2. Faulty harness 12349881 circuit 367. Beyond unit maintenance repair.
3. Notify supervisor.

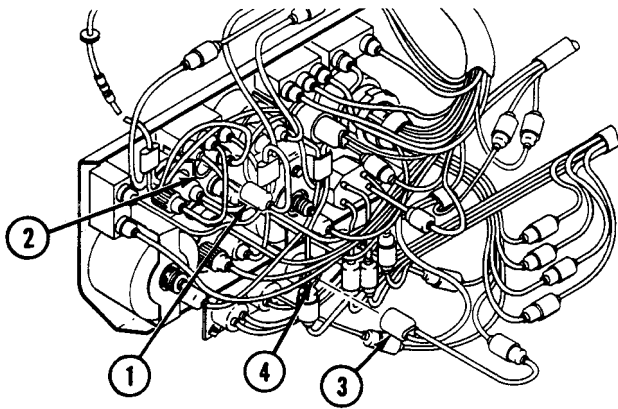
YES

**B8Y**

1. Install harness 12349881 circuit 367 plugs on switch and cable assembly 12345898.
2. Replace TRANS OIL LOW PRESS indicator assembly (WP 0287 00).
3. Verify no faults found.

**CY**

1. Remove jumper wire and install harness 12349810 on trans oil low press switch.
2. Remove instrument panel for access (WP 0295 00).
3. Remove cable assembly 12349858 circuit 27 plug (1) from circuit breaker (2).
4. Remove harness 12349858 circuit 367/27L plug (3) from TRANS OIL LOW PRESS indicator jack (4).
5. Check continuity between harness 12349858 circuit 27 plug (1) and circuit 367/27L plug (3) circuit 27L pin.
6. Is there continuity?



**NO**

**CYN**

1. Install gasket, bulb, gasket, cover lens on TRANS OIL LOW PRESS indicator assembly.
2. Replace special purpose cable 12349858 circuit 27L (WP 0290 00).
3. Verify no faults found.

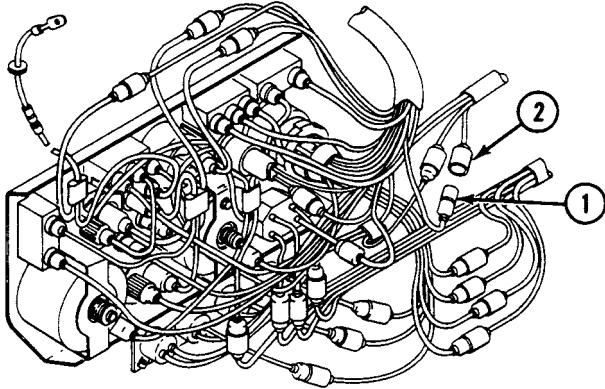
**YES**

**C2Y**

1. Install special purpose cable 12349858 on circuit breaker.
2. Replace TRANS OIL LOW PRESS indicator (WP 0287 00).
3. Verify no faults found.

**DY**

1. Install harness 12349881 circuit 366A plugs on brake switches and 367/27L plug on indicator assembly.
2. Remove harness 12349813 circuit 366 plug (1) from harness 12349881 circuit 366 jack (2) behind instrument panel.
3. Check continuity between harness 12349813 circuit 366 plug (1) and ground.
4. Is there continuity?



NO

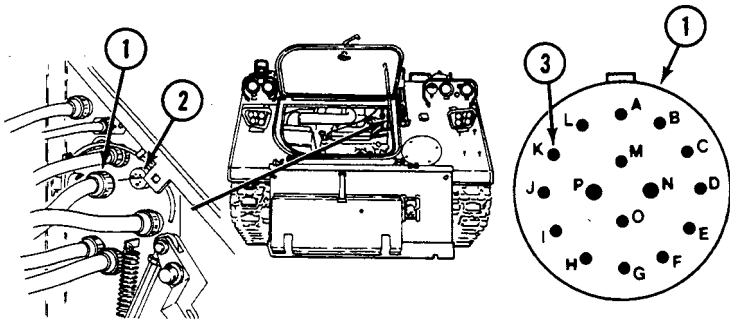
**DYN**

1. Remove jumper wire and install harness 12349810 on switch.
2. Faulty harness 12349881 circuit 366. Beyond unit maintenance repair.
3. Notify supervisor.

YES

**D2Y**

1. Install harness 12349881 circuit 366 plug on stop light switch circuit 366 jack.
2. Remove harness 12349810 plug (1) from harness 12349813 jack (2) at carrier bulkhead.
3. Check continuity between harness 12349810 plug (1) pin K (3) and ground.
4. Is there continuity?



NO

**D2YN**

1. Install harness 12349813 circuit 366 plug on harness 12349881 circuit 366 jack behind instrument panel.
2. Replace harness 12349810 circuit 366 (WP 0361 00).
3. Verify no faults found.

YES



**D3Y**

1. Remove jumper wire and install harness 12349810 circuit 366 plug on trans oil low press switch.
2. Replace harness 12349813 circuit 366 (WP 0360 00).
3. Verify no faults found.



**TRANS OIL HI TEMP INDICATOR MALFUNCTIONS**

**0057 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)
- Jumper Wire

Equipment Condition

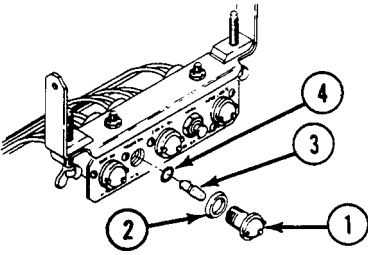
- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Engine and transmission cooled down
- All power plant access panels off (see your -10)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)

Personnel Required

- Unit Mechanic
- Helper (H)

**T**

1. Remove TRANS OIL HI TEMP indicator cover lens (1), gasket (2), bulb (3), and gasket (4).
2. Check continuity between bulb center contact and bulb base.
3. Does multimeter indicate continuity?



**NO**

**TN**

1. Replace TRANS OIL HI TEMP indicator bulb (WP 0294 00).
2. Verify no faults found.

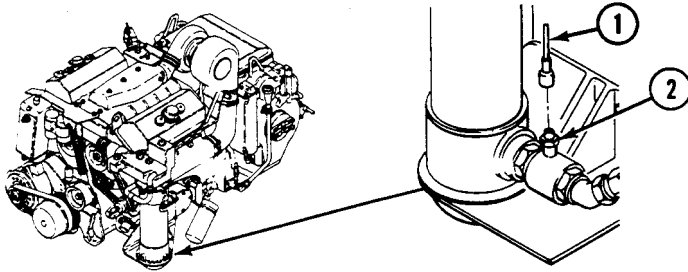
**YES**

**Y**

1. Install TRANS OIL HI TEMP indicator cover lens bulb and gaskets.
2. Remove harness 12349873 circuit 327 plug (1) from trans oil hi temp switch (2).
3. Turn MASTER SWITCH to ON.
4. Is TRANS OIL HI TEMP indicator off?

**NO**

GO TO **AY** (PAGE 0057 00-3)



**YES**

**2Y**

1. Install jumper wire between harness 12349873 circuit 327 plug and ground.
2. Is TRANS OIL HI TEMP indicator on?

**NO**

GO TO **BY** (PAGE 0057 00-4)

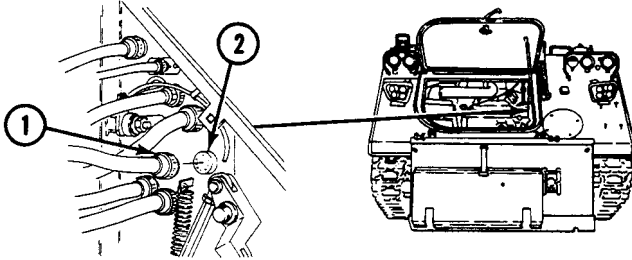
**YES**

**3Y**

1. Remove jumper wire.
2. Replace trans oil hi temp switch (WP 0322 00).
3. Verify no faults found.

**A1Y**

1. Remove harness 12349873 plug (1) from harness 12349881 jack (2) at carrier bulkhead.
2. Is TRANS OIL HI TEMP indicator still on?



**NO**

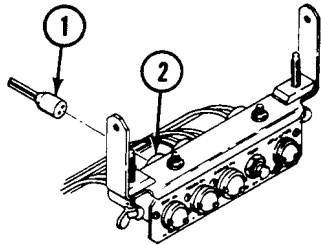
**A1YN**

1. Replace harness 12349873 (WP 0359 00).
2. Verify no faults found.

**YES**

**A2Y**

1. Turn MASTER SWITCH to OFF.
2. Remove harness 12349881 circuit 327/27G plug (1) from TRANS OIL HI TEMP indicator (2).
3. Measure resistance between harness 12349881 circuit 327/27G plug (1) circuit 327 pin and ground.
4. Does multimeter read 0 ohms?



**NO**

**A2YN**

1. Replace TRANS OIL HI TEMP indicator assembly (WP 0294 00).
2. Verify no faults found.

**YES**

**A3Y**

1. Shorted harness 12349881 circuit 327. Beyond unit maintenance repair.
2. Notify supervisor.

**BY**

1. Remove TRANS OIL HI TEMP indicator cover lens, gasket, bulb, and gasket.
2. Measure voltage between assembly center contact and ground.
3. Does multimeter read less than 17 volts?

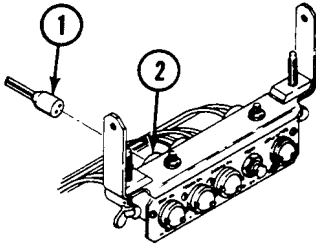
**NO** → GO TO CY (PAGE 0057 00-5)

**YES**

**B2Y**

1. Remove jumper wire and install harness 12349873 circuit 327 plug on trans oil hi temp switch.
2. Remove harness 12349881 circuit 327/27G plug (1) from TRANS OIL HI TEMP indicator (2).
3. Measure voltage between harness 12349881 circuit 327/27G plug (1) circuit 327 pin and ground.
4. Does multimeter read less than 17 volts?

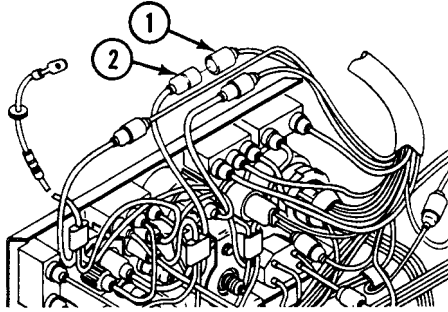
**NO** → **B2YN**  
 1. Replace TRANS OIL HI TEMP indicator assembly (WP 0294 00).  
 2. Verify no faults found.



**YES**

**B3Y**

1. Turn MASTER SWITCH to OFF.
2. Remove instrument panel for access. See task: replace instrument panel mounts and ground lead (WP 0295 00).
3. Remove harness 12349881 circuit 27F plug (1) from cable assembly 12349858 circuit 27F jack (2).
4. Measure resistance between harness 12349881 circuit 27F plug (1) and circuit 27G pin on circuit 327/27G plug.
5. Does multimeter read 0 ohms?



NO

**B3YN**

1. Faulty harness 12349881 circuit 27G/27F. Beyond unit maintenance repair.
2. Notify supervisor.

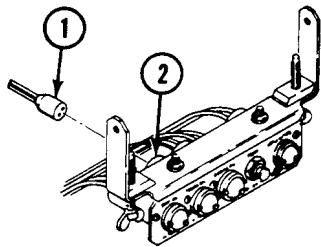
YES

**B4Y**

1. Install harness 12349881 circuit 327/27G plug on TRANS OIL HI TEMP indicator jack.
2. Repair special purpose cable 12349858 circuit 27F (WP 0382 00).
3. Verify no faults found.

**CY**

1. Turn MASTER SWITCH to OFF.
2. Remove harness 12349881 circuit 327/27G plug (1) from TRANS OIL HI TEMP indicator (2).
3. Measure resistance between harness 12349881 circuit 327/27G plug (1) circuit 327 pin and ground.
4. Does multimeter read more than 0 ohms?



NO

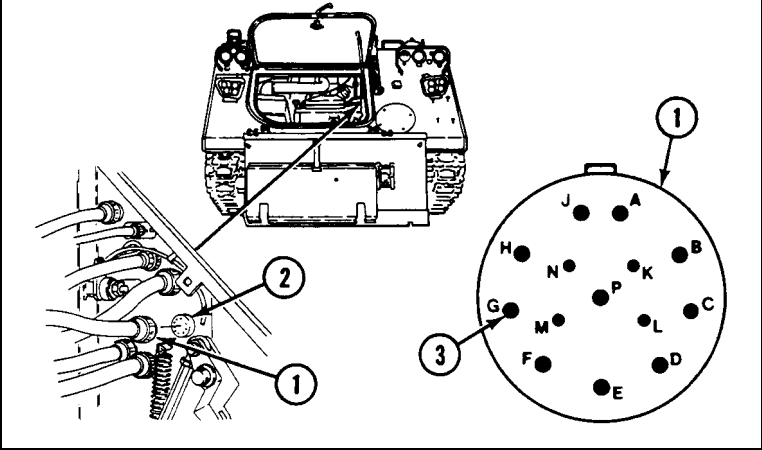
**CYN**

1. Remove jumper cable and install harness 12349873 plug on trans hi oil temp switch.
2. Replace TRANS OIL HI TEMP indicator assembly (WP 0294 00).
3. Verify no faults found.

YES

**C2Y**

1. Install TRANS OIL HI TEMP indicator cover lens, gasket, bulb, and gasket.
2. Remove harness 12349873 plug (1) from harness 12349881 jack (2) at carrier bulkhead.
3. Measure resistance between harness 12349873 plug (1) pin G (3) and ground.
4. Does multimeter read more than 0 ohms?



**NO**

**C2YN**

1. Remove jumper wire and install harness 12349873 circuit 327 plug on trans oil hi temp switch.
2. Faulty harness 12349881 circuit 327. Beyond unit maintenance repair.
3. Notify supervisor.

**YES**

**C3Y**

1. Install harness 12349881 circuit 327/27G plug on trans oil hi temp indicator.
2. Repair harness 12349873 circuit 327 (WP 0382 00).
3. Verify no faults found.



**ENGINE COOLANT LOW LEVEL INDICATOR MALFUNCTIONS**

**0058 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Multimeter (WP 0926 00, Item 30)

Jumper Wire

Equipment Condition

Engine stopped (see your -10)

Carrier blocked (see your -10)

Trim vane lowered (see your -10)

Power plant access door open (see your -10)

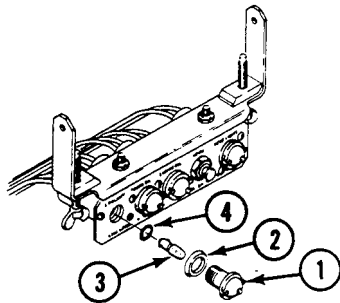
Personnel Required

Unit Mechanic

Helper (H)

**T**

1. Remove ENGINE COOLANT LOW LEVEL indicator cover (1), gasket (2), and bulb (3), and gasket (4).
2. Check continuity between bulb center contact and bulb base.
3. Does multimeter indicate continuity?



**YES**



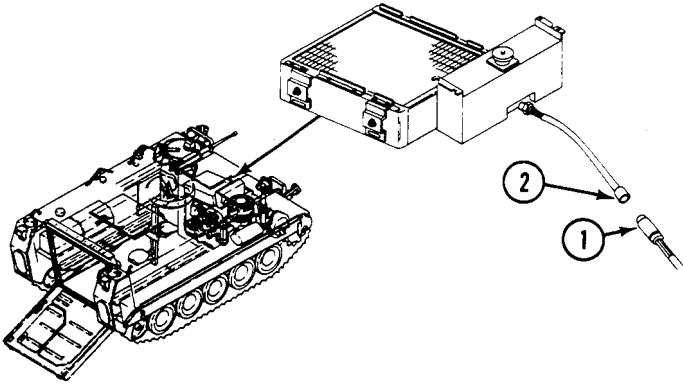
**NO**

**TN**

1. Replace ENGINE COOLANT LOW LEVEL indicator bulb (WP 0294 00).
2. Verify no faults found.

**Y**

1. Install ENGINE COOLANT LOW LEVEL indicator cover, bulb and gaskets.
2. Remove harness 12349873 plug (1) from coolant level detector jack (2).
3. Turn MASTER SWITCH to ON.
4. Is ENGINE COOLANT LOW LEVEL indicator off?



**NO** → GO TO AY (PAGE 0058 00-3)

**YES**

**2Y**

1. Install jumper wire between harness 12349873 plug pin B and ground.
2. Is ENGINE COOLANT LOW LEVEL indicator on?

**NO** → GO TO BY (PAGE 0058 00-4)

**YES**

**3Y**

1. Remove jumper wire.
2. Measure voltage between harness 12349873 plug pin A and ground.
3. Does multimeter read 17 volts or more?

**NO** → GO TO CY (PAGE 0058 00-5)

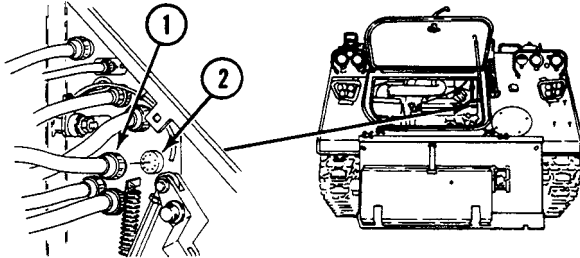
**YES**

**4Y**

1. Replace auxiliary tank fluid level detector (WP 0329 00).
2. Verify no faults found.

**AY**

1. Remove harness 12349873 plug (1) from harness 12349881 jack (2) at carrier bulkhead.
2. Is ENGINE COOLANT LOW LEVEL indicator still on?



NO

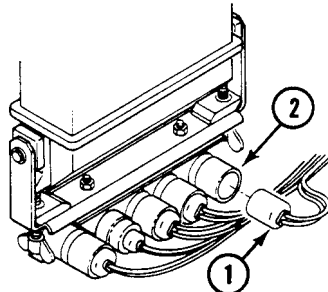
**AYN**

1. Shorted harness 12349873. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**A2Y**

1. Turn MASTER SWITCH to OFF.
2. Remove harness 12349881 circuit 352/27K (1) from backside of ENGINE COOLANT LOW LEVEL indicator jack (2).
3. Measure resistance between harness 12349881 plug circuit 352 pin and ground.
4. Does multimeter read infinity?



NO

**A2YN**

1. Install harness 12349873 plug on coolant level detector.
2. Shorted harness 12349881 circuit 352. Beyond unit maintenance repair.
3. Notify supervisor.

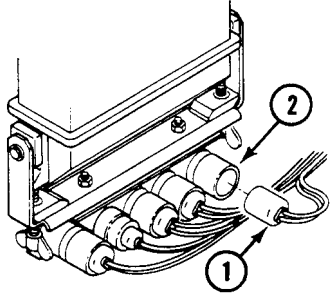
YES

**A3Y**

1. Replace ENGINE COOLANT LOW LEVEL indicator assembly (WP 0294 00).
2. Verify no faults found.

**BY**

1. Remove harness 12349881 circuit 352/27K (1) from ENGINE COOLANT LOW LEVEL indicator (2).
2. Measure voltage between harness 12349881 plug (1) circuit 27K pin and ground.
3. Does multimeter read less than 17 volts?



NO

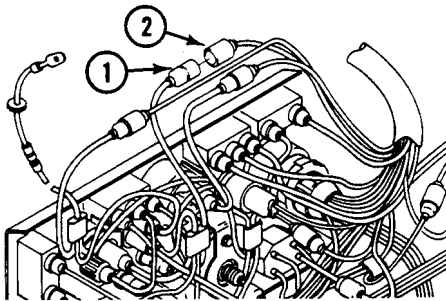
**BYN**

1. Remove jumper wire and install harness 12349873 plug on coolant level detector.
2. Replace ENGINE COOLANT LOW LEVEL indicator assembly (WP 0294 00).
3. Verify no faults found.

YES

**B2Y**

1. Turn MASTER SWITCH to OFF.
2. Remove instrument panel for access. See task: replace instrument panel mounts and ground lead (WP 0295 00).
3. Remove harness 12349881 circuit 27F plug (1) from cable assembly 12349858 circuit 27F jack (2).
4. Measure resistance between harness 12349881 circuit 27K plug and circuit 27F plug (1).
5. Does multimeter read 0 ohms?



NO

**B2YN**

1. Faulty harness 12349881 circuit 27K. Beyond unit maintenance repair.
2. Notify supervisor.

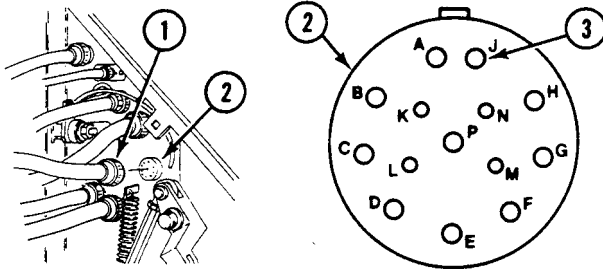
YES

**B3Y**

1. Install harness 12349881 circuit 352/27K plug on ENGINE COOLANT LOW LEVEL indicator.
2. Replace cable assembly 12349858 circuit 27F (WP 0290 00).
3. Verify no faults found.

**CY**

1. Remove harness 12349873 plug (1) from harness 12349881 jack (2) at carrier bulkhead.
2. Measure voltage between harness 12349881 jack (2) pin J (3) and ground.
3. Does multimeter read less than 17 volts?



**NO**

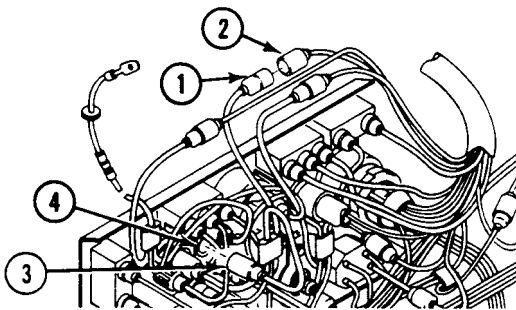
**CYN**

1. Replace harness 12349873 circuit 27N (WP 0359 00).
2. Verify no faults found.

**YES**

**C2Y**

1. Turn MASTER SWITCH to OFF.
2. Install harness 12349873 plug on coolant level detector.
3. Remove instrument panel for access. See task: replace instrument panel mounts and ground lead (WP 0295 00).
4. Remove harness 12349881 circuit 27F plug (1) from cable assembly 12349858 circuit 27F jack (2).
5. Remove cable assembly 12349858 circuit 27 plug (3) from instrument panel circuit breaker (4).
6. Measure resistance between cable assembly 12349858 circuit 27 plug (3) and circuit 27F plug (1).
7. Does multimeter read 0 ohms?



**NO**

**C2YN**

1. Install harness 12349873 plug on harness 12349881 jack on carrier bulkhead.
2. Replace cable assembly 12349858 circuit 27/27F (WP 0290 00).
3. Verify no faults found.

**YES**

**C3Y**

1. Faulty harness 12349881 circuit 27N. Beyond unit maintenance repair.
2. Notify supervisor.

**TRANS FILTER CLOGGED INDICATOR MALFUNCTIONS**

**0059 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Multimeter (WP 0926 00, Item 30)

Jumper Wire

Equipment Condition

Engine stopped (see your -10)

Carrier blocked (see your -10)

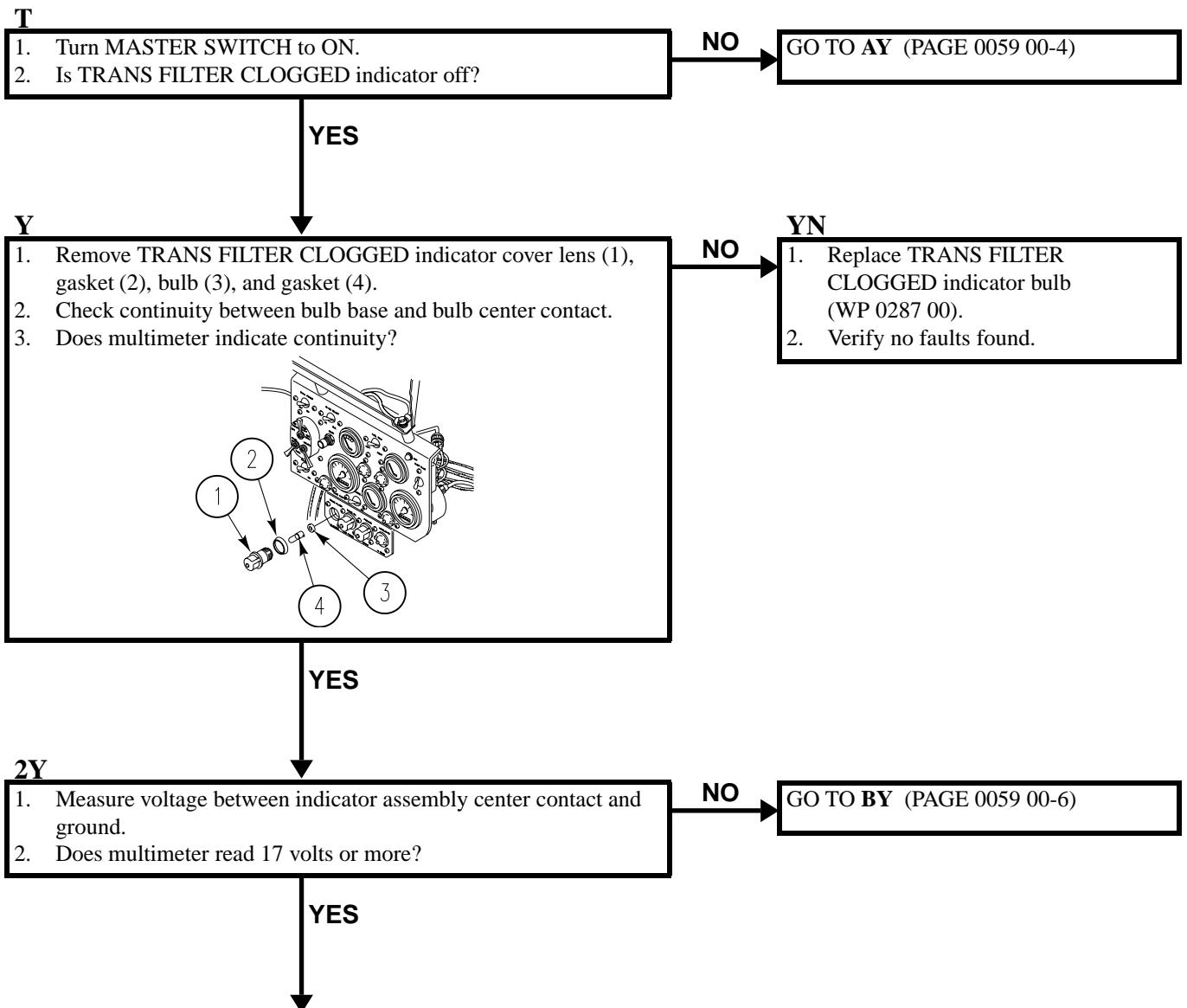
Trim vane lowered (see your -10)

Power plant access door open (see your -10)

Personnel Required

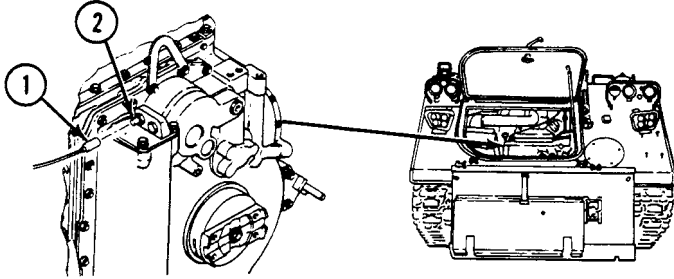
Unit Mechanic

Helper (H)



**3Y**

1. Install TRANS FILTER CLOGGED indicator cover lens, bulb and gaskets.
2. Remove harness 12349810 plug (1) from pressure differential switch (2).
3. Install jumper wire between harness 12349810 plug (1) pin B and ground.
4. Is TRANS FILTER CLOGGED indicator off?



**NO**

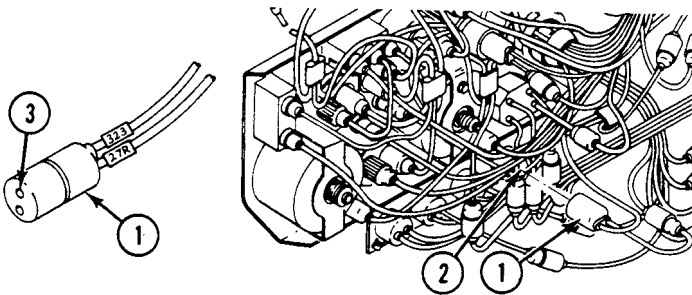
**3YN**

1. Turn MASTER SWITCH to OFF.
2. Replace differential pressure switch (WP 0401 00).
3. Verify no faults found.

**YES**

**4Y**

1. Turn MASTER SWITCH to OFF.
2. Remove cable assembly 12349858 circuit 323/27R plug (1) from TRANS FILTER CLOGGED indicator jack (2).
3. Measure resistance between harness 12349858 circuit 323/27R plug (1) circuit 323 pin (3) and ground.
4. Does multimeter read more than 0 ohms?



**NO**

**4YN**

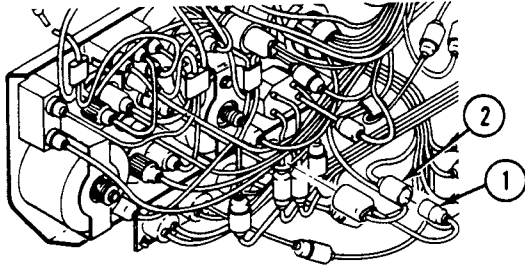
1. Remove jumper wire and install harness 12349810 plug on pressure differential switch jack.
2. Replace TRANS FILTER CLOGGED indicator assembly (WP 0287 00).
3. Verify no faults found.

**YES**



**5Y**

1. Remove harness 12349813 circuit 323 plug (1) from cable assembly 12349858 circuit 323 jack (2).
2. Measure resistance between harness 12349813 circuit 323 plug pin (1) and ground.
3. Does multimeter read more than 0 ohms?



NO

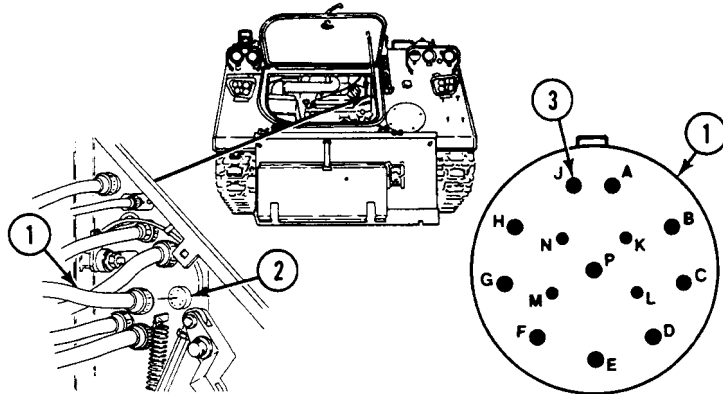
**5YN**

1. Remove jumper wire and install harness 12349813 plug on pressure differential switch jack.
2. Replace cable assembly 12349858 circuit 323 (WP 0290 00).
3. Verify no faults found.

YES

**6Y**

1. Remove harness 12349810 plug (1) from harness 12349813 jack (2) at carrier bulkhead.
2. Measure resistance between harness 12349810 plug (1) pin J (3) and ground.
3. Does multimeter read 0 ohms?



NO

**6YN**

1. Install harness 12349813 circuit 323/27R plug on TRANS FILTER CLOGGED indicator jack.
2. Install harness 12349813 circuit 323 plug on cable assembly 12349858 circuit 323 jack.
3. Remove jumper wire and replace harness 12349810 circuit 323 (WP 0360 00).
4. Verify no faults found.

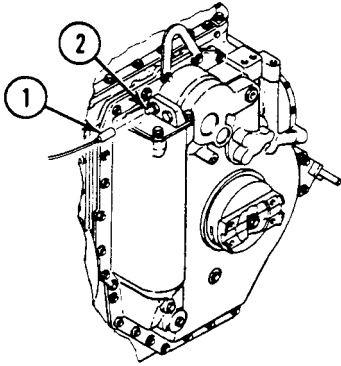
YES

**7Y**

1. Remove jumper wire and install harness 12349810 plug on pressure differential switch.
2. Replace harness 12349813 circuit 323 (WP 0361 00).
3. Verify no faults found.

**AY**

1. Remove harness 12349810 plug (1) from pressure differential switch (2).
2. Is TRANS FILTER CLOGGED indicator still on?



NO

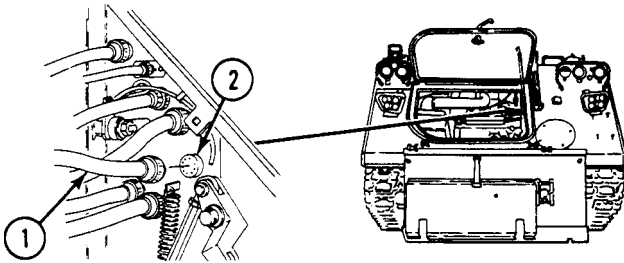
**AYN**

1. Turn MASTER SWITCH to OFF.
2. Replace differential pressure switch (WP 0401 00).
3. Verify no faults found.

YES

**A2Y**

1. Remove harness 12349810 plug (1) from harness 12349813 jack (2) at carrier bulkhead.
2. Is TRANS FILTER CLOGGED indicator still on?



NO

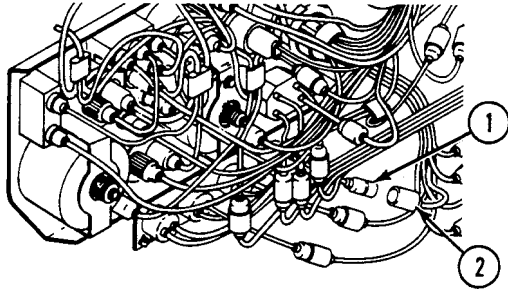
**A2YN**

1. Turn MASTER SWITCH to OFF.
2. Replace harness 12349810 (WP 0360 00).
3. Verify no faults found.

YES

**A3Y**

1. Install harness 12349810 circuit 323 plug on pressure differential switch.
2. Remove harness 12349813 circuit 323 plug (1) from cable assembly 12349858 circuit 323 jack (2) behind indicator assembly.
3. Is TRANS FILTER CLOGGED indicator still on?



**NO**

**A3YN**

1. Turn MASTER SWITCH to OFF.
2. Replace harness 12349813 (WP 0361 00).
3. Verify no faults found.

**YES**

**A4Y**

1. Turn MASTER SWITCH to OFF.
2. Install harness 12349810 plug on harness 12349813 jack at carrier bulkhead.
3. Install harness 12349813 circuit 323 plug on cable assembly 12349858 circuit 323 jack behind instrument panel.
4. Replace TRANS FILTER CLOGGED indicator assembly (WP 0287 00).
5. Verify no faults found.

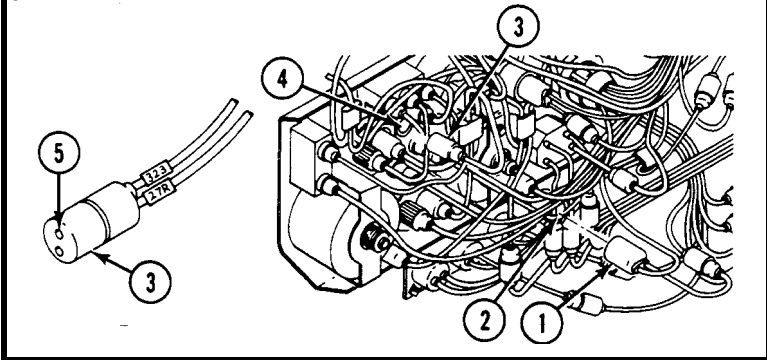
**BY**

1. Remove instrument panel for access. See task: replace instrument panel mounts and ground lead (WP 0295 00).
2. Remove plug (1) from TRANS FILTER CLOGGED indicator jack (2).
3. Remove circuit 27 plug (3) from circuit breaker jack (4).
4. Measure resistance between filter clogged indicator plug (1) circuit 27R (5) pin and circuit breaker plug (3) circuit 27 plug pin (3).
5. Does multimeter read 0 ohms?

NO

**BYN**

1. Replace cable assembly 12349858 circuit 27R (WP 0290 00).
2. Verify no faults found.



YES

**B2Y**

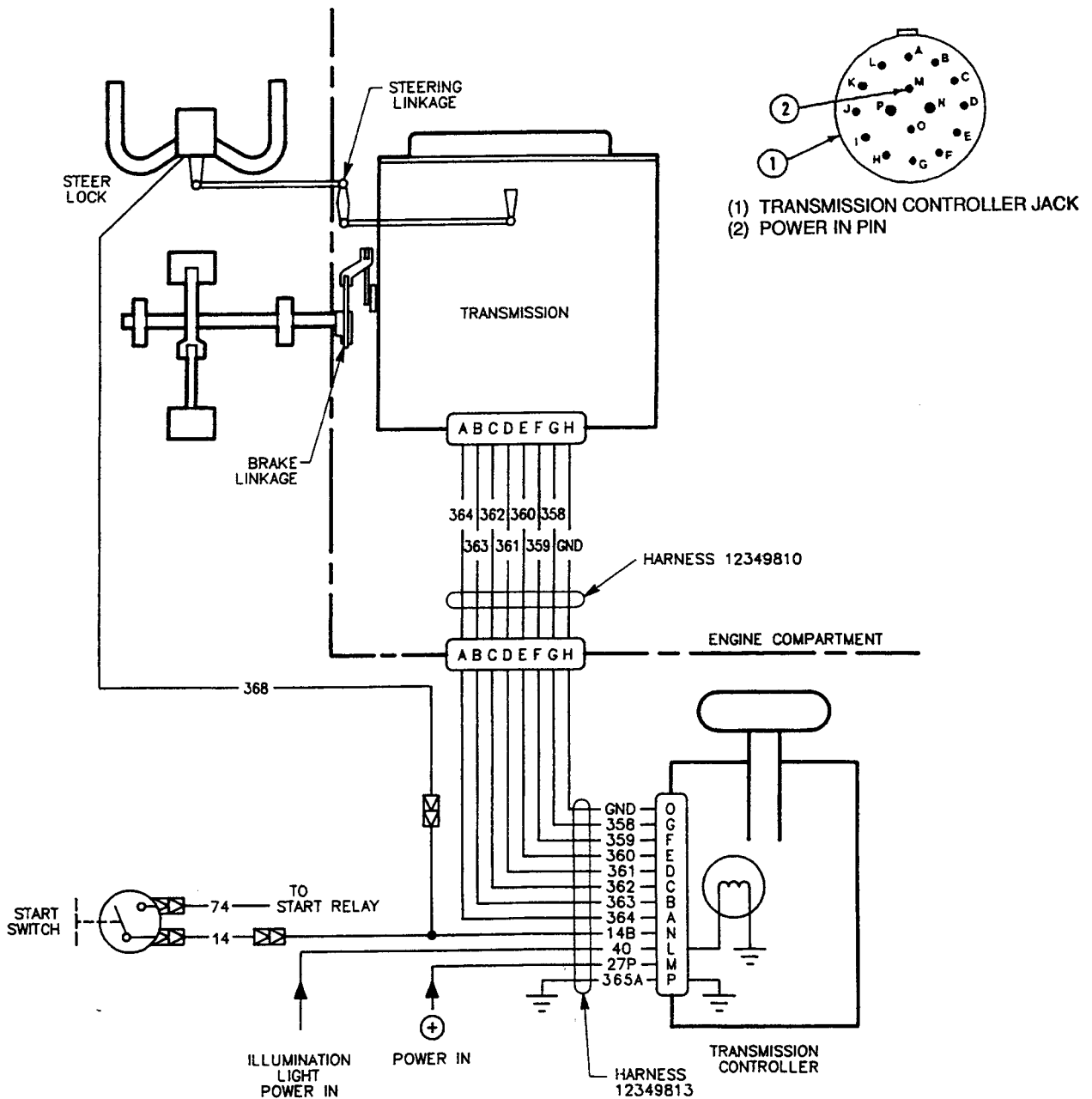
1. Replace TRANS FILTER CLOGGED indicator assembly (WP 0287 00).
2. Verify no faults found.

TRANSMISSION SYSTEM SCHEMATIC

0060 00

TRANSMISSION CONTROLLER SWITCH  
PIN TO PIN CONTINUITY CHECK

RANGES> PINS	SL	R	PV	1-4	1-3	1-2	
A	Off	Off	Off	On	On	On	On
B	On	On	On	Off	Off	Off	Off
C	Off	On	Off	On	On	On	On
D	On	Off	On	Off	Off	Off	Off
E	On	On	On	Off	On	On	On
F	Off	Off	Off	Off	On	Off	Off
G	Off	Off	Off	Off	On	On	Off
N	On	Off	Off	Off	Off	Off	Off





**CARRIER MOVES WITH TRANSMISSION IN SL**

**0061 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

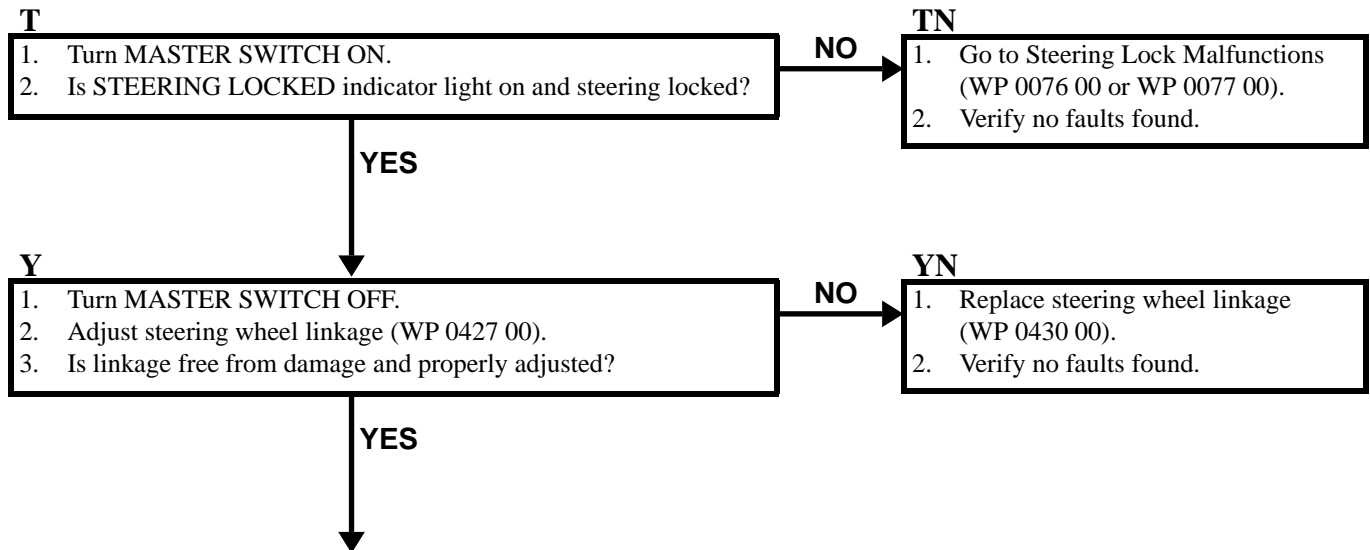
- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)
- Electrical Connector Pliers (WP 0926 00, Item 31)

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Transmission in SL position
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)

Personnel Required

- Unit Mechanic
- Helper (H)



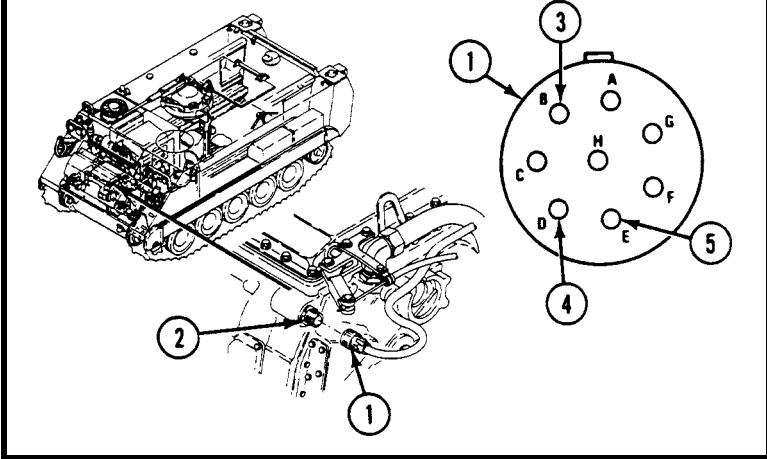
**2Y**

1. Remove harness 12349810 plug (1) from transmission jack (2).
2. Turn MASTER SWITCH ON.
3. Measure voltage between each socket on harness 12349810 plug (1) and ground. Multimeter should read 18 volts or more at sockets B (3), D (4), and E (5), and 0 volts for all remaining socket checks.
4. Does multimeter read less than 18 volts for sockets B, D, and E, and does not read 0 volts for all other sockets?

NO

**2YN**

1. Faulty transmission. Beyond unit maintenance repair.
2. Notify supervisor.



YES

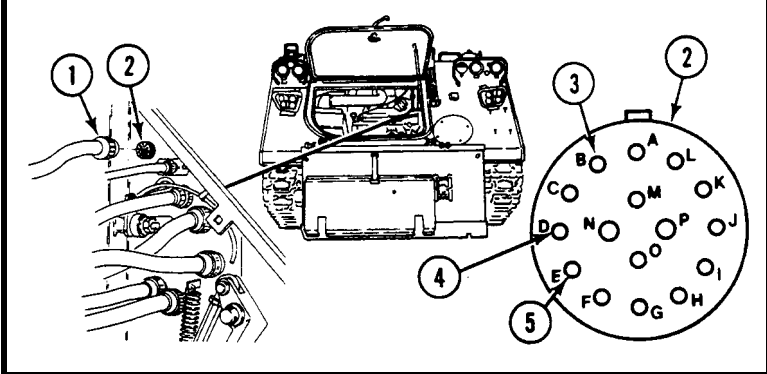
**3Y**

1. Remove harness 12349810 plug (1) from harness 12349813 jack (2) at carrier bulkhead.
2. Measure voltage between each socket on harness 12349813 jack (2) and ground. Multimeter should read 18 volts or more for sockets B (3), D (4), and E (5), and 0 volts for the remaining socket checks.
3. Does multimeter read less than 18 volts for sockets B, D, and E, and does not read 0 volts for all other sockets?

NO

**3YN**

1. Faulty transmission control wiring harness 12349810. Beyond unit maintenance repair.
2. Notify supervisor.

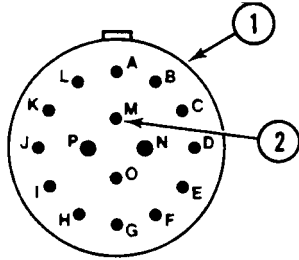


YES



**4Y**

1. Turn MASTER SWITCH to OFF.
2. Install harness 12349810 plug on transmission jack.
3. Remove transmission controller (WP 0386 00 or WP 0387 00).
4. Measure resistance between transmission controller jack (1) pin M (2) and pins A thru G.
5. Does multimeter read more than 0 ohms for pins B, D, and E, and less than infinity for all remaining pins?



NO

**4YN**

1. Install transmission controller (WP 0386 00 or WP 0387 00).
2. Faulty transmission wiring harness 12349813. Beyond unit maintenance repair.
3. Notify supervisor.

YES

**5Y**

1. Install harness 12349810 plug on harness 12349813 jack at carrier bulkhead.
2. Replace faulty transmission controller (WP 0386 00 or WP 0387 00).
3. Perform pin to pin check (WP 0060 00).
4. Verify no faults found.



**CARRIER DOES NOT MOVE IN ANY SHIFT LEVER POSITION**

**0062 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)
- Electrical Connector Pliers (WP 0926 00, Item 31)

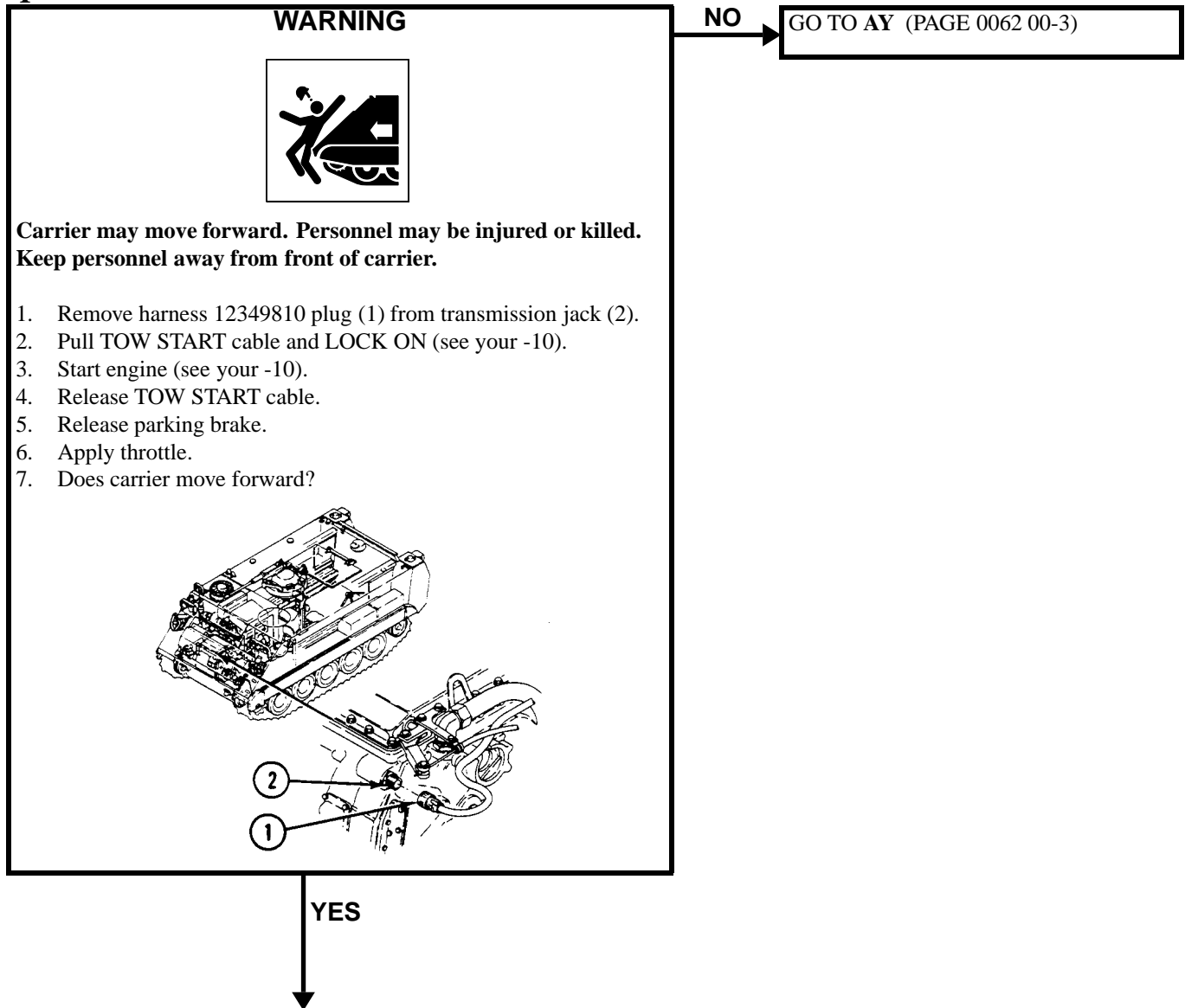
Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)
- Transmission oil level normal

Personnel Required

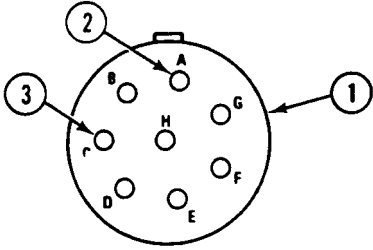
Unit Mechanic

T



**Y**

1. Stop engine (see your -10).
2. Place transmission controller in 1-4 position.
3. Turn MASTER SWITCH ON.
4. Measure voltage between each socket on harness 12349810 plug (1) and ground.
5. Does multimeter read less than 18 volts at sockets A (2) or C (3), or more than 0 volts at any remaining sockets?



**NO**

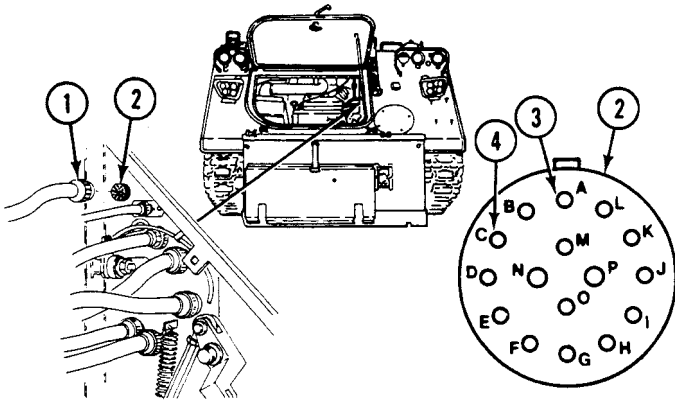
**YN**

1. Faulty transmission. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**2Y**

1. Turn MASTER SWITCH OFF.
2. Remove harness 12349810 plug (1) from harness 12349813 jack (2) at carrier bulkhead.
3. Turn MASTER SWITCH ON.
4. Measure voltage between each socket on harness 12349813 jack (2) and ground.
5. Does multimeter read less than 18 volts at sockets A (3) or C (4), or more than 0 volts at any remaining sockets?



**NO**

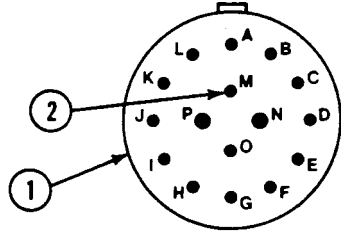
**2YN**

1. Faulty transmission control wiring harness 12349810. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**3Y**

1. Turn MASTER SWITCH OFF.
2. Remove transmission controller (WP 0386 00 or WP 0387 00).
3. Measure resistance between transmission controller jack (1) pin M (2) and pins A thru G.
4. Does multimeter read more than 0 ohms for pins A and C, and less than infinity for all remaining pins?



NO

**3YN**

1. Install transmission controller (WP 0386 00 or WP 0387 00).
2. Faulty transmission wiring harness 12349813. Beyond unit maintenance repair.
3. Notify supervisor.

YES

**4Y**

1. Install harness 12349810 plug on harness 12349813 jack at carrier bulkhead.
2. Replace faulty transmission controller switch (WP 0389 00).
3. Perform pin to pin check (WP 0060 00).
4. Verify no faults found.

**AY**

1. Stop engine (see your -10).
2. Check brake linkage and brake adjustment (WP 0406 00 and WP 0407 00).
3. Is brake linkage free from damage and brakes properly adjusted?

NO

**AYN**

1. Repair linkage and/or adjust brakes (WP 0410 00 or WP 0394 00).
2. Verify no faults found.

YES

**A2Y**

1. Disconnect track (see your -10).
2. Disconnect propeller shaft (WP 0405 00).
3. Does final drive/sprocket turn?

NO

**A2YN**

1. Replace faulty final drive (WP 0403 00).
2. Verify no faults found.

YES

**A3Y**

1. Faulty transmission. Beyond unit maintenance repair.
2. Notify supervisor.

**CARRIER DRIFTS OR DOES NOT STEER**

**0063 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Equipment Condition

Engine stopped (see your -10)

Carrier blocked (see your -10)

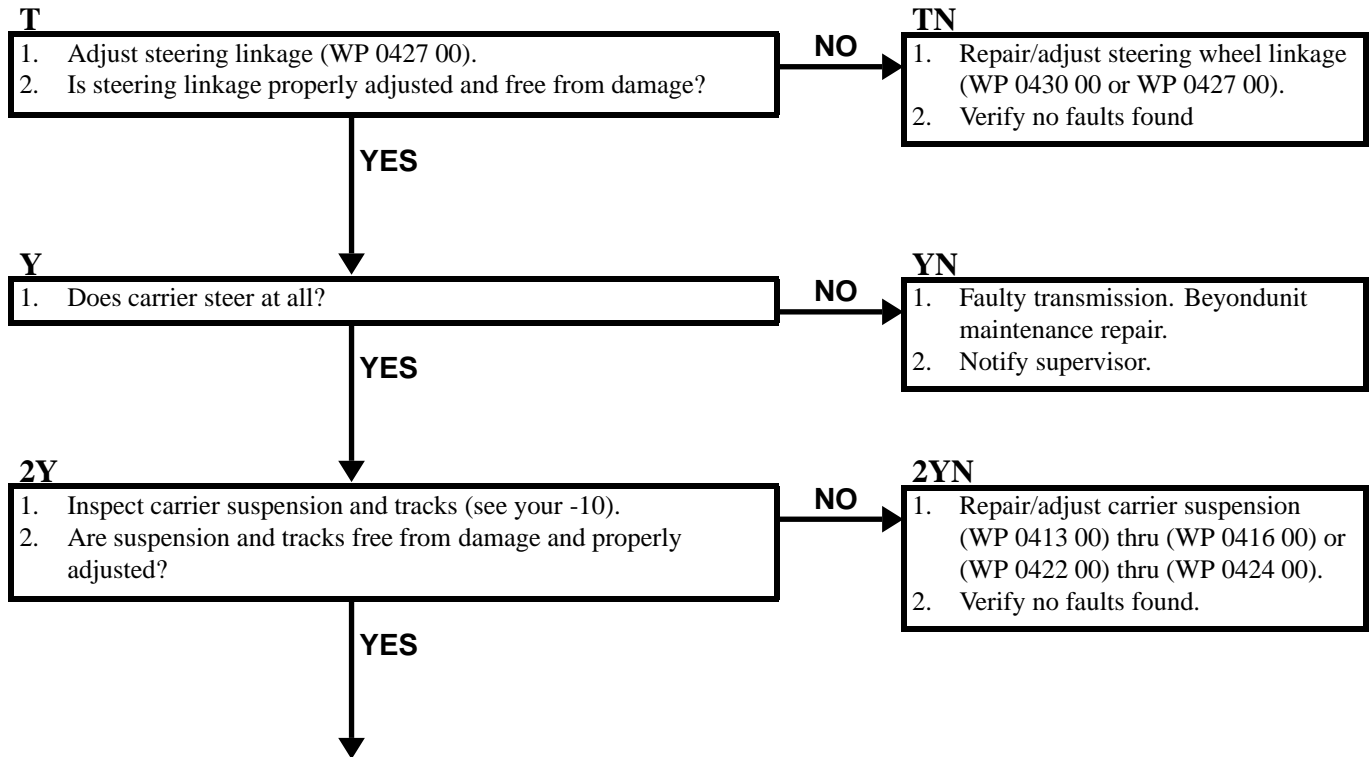
Trim vane lowered (see your -10)

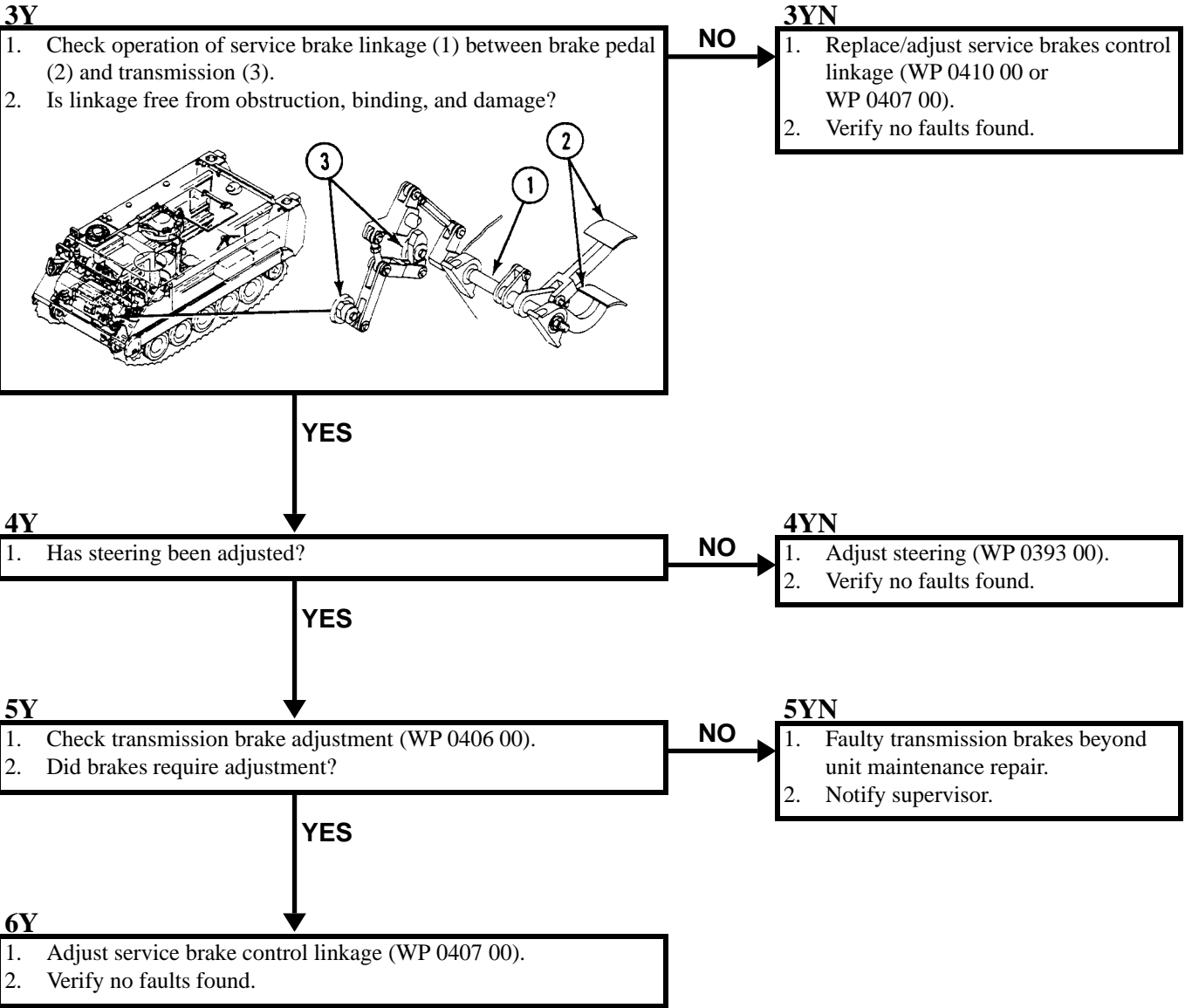
Power plant access door open (see your -10)

Personnel Required

Unit Mechanic

Helper (H)







**SERVICE AND/OR PARKING BRAKE WON'T HOLD CARRIER**

**0064 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Equipment Condition

Engine stopped (see your -10)

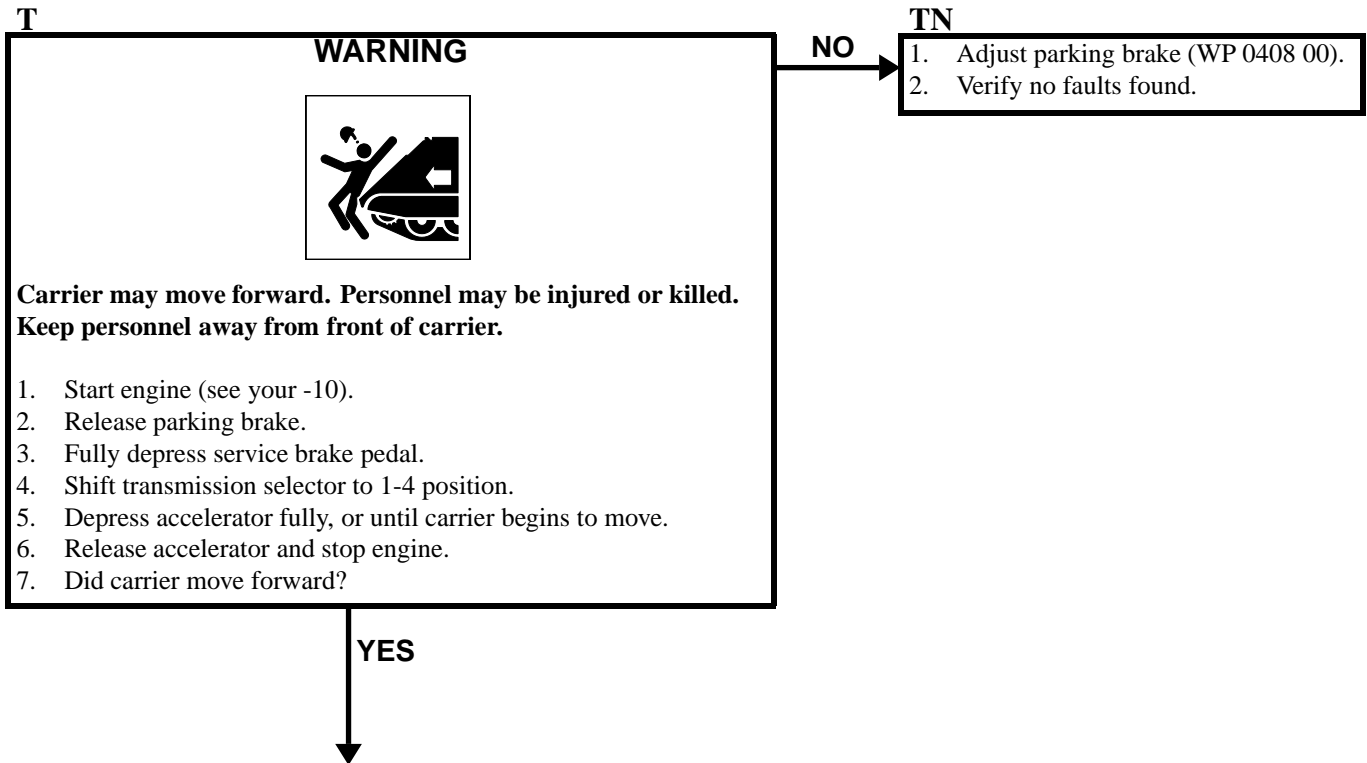
Carrier blocked (see your -10)

Trim vane lowered (see your -10)

Power plant access door open (see your -10)

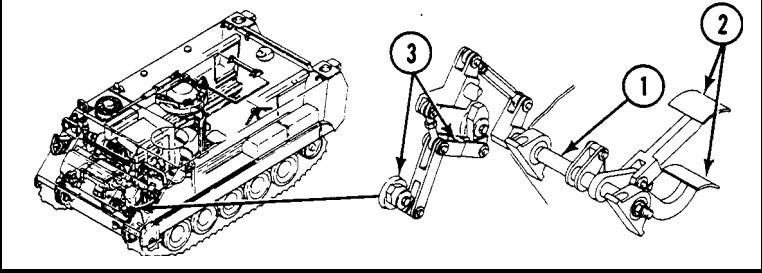
Personnel Required

Unit Mechanic



**Y**

1. Check operation of service brake linkage (1) between brake pedal (2) and transmission (3).
2. Is linkage free from obstruction, binding, and damage?



**NO**

**YN**

1. Replace/adjust service brakes control linkage (WP 0410 00 or WP 0407 00).
2. Verify no faults found.

**YES**

**2Y**

1. Check transmission brake adjustment (WP 0406 00).
2. Did brakes require adjustment?

**NO**

**2YN**

1. Faulty transmission brakes beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**3Y**

1. Check service brake control linkage adjustment (WP 0407 00).
2. Is service brake linkage properly adjusted?

**NO**

**3YN**

1. Adjust service brake control linkage (WP 0407 00).
2. Verify no faults found.

**YES**

**4Y**

1. Verify no faults found.

**TRANSMISSION WON'T UPSHIFT OR SHIFTS ERRATICALLY IN 1-4 POSITION**

**0065 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

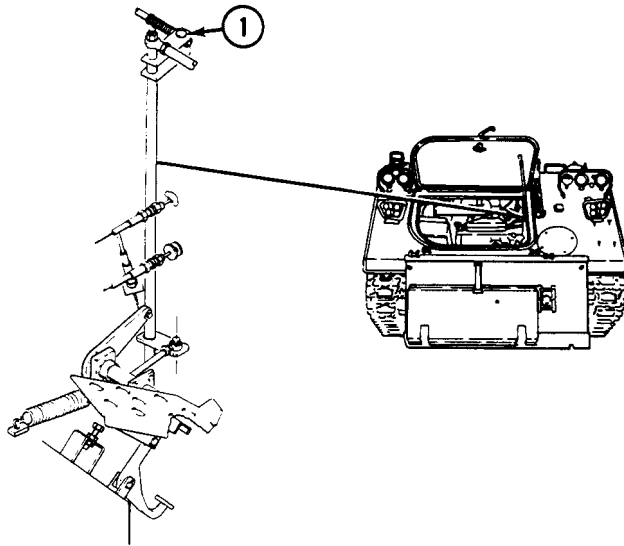
Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Trim vane lowered (see your -10)  
Power plant access door open (see your -10)  
Power plant rear upper access panel removed (see your -10)  
Transmission in SL

Personnel Required

Unit Mechanic

**T**

1. Measure distance between center of throttle linkage pin (1) and bulkhead.
2. Is center of pin between 1-1/16 and 1-1/8 inches (27 and 28.5 mm) from bulkhead?



**NO**

**TN**

1. Adjust accelerator linkage (WP 0214 00).
2. Verify no faults found.

**YES**

**TRANSMISSION WON'T UPSHIFT OR SHIFTS ERRATICALLY IN 1-4 POSITION—Continued**

0065 00

**Y**

1. Adjust throttle valve modulator (WP 0213 00).
2. Can throttle valve modulator be adjusted?

**NO**

**YN**

1. Replace throttle valve modulator and lever (WP 0218 00).
2. Verify no faults found.

**YES**

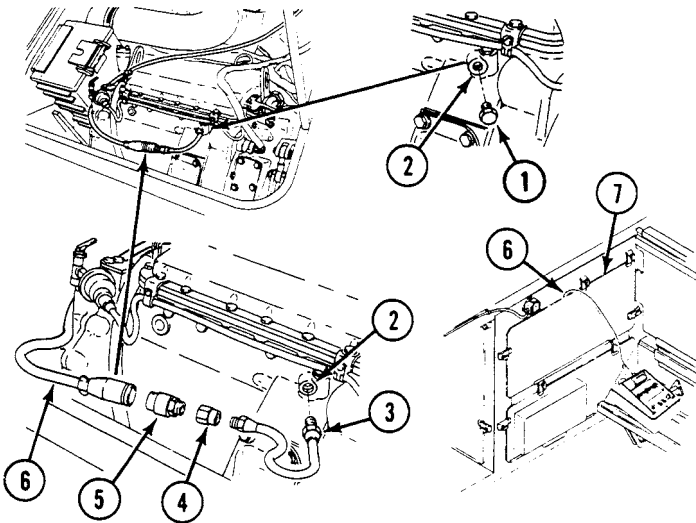
**2Y**

1. Remove plug (1) from GOVERNOR TWO (G2) pressure port (2).
2. Install STE/ICE 11669236 hose (3) into (G2) pressure port (2).
3. Install STE/ICE 444012 adapter (4) onto 11669236 hose (3).
4. Install STE/ICE 12258876 pressure transducer (5) onto 444012 adapter (4).
5. Hook up STE/ICE W4 cable (6) to transducer (5).
6. Route STE/ICE W4 cable (6) around left side of transmission, over engine, and thru power plant rear access opening (7) as shown.
7. Install rear upper access panel (see your -10) allowing W4 cable slack to reach VTM.
8. Close front power plant access door (see your -10).
9. Raise and secure trim vane (see your -10).
10. Hook up VTM to DCA 6.
11. Hook up STE/ICE W4 cable (6) to VTM jack J2TK.
12. Perform STE/ICE test 50 TM 9-4910-571-12&P with carrier traveling over flat, level terrain at 30 MPH and transmission selector in 1-4 position.
13. Does VTM read between 92 and 107 psi?

**NO**

**2YN**

1. Replace governor assembly (WP 0397 00).
2. Verify no faults found.



**YES**

---

**TRANSMISSION WON'T UPSHIFT OR SHIFTS ERRATICALLY IN 1-4  
POSITION—Continued**

---

0065 00

**3Y**

- |   |
|---|
| <ol style="list-style-type: none"><li>1. G2 pressure is OK.</li><li>2. Faulty transmission. Beyond unit maintenance repair.</li><li>3. Notify supervisor.</li></ol> |
|---|



**TRANSMISSION DOES NOT DOWNSHIFT IN 1-4 POSITION**

**0066 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Pressure Gage Kit (WP 0926 00, Item 35)

Personnel Required

Unit Mechanic

References

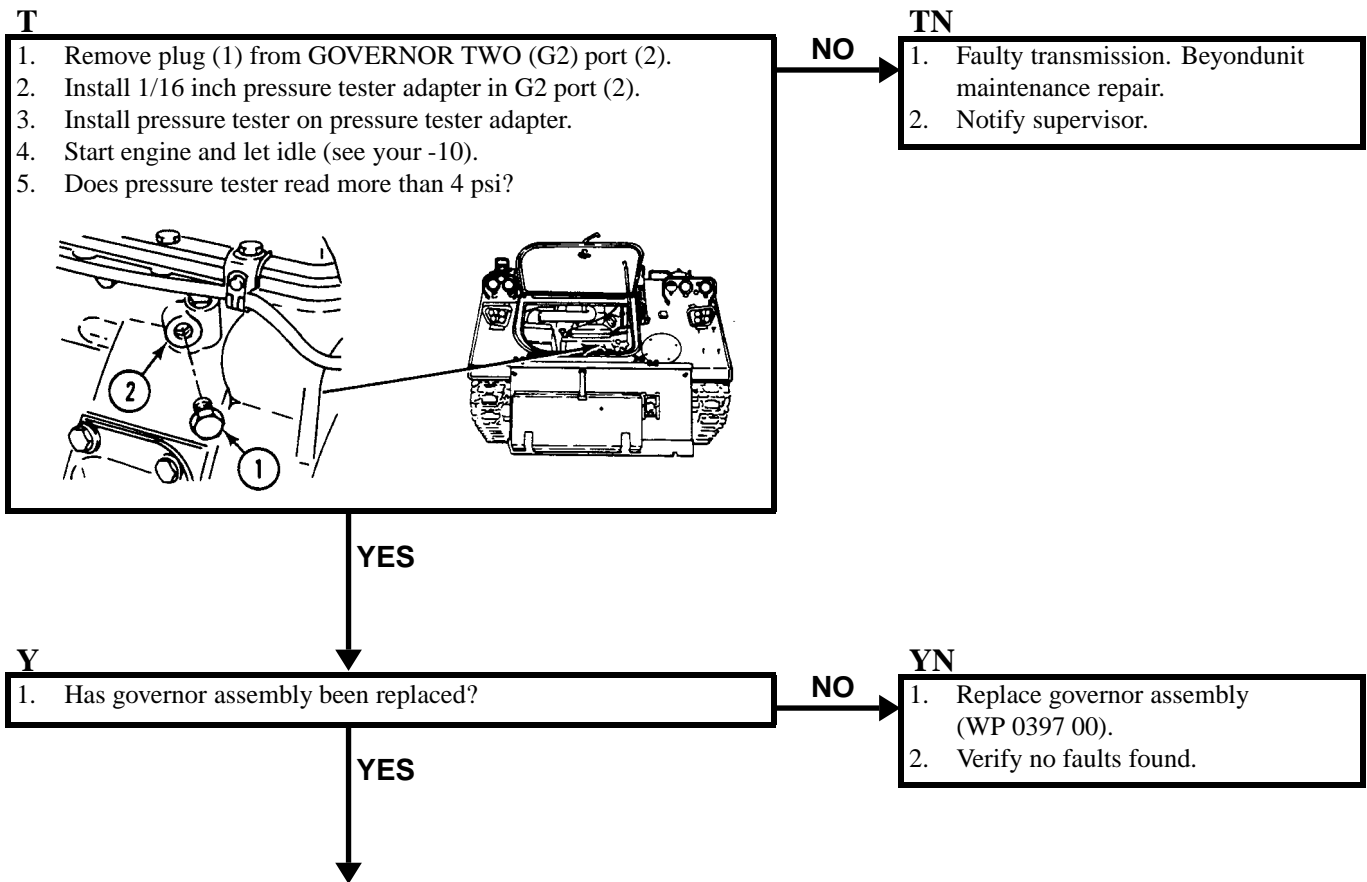
See your -10

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)
- Driver's power plant access panel removed (see your -10)
- Power plant rear access panel removed (see your -10)
- Transmission in SL

**NOTE**

**Pressure tester must read 4 psi. Any other reading indicates a fault.**



**2Y**

- |   |
|---|
| <ol style="list-style-type: none"><li>1. Faulty transmission. Beyond unit maintenance repair.</li><li>2. Notify supervisor.</li></ol> |
|---|



**TRANSMISSION DOES NOT HOLD 1ST POSITION**

**0067 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)
- Electrical Connector Pliers (WP 0926 00, Item 31)

Equipment Condition

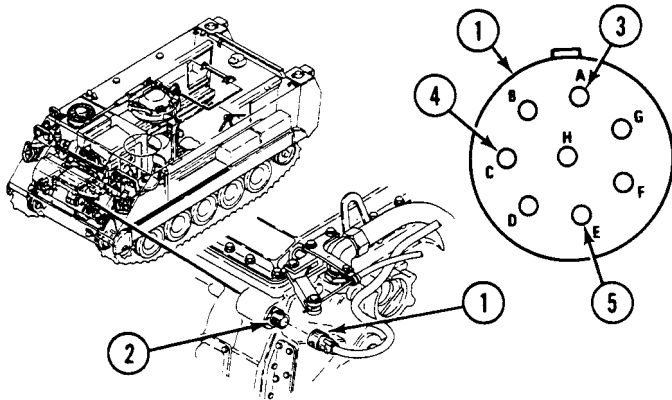
- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Transmission in 1 position
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)

Personnel Required

- Unit Mechanic
- Helper (H)

**T**

1. Remove harness 12349810 plug (1) from transmission jack (2).
2. Turn MASTER SWITCH to ON. See your -10.
3. Measure voltage between each socket on harness 12349810 plug (1) and ground. Multimeter should read 18 volts or more at sockets A (3), C (4), E (5), and 0 volts for all remaining socket checks.
4. Does multimeter read less than 18 volts at sockets A (3), C (4), and E (5), or more than 0 volts at all remaining sockets?



**YES**

**NO**

**TN**

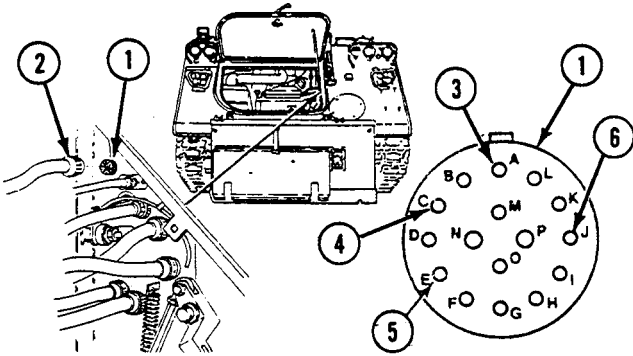
1. Faulty transmission. Beyond unit maintenance repair.
2. Notify supervisor.

TRANSMISSION DOES NOT HOLD 1ST POSITION—Continued

0067 00

**Y**

1. Remove harness 12349810 plug (1) from harness 12349813 jack (2) at carrier bulkhead.
2. Measure voltage between each socket on harness 12349813 jack (2) and ground. Multimeter should read 18 volts or more for sockets A (3), C (4), E (5), J (6), and 0 volts for the remaining socket checks.
3. Does multimeter read less than 18 volts at sockets A (3), C (4), E (5), and J (6), or more than 0 volts at all remaining sockets?



**NO**

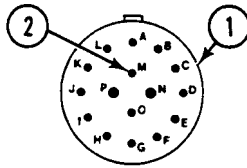
**YN**

1. Faulty harness 12349810 (transmission control wiring harness). Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**2Y**

1. Turn MASTER SWITCH to OFF. See your -10.
2. Install harness 12349810 plug on transmission jack.
3. Remove transmission controller (WP 0386 00) or (WP 0387 00).
4. Measure resistance between transmission controller jack (1) pin M (2) and pins A thru G. Multimeter should read 0 ohms for pins A, C, and E, and infinity for all remaining pin checks.
5. Does multimeter read more than 0 ohms for pins A, C, and E, or less than infinity for all remaining pins?



**NO**

**2YN**

1. Install transmission controller (WP 0386 00) or (WP 0387 00).
2. Faulty harness 12349813 (transmission wiring harness). Beyond unit maintenance repair.
3. Notify supervisor.

**YES**

**3Y**

1. Install harness 12349810 plug on harness 12349813 jack at carrier bulkhead.
2. Replace faulty transmission controller switch (WP 0389 00).
3. Perform pin to pin check (WP 0060 00).
4. Verify no faults found .



**TRANSMISSION DOES NOT HOLD 2ND POSITION**

**0068 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)
- Electrical Connector Pliers (WP 0926 00, Item 31)

Equipment Condition

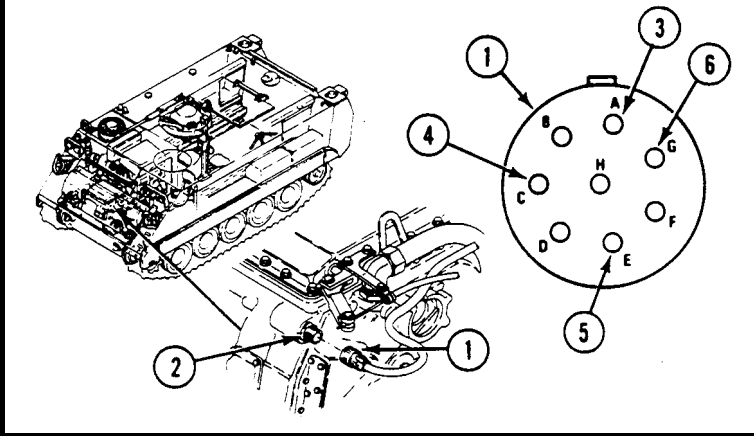
- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Transmission in 1-2 position
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)

Personnel Required

- Unit Mechanic
- Helper (H)

**T**

1. Remove harness 12349810 plug (1) from transmission jack (2).
2. Turn MASTER SWITCH to ON.
3. Measure voltage between each socket on harness 12349810 plug (1) and ground. Multimeter should read 18 volts or more at socket A (3), C (4), E (5), and G (6), and read 0 volts for all remaining sockets.
4. Does multimeter read less than 18 volts at sockets A (3), C (4), E (5), and G (6), or more than 0 volts at all remaining sockets?



**YES**



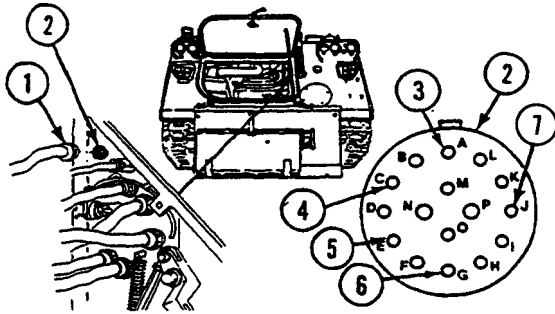
**NO**

**TN**

1. Faulty transmission. Beyond unit maintenance repair.
2. Notify supervisor.

**Y**

1. Remove harness 12349810 plug (1) from harness 12349813 jack (2) at carrier bulkhead.
2. Measure voltage between each socket on harness 12349813 jack (2) and ground. Multimeter should read 18 volts or more for socket A (3), C (4), E (5), G (6), and J (7), and 0 volts for the remaining socket checks.



3. Does multimeter read less than 18 volts at sockets A, C, E, G, and J, or more than 0 volts for all remaining sockets?

**NO**

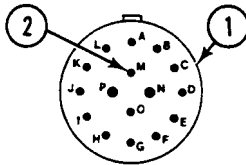
**YN**

1. Faulty harness 12349810 (transmission control wiring harness). Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**2Y**

1. Turn MASTER SWITCH to OFF. See your -10.
2. Install harness 12349810 plug on transmission jack.
3. Remove transmission controller (WP 0386 00) or (WP 0387 00).
4. Measure resistance between transmission controller jack (1) pin M (2), and pins A thru G. Multimeter should read 0 ohms for pins A, C, E and G, and infinity for all other pins.
5. Does multimeter read more than 0 ohms for pins A, C, E, and G, or less than infinity for all remaining pins?



**NO**

**2YN**

1. Install transmission controller (WP 0386 00) or (WP 0387 00).
2. Faulty harness 12349813 (transmission wiring harness). Beyond unit maintenance repair.
3. Notify supervisor.

**YES**

**3Y**

1. Install harness 12349810 plug on harness 12349813 jack at carrier bulkhead.
2. Replace faulty transmission controller switch (WP 0389 00).
3. Perform pin to pin check (WP 0060 00).
4. Verify no faults found .





**TRANSMISSION DOES NOT HOLD 3RD POSITION**

**0069 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)
- Electrical Connector Pliers (WP 0926 00, Item 31)

Equipment Condition

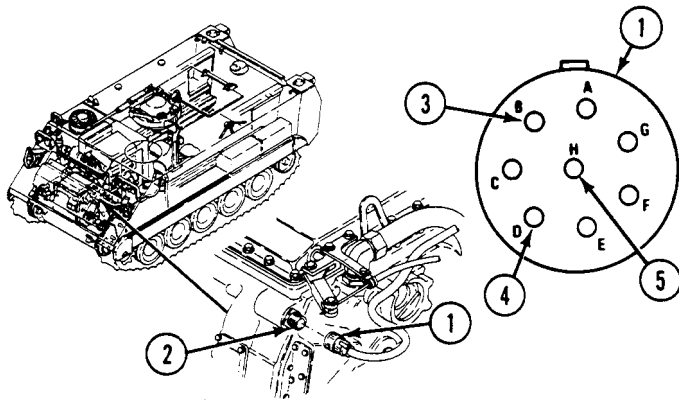
- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Transmission in 1-3 position
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)

Personnel Required

Unit Mechanic

**T**

1. Remove harness 12349810 plug (1) from transmission jack (2).
2. Turn MASTER SWITCH to ON.
3. Measure voltage between each socket on harness 12349810 plug (1) and ground. Multimeter should read 0 volts at socket B (3), D (4), and H (5), and at least 18 volts for all remaining socket checks.
4. Does multimeter read more than 0 volts at sockets B (3), D (4), and H (5), or less than 18 volts at all remaining sockets?



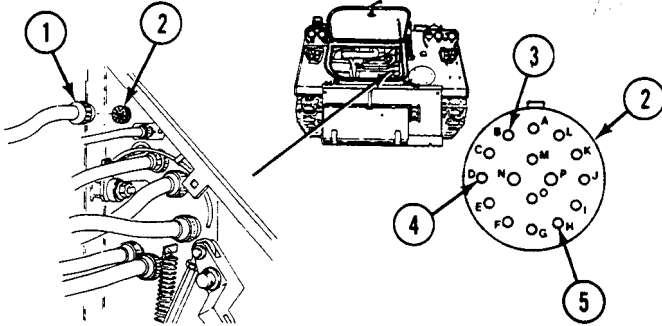
**YES**

**TN**

1. Faulty transmission. Beyond unit maintenance repair.
2. Notify supervisor.

**Y**

1. Remove harness 12349810 plug (1) from harness 12349813 jack (2) at carrier bulkhead.
2. Measure voltage between each socket on harness 12349813 jack (2) and ground. Multimeter should read 0 volts for sockets B (3), D (4), and H (5), and at least 18 volts for the remaining socket checks.
3. Does multimeter read more than 0 volts at sockets B (3), D (4), and H (5), or less than 18 volts at all remaining sockets?



**NO**

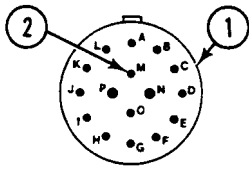
**YN**

1. Faulty harness 12349810 (transmission control wiring harness). Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**2Y**

1. Turn MASTER SWITCH to OFF.
2. Install harness 12349810 plug on transmission jack.
3. Remove transmission controller (WP 0386 00 or WP 0387 00).
4. Measure resistance between transmission controller jack (1) pin M (2), and pins A thru G. Multimeter should read infinity for pins B and D, and read 0 ohms for pins A, C, E, F, and G.
5. Does multimeter read less than infinity for pins B and D, or more than 0 ohms for pins A, C, E, and G?



**NO**

**2YN**

1. Install transmission controller (WP 0386 00 or WP 0387 00).
2. Faulty harness 12349813 (transmission wiring harness). Beyond unit maintenance repair.
3. Notify supervisor.

**YES**

**3Y**

1. Install harness 12349810 plug on harness 12349813 jack at carrier bulkhead.
2. Replace faulty transmission controller switch (WP 0389 00).
3. Perform pin to pin check (WP 0060 00).
4. Verify no faults found.



**TRANSMISSION DOES NOT REVERSE**

**0070 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)
- Electrical Connector Pliers (WP 0926 00, Item 31)

Equipment Condition

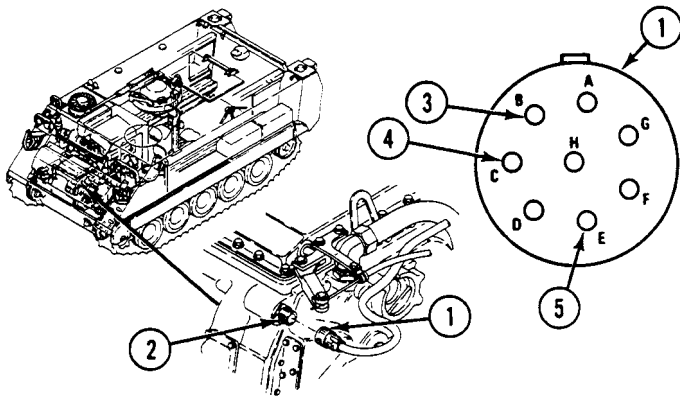
- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Transmission in R position
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)

Personnel Required

- Unit Mechanic
- Helper (H)

**T**

1. Remove harness 12349810 plug (1) from transmission jack (2).
2. Turn MASTER SWITCH to ON.
3. Measure voltage between each socket on harness 12349810 plug (1) and ground. Multimeter should read 18 volts or more at socket B (3), C (4), and E (5), and 0 volts for all remaining socket checks.
4. Does multimeter read less than 18 volts at sockets B (3), C (4), and E (5), or more than 0 volts at all remaining sockets?



**YES**

**NO**

**TN**

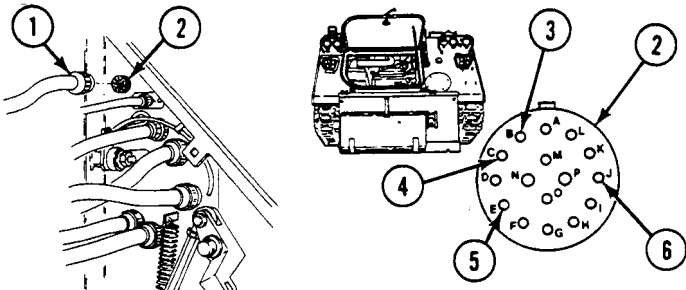
1. Faulty transmission, Beyond unit maintenance repair.
2. Notify supervisor.

TRANSMISSION DOES NOT REVERSE—Continued

0070 00

**Y**

1. Remove harness 12349810 plug (1) from harness 12349813 jack (2) at carrier bulkhead.
2. Measure voltage between each socket on harness 12349813 jack (2) and ground. Multimeter should read 18 volts or more for socket B (3), C (4), E (5), and J (6), and 0 volts for the remaining socket checks.
3. Does multimeter read less than 18 volts at sockets B (3), C (4), E (5), and J (6), or more than 0 volts at all remaining sockets?



**NO**

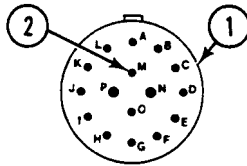
**YN**

1. Faulty harness 12349810 (transmission control wiring harness). Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**2Y**

1. Turn MASTER SWITCH to OFF.
2. Install harness 12349810 plug on transmission jack.
3. Remove transmission controller (WP 0386 00 or WP 0387 00).
4. Measure resistance between transmission controller jack (1) pin M (2) and pins A thru G. Multimeter should read 0 ohms for pins B, C, and E, and read infinity for all remaining pins.
5. Does multimeter read more than 0 ohms for pins B, C, and E, or less than infinity for all remaining pins?



**NO**

**2YN**

1. Install transmission controller (WP 0386 00 or WP 0387 00).
2. Faulty harness 12349813 (transmission wiring harness). Beyond unit maintenance repair.
3. Notify supervisor.

**YES**

---

**TRANSMISSION DOES NOT REVERSE—Continued**

---

**0070 00****3Y**

1. Install harness 12349810 plug on harness 12349813 jack at carrier bulkhead.
2. Replace faulty transmission controller switch (WP 0389 00).
3. Perform pin to pin check (WP 0060 00).
4. Verify no faults found.





**TRANSMISSION DOES NOT PIVOT STEER**

**0071 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)
- Electrical Connector Pliers (WP 0926 00, Item 31)

Equipment Condition

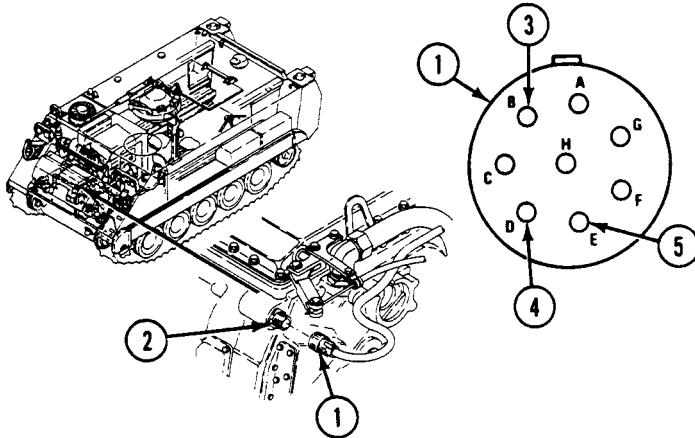
- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Transmission in PV position
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)

Personnel Required

- Unit Mechanic
- Helper (H)

**T**

1. Remove harness 12349810 plug (1) from transmission jack (2).
2. Turn MASTER SWITCH to ON (see your -10).
3. Measure voltage between each socket on harness 12349810 plug (1) and ground. Multimeter should read 18 volts or more at sockets B (3), D (4), and E (5), and 0 volts for all remaining socket checks.
4. Does multimeter indicate an incorrect reading?



**YES**

**NO**

**TN**

1. Faulty transmission. Beyond unit maintenance repair.
2. Notify supervisor.

TRANSMISSION DOES NOT PIVOT STEER—Continued

0071 00

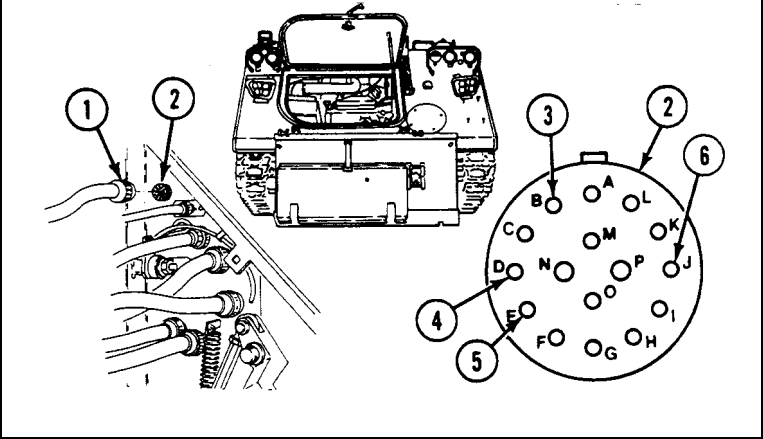
**Y**

1. Remove harness 12349810 plug (1) from harness 12349813 jack (2) at carrier bulkhead.
2. Measure voltage between each socket on harness 12349813 jack (2) and ground. Multimeter should read 18 volts or more for socket B (3), D (4), E (5), and J (6), and 0 volts for all remaining socket checks.
3. Does multimeter indicate an incorrect reading?

**NO**

**YN**

1. Faulty harness 12349810 (transmission control wiring harness). Beyond unit maintenance repair.
2. Notify supervisor.



**YES**

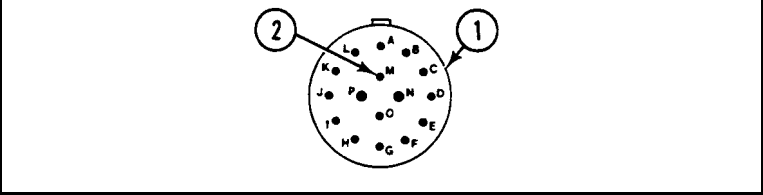
**2Y**

1. Turn MASTER SWITCH to OFF.
2. Install harness 12349810 plug on transmission jack.
3. Remove transmission controller (WP 0386 00 or WP 0387 00).
4. Measure resistance between transmission controller jack (1) pin M (2) and pins A thru G. Multimeter should read 0 ohms for pins B, D, and E, and infinity for all remaining pin checks.
5. Does multimeter indicate an incorrect reading?

**NO**

**2YN**

1. Install transmission controller (WP 0386 00 or WP 0387 00).
2. Faulty harness 12349813 (transmission wiring harness). Beyond unit maintenance repair.
3. Notify supervisor.



**YES**

---

**TRANSMISSION DOES NOT PIVOT STEER—Continued**

---

**0071 00****3Y**

1. Install harness 12349810 plug on harness 12349813 jack at carrier bulkhead.
2. Replace faulty transmission controller switch (WP 0389 00).
3. Perform pin to pin check (WP 0060 00).
4. Verify no faults found.



**TRANSMISSION HIGH TEMP INDICATOR COMES ON**

**0072 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Pressure Gauge Kit (WP 0926 00, Item 35)

Personnel Required

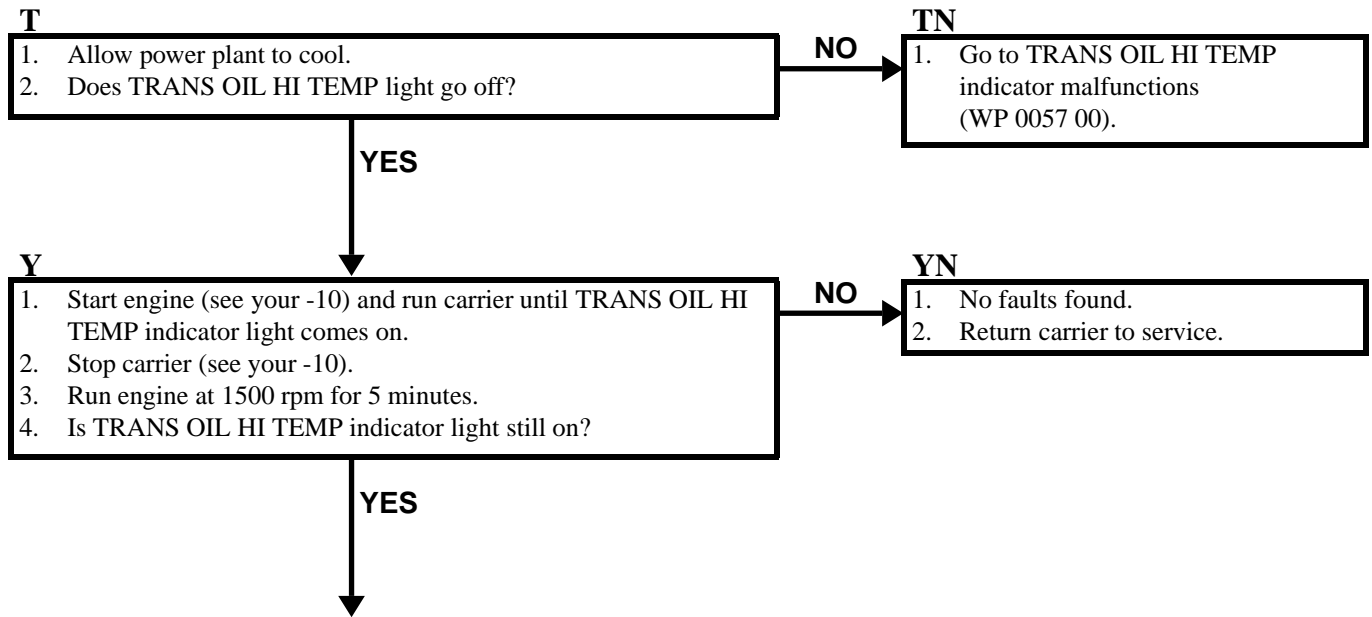
Unit Mechanic

References

- See your -10
- See your PMCS

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Transmission in SL
- Transmission oil level checked (see your PMCS)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)
- Driver's power plant access panel removed (see your -10)
- Power plant rear access panel removed (see your -10)

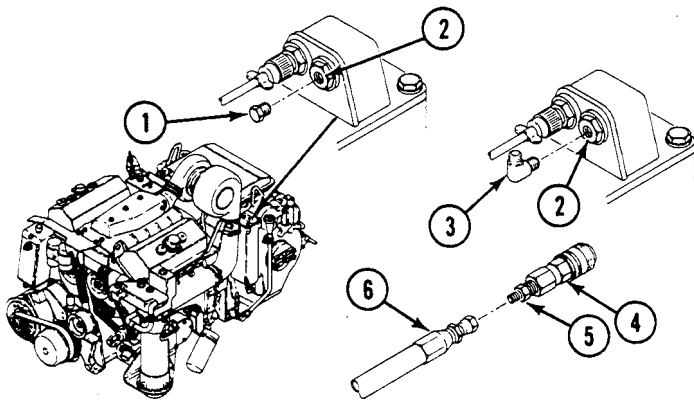


2Y

1. Stop engine (see your -10).
2. Remove plug (1) from MAIN port (2) on top of filter housing.
3. Install 4730-231-5632 elbow (3) into MAIN port (2).
4. Remove quick disconnect (4) and adapter (5) from test hose (6).
5. Install test hose (6) onto elbow (3).
6. Start engine (see your -10).
7. With engine at 600 rpm, measure MAIN pressure with transmission in R, and then in 1-4 position. Use 400 psi gauge. Pressure should be 280-325 psi in R. Pressure should be 190-210 psi in 1-4 position.
8. Does pressure tester indicate an incorrect reading?

NO

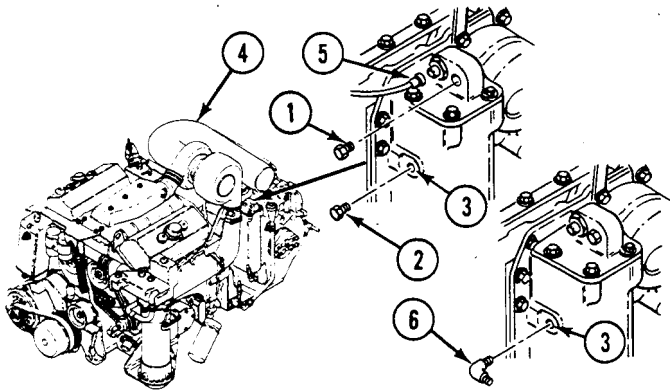
GO TO BY (PAGE 0072 00-4)



YES

**3Y**

1. Stop engine (see your -10).
2. Remove pressure tester, elbow, and install MAIN port plug (1).
3. Remove plug (2) from FILTER IN port (3).
4. Remove turbo air inlet duct (4) and trans filter clogged switch plug (5).
5. Install 4730-766-9000 elbow (6) into FILTER IN port (3).
6. Install pressure tester into elbow (6).
7. Install turbo air inlet duct (4).
8. Start engine (see your -10).
9. With engine at 600 rpm, measure FILTER IN pressure with transmission in R, and then in 1-4 position. Pressure should be 280-325 psi in R. Pressure should be 190-210 psi in 1-4 position.
10. Is FILTER IN pressure 35 psi or more greater than MAIN pressure?



**NO**

GO TO **CY** (PAGE 0072 00-4)

**YES**

**4Y**

1. Is TRANS FILTER CLOGGED indicator ON?

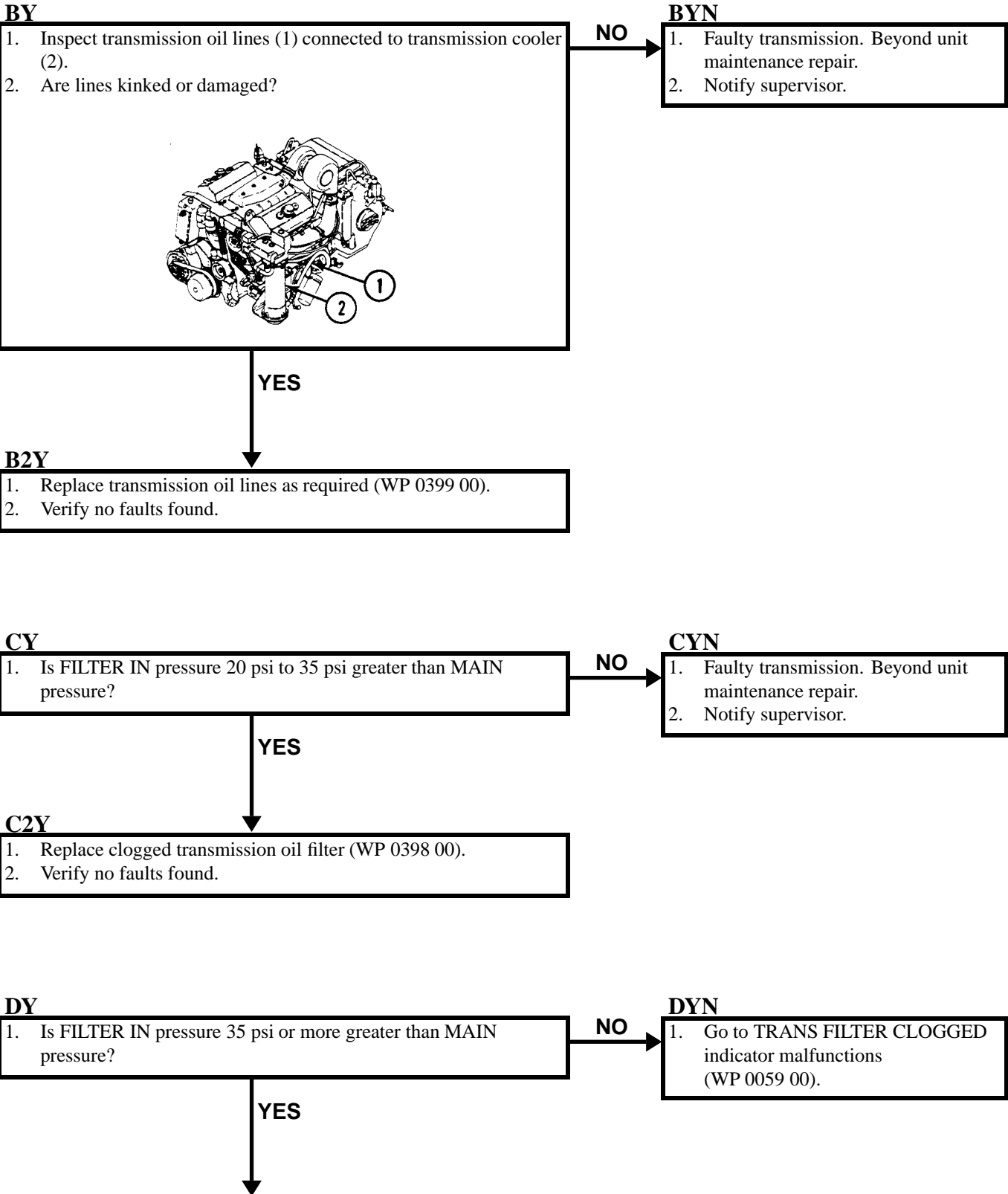
**NO**

GO TO **DY** (PAGE 0072 00-4)

**YES**

**5Y**

1. Stop engine (see your -10).
2. Replace transmission oil filter element (WP 0398 00).
3. Verify no faults found.





**D2Y**

1. Faulty transmission. Beyond unit maintenance repair.
2. Notify supervisor.



**TRANSMISSION LOW LUBE INDICATOR COMES ON**

**0073 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

- Fitting Kit (WP 0926 00, Item 21)
- Pressure Gauge Kit (WP 0926 00, Item 35)
- General Mechanic's Tool Kit (WP 0926 00, Item 65)

Personnel Required

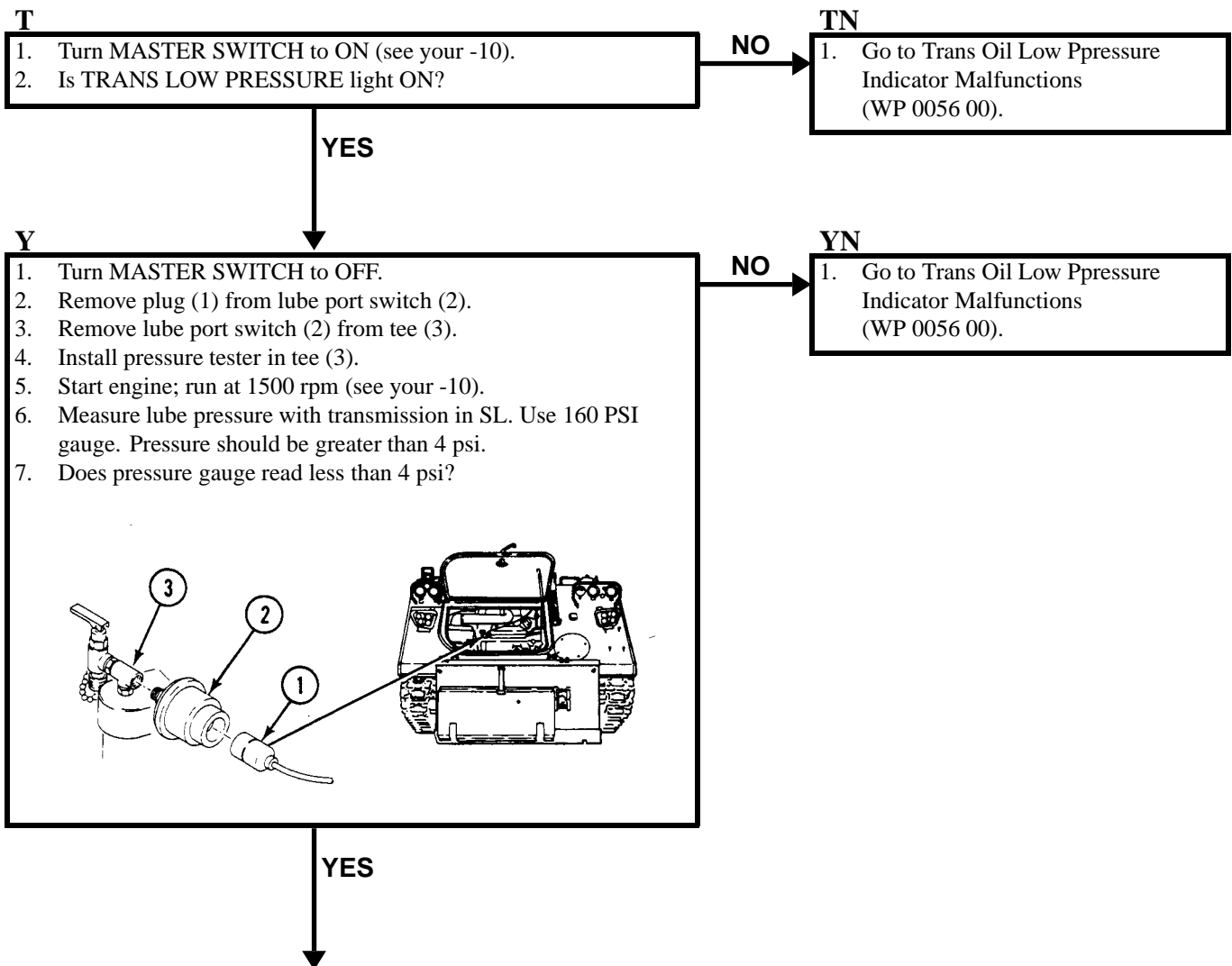
Unit Mechanic

References

- See your -10
- See your PMCS

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Parking brake off (see your -10)
- Transmission in SL
- Transmission oil level checked (see your PMCS)
- Power plant warm
- Idle speed set at 600 rpm
- Trim vane down (see your -10)
- Power engine access door open (see your -10)
- Driver access panel removed (see your -10)
- Rear access panel removed (see your -10)



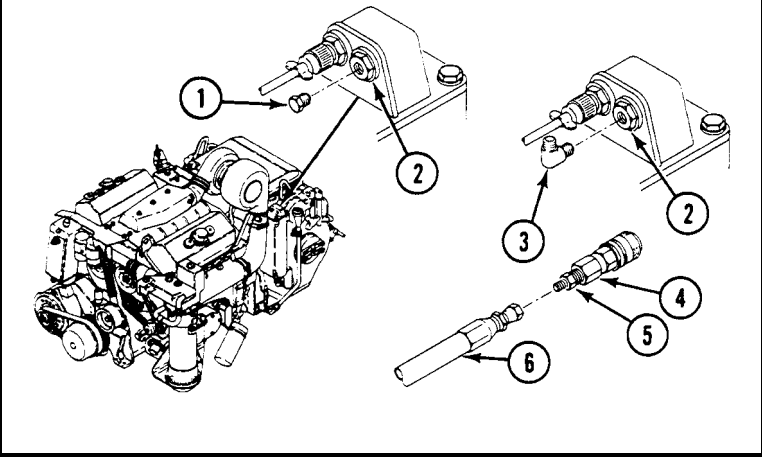
**2Y**

1. Stop engine (see your -10).
2. Remove pressure tester and install switch.
3. Remove plug (1) from MAIN port (2).
4. Install 4730-231-5632 elbow (3) into MAIN port (2).
5. Remove quick disconnect (4) and adapter (5) from test hose (6).
6. Install test hose (6) on elbow (3).
7. Start engine (see your -10).
8. With engine at 600 rpm, measure MAIN pressure with transmission in R and then in 1-4 position. Use 400 PSI gauge. Pressure should be 280-325 psi in R. Pressure should be 190-210 psi in 1-4 position.
9. Does pressure gauge reading differ from step 8, above?

**NO**

**2YN**

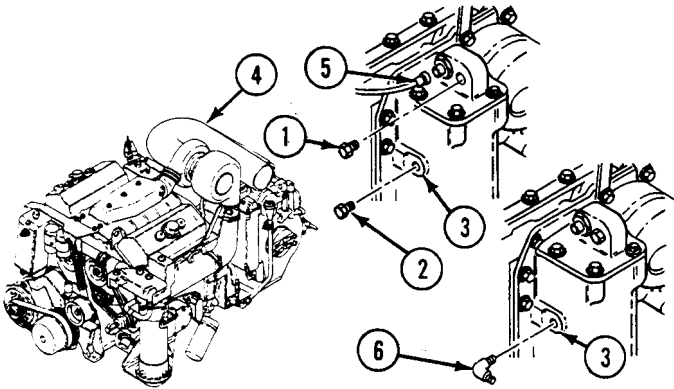
1. Transmission low lube pressure. Beyond unit maintenance repair.
2. Notify supervisor.



**YES**

**3Y**

1. Stop engine (see your -10).
2. Remove pressure tester and install MAIN port plug (1).
3. Remove plug (2) from FILTER IN port (3).
4. Remove turbo air inlet duct (4) and trans filter clogged switch plug (5).
5. Install 4730-766-9000 elbow (6) into FILTER IN port (3).
6. Install pressure tester onto elbow (6). Use 400 PSI gauge.
7. Install turbo air inlet duct (4).
8. Start engine (see your -10).
9. With engine at 600 rpm, measure FILTER IN pressure with transmission in R and then in 1-4 position. FILTER IN pressure should be within 35 psi of MAIN pressure.
10. Is FILTER IN pressure, at 35 psi or more, greater than MAIN pressure?



**NO**

GO TO AY (PAGE 0073 00-4)

**YES**

**4Y**

1. Is trans filter clogged indicator ON?

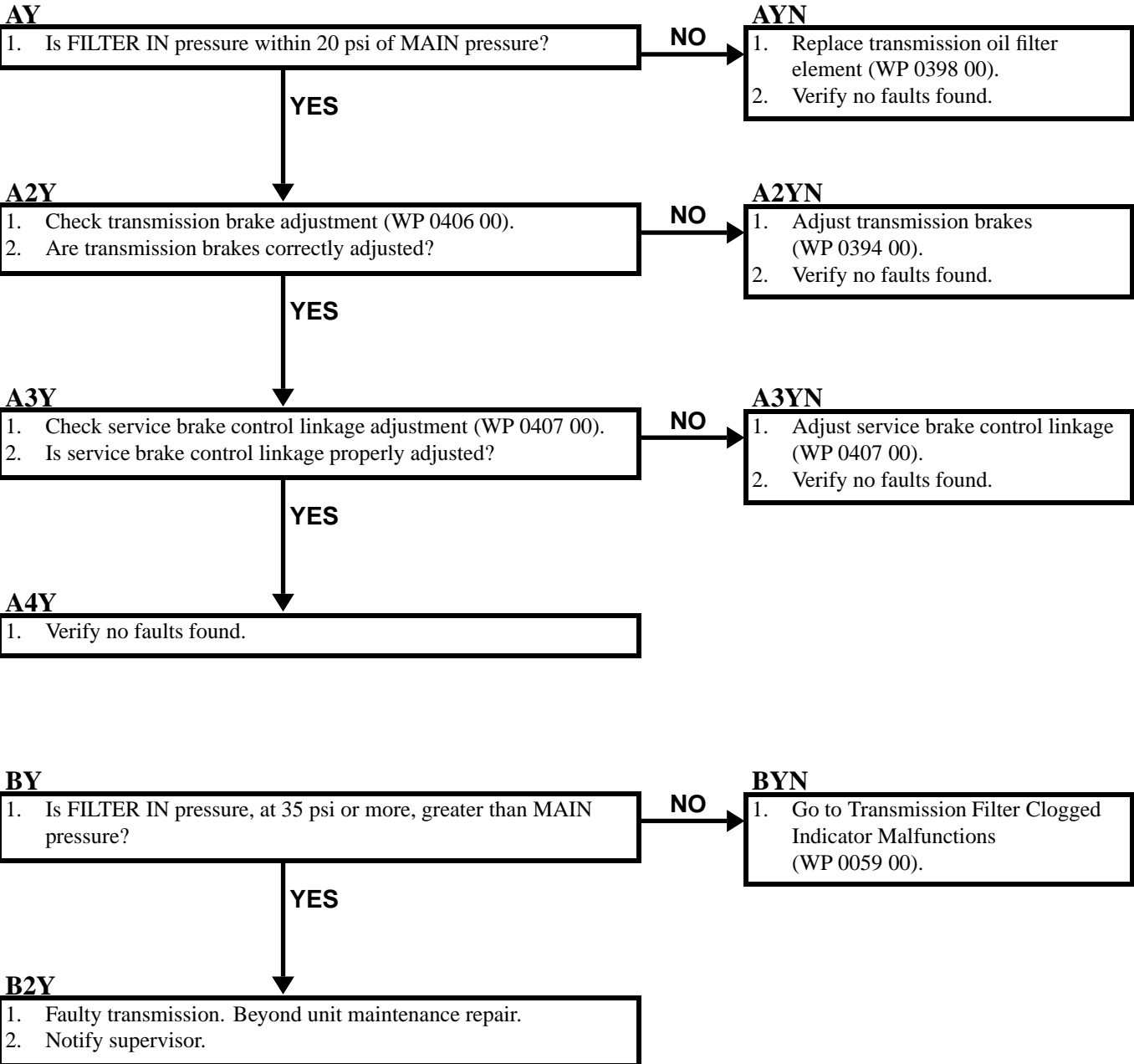
**NO**

GO TO BY (PAGE 0073 00-4)

**YES**

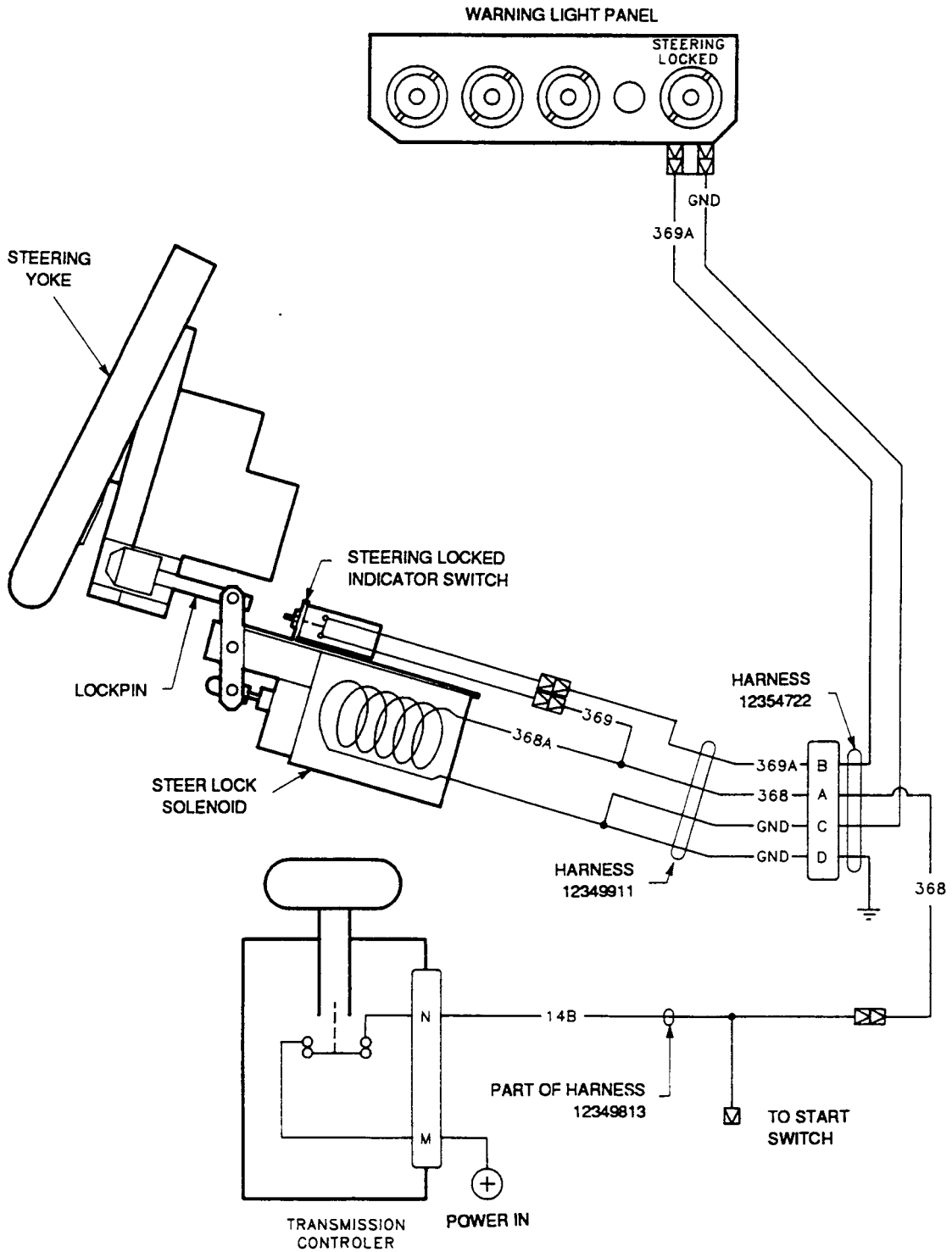
**5Y**

1. Stop engine (see your -10).
2. Replace transmission oil filter element (WP 0398 00).
3. Verify no faults found.



STEERING LOCK SCHEMATIC (SOLENOID-ACTIVATED LOCK)

0074 00

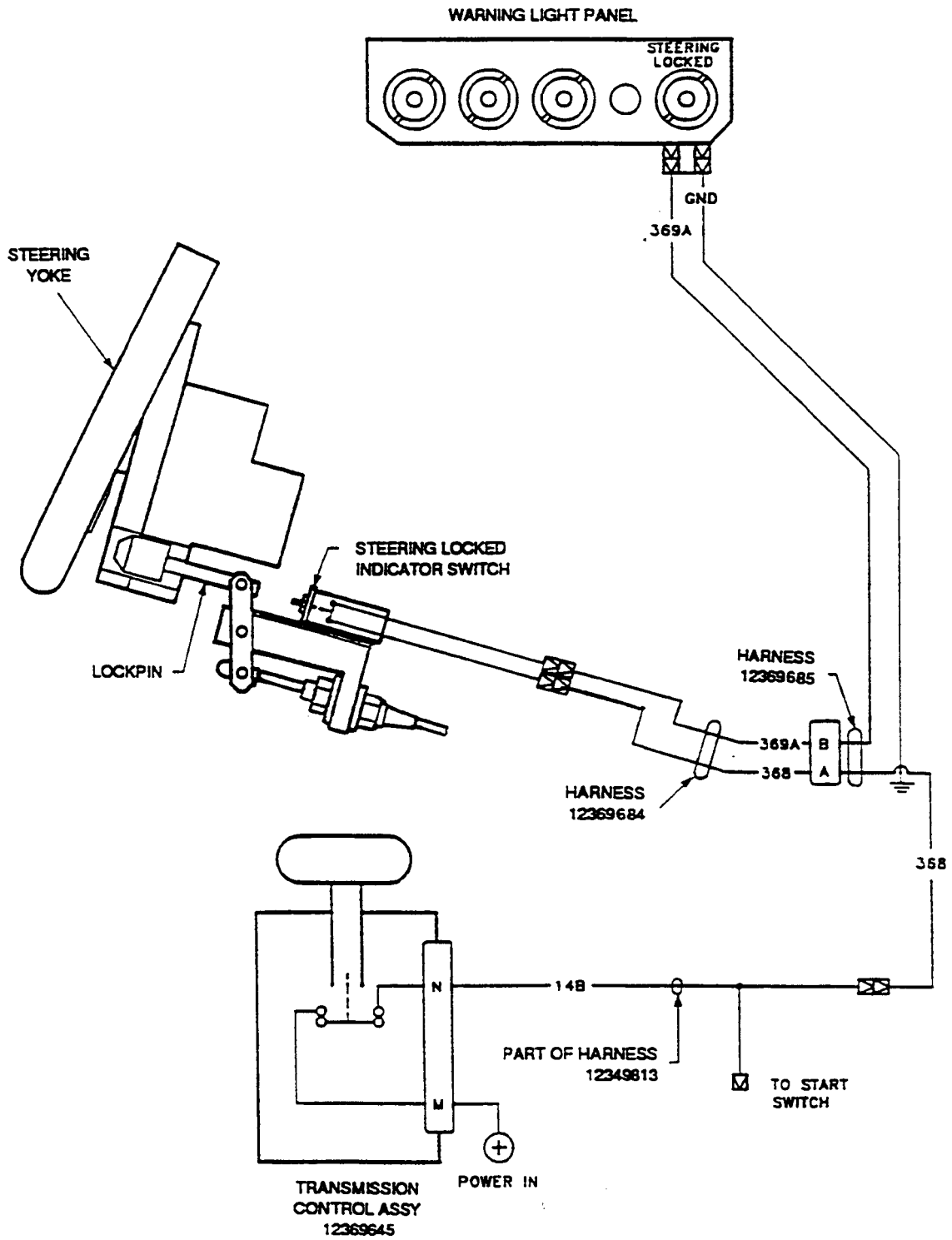






STEERING LOCK SCHEMATIC (CABLE-ACTIVATED LOCK)

0075 00





**SOLENOID-ACTIVATED STEERING LOCK MALFUNCTIONS**

**0076 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Multimeter (WP 0926 00, Item 30)

Equipment Condition

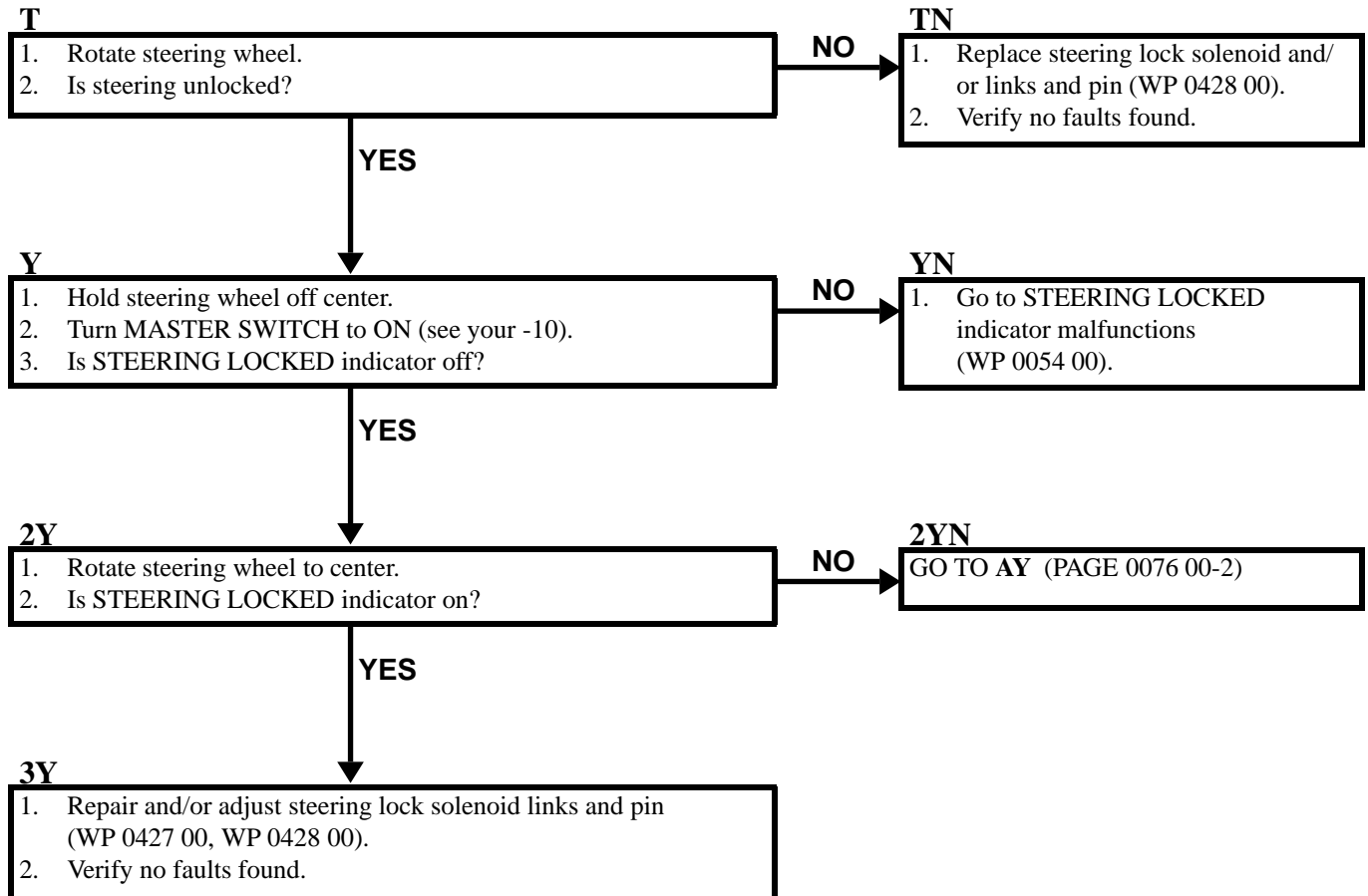
Engine stopped (see your -10)

Carrier blocked (see your -10)

Transmission controller in SL

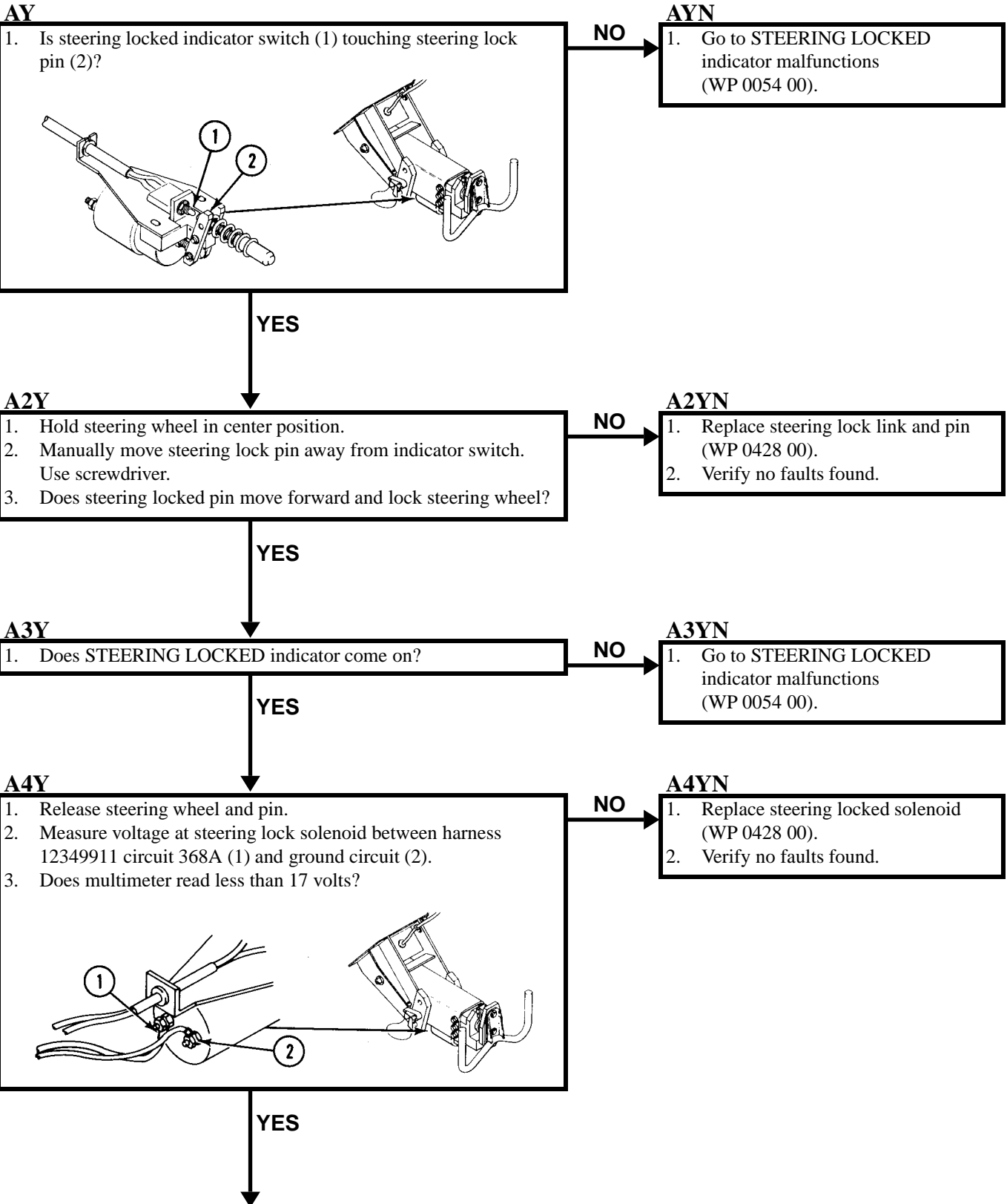
Personnel Required

Unit Mechanic



SOLENOID-ACTIVATED STEERING LOCK MALFUNCTIONS—Continued

0076 00



**A5Y**

- |   |
|---|
| <ol style="list-style-type: none"><li>1. Repair harness 12345911 (WP 0367 00).</li><li>2. Verify no faults found.</li></ol> |
|---|



**CABLE-ACTIVATED STEERING LOCK MALFUNCTIONS**

**0077 00**

**INITIAL SETUP:**

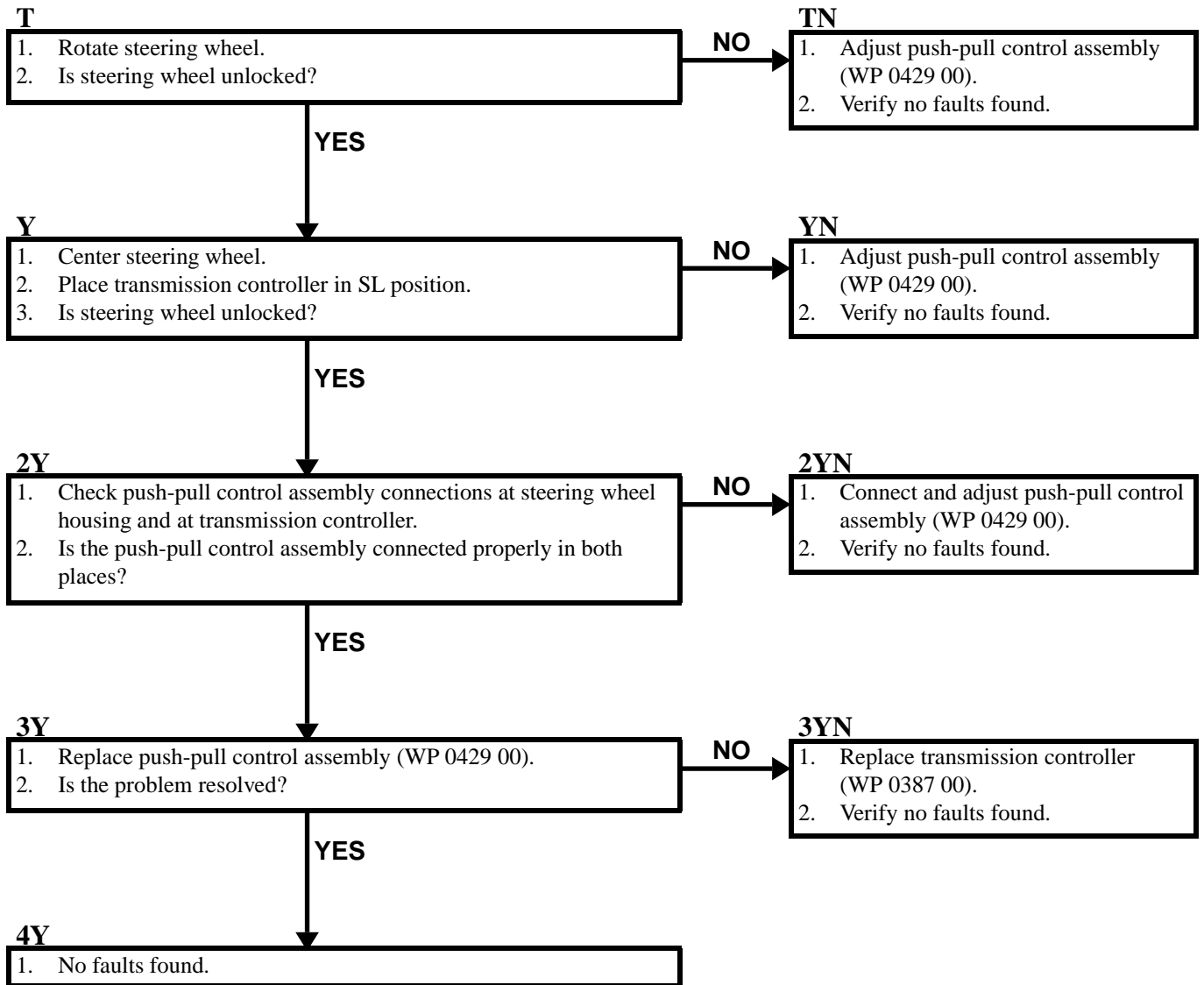
Maintenance Level  
Unit

References  
See your -10

Tools and Special Tools  
General Mechanic's Tool Kit (WP 0926 00, Item 65)

Equipment Condition  
Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Transmission controller in any position except SL

Personnel Required  
Unit Mechanic

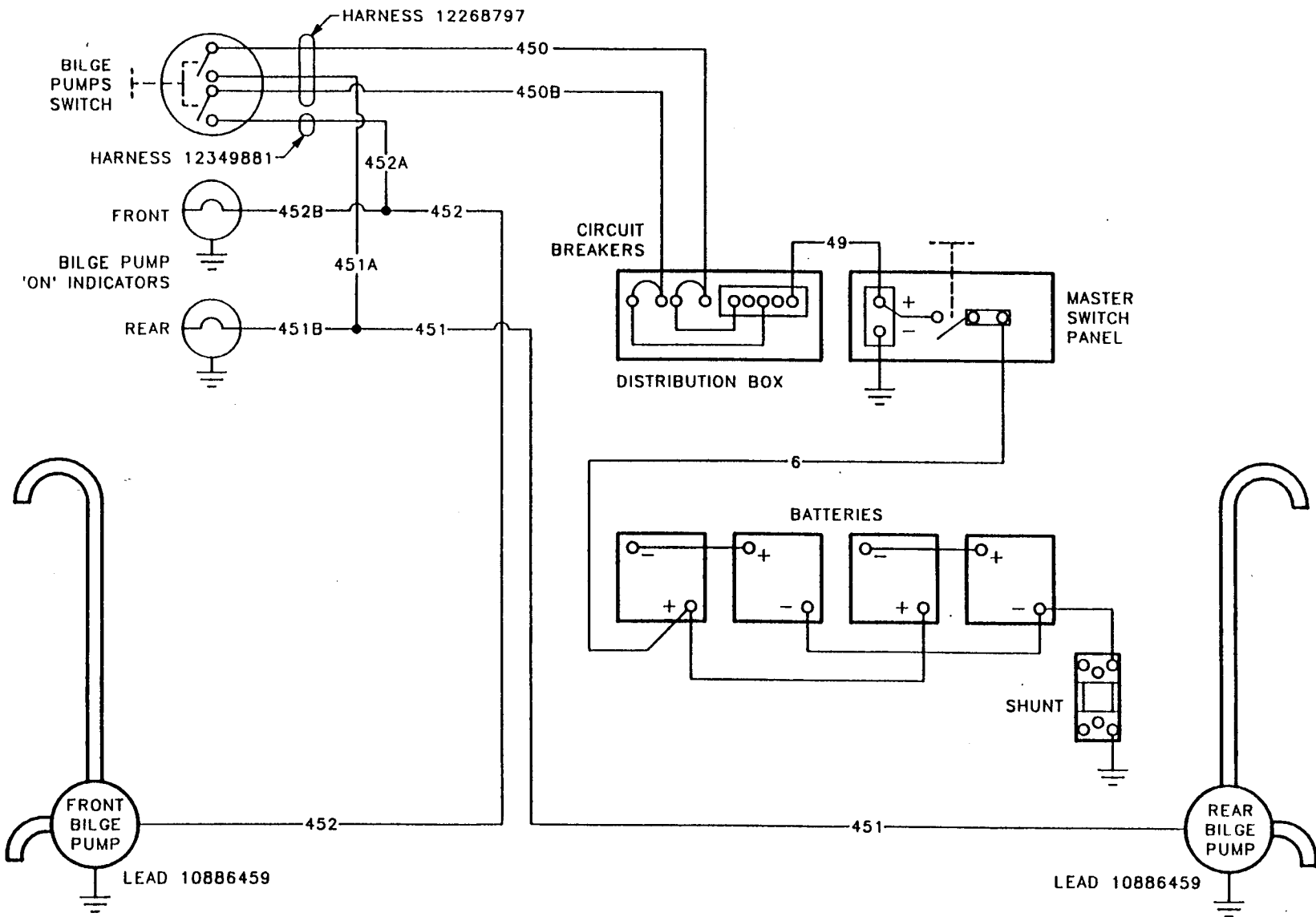






BILGE PUMP SCHEMATIC (ALL EXCEPT M981A3)

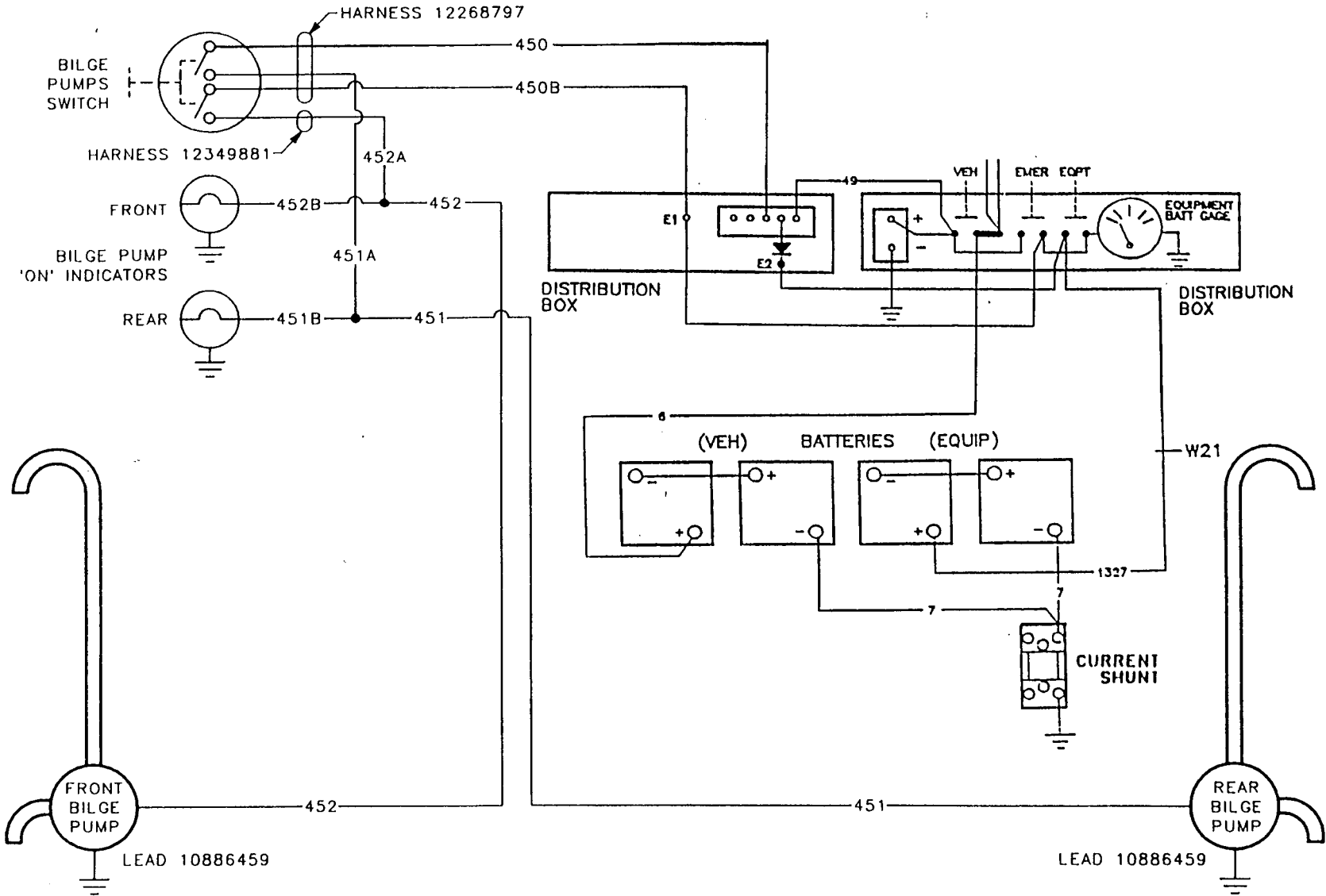
0078 00



0078 00-1/2 blank



0079 00-1/2 blank



**BILGE PUMP SCHEMATIC (M981A3 ONLY)**

**0079 00**

TM 9-2350-277-20-1



**FRONT AND/OR REAR BILGE PUMP(S) AND/OR LIGHTS DON'T WORK**

**0080 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)

Personnel Required

Unit Mechanic

References

See your -10

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- MASTER SWITCH OFF (see your -10)
- Driver's engine access panel removed (front bilge pump) (WP 0441 00)
- Ramp lowered (rear bilge pump) (see your -10)
- Rear floor plate removed (rear bilge pump) (WP 0539 00)
- Fog oil tank removed (rear bilge pump-M1059A3 only) (WP 0753 00)

**T**

1. Turn BILGE PUMP switch to ON (see your -10).
2. Do both bilge pump lights come on?

**NO**

**GO TO BY (PAGE 0080 00-2)**

**YES**

**Y**

1. Does either bilge pump (front or rear) fail to start?

**NO**

**GO TO CY (PAGE 0080 00-5)**

**YES**

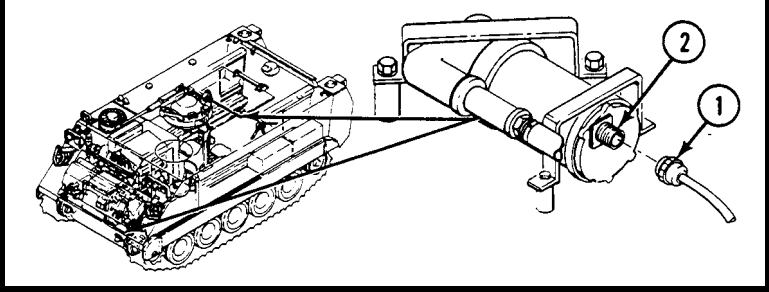
**2Y**

1. Locate bilge pump that is not operating.
2. Remove circuit 451 (rear pump), or circuit 452 (front pump), plug (1) from pump jack (2).
3. Measure voltage between plug 451 or 452 and ground.
4. Does multimeter read 17 or more volts?

**NO**

**2YN**

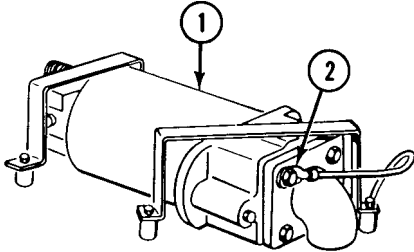
1. Repair harness 12349881 (front bilge pump), WP 0382 00); or repair harness 12268797 (rear bilge pump), WP 0382 00).
2. Verify no faults found.



**YES**

**3Y**

1. Turn MASTER SWITCH to OFF.
2. Check continuity between bilge pump body (1) and ground lead (2).
3. Is there continuity?



NO

**3YN**

1. Replace ground lead 10886459 to bilge pump (WP 0632 00), front; (WP 0635 00), rear.
2. Verify no faults found.

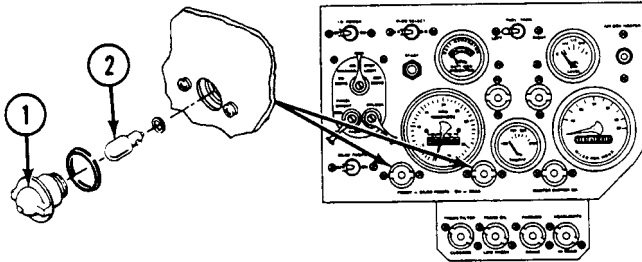
YES

**4Y**

1. Replace bilge pump (WP 0632 00), front; (WP 0635 00), rear.
2. Verify no faults found.

**BY**

1. Remove BILGE PUMP ON indicator lens (1) and bulb (2).
2. Check continuity between bulb center contact and bulb base.
3. Is there any continuity?



NO

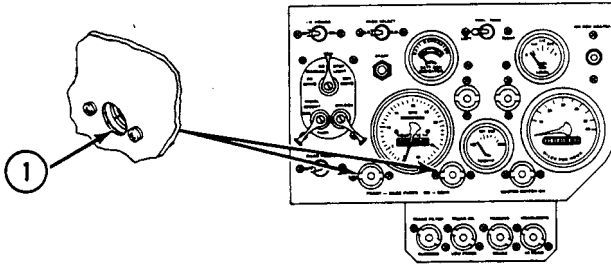
**BYN**

1. Replace BILGE PUMP ON indicator light bulb (WP 0286 00).
2. Verify no faults found.

YES

**B2Y**

1. Measure voltage between bulb socket center contact (1) and ground.
2. Does multimeter read less than 17 volts?



NO

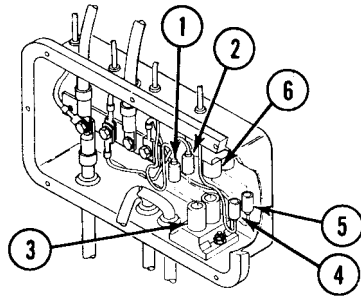
**B2YN**

1. Replace BILGE PUMP ON light assembly (WP 0286 00).
2. Verify no faults found.

YES

**B3Y**

1. Turn MASTER SWITCH to OFF.
2. Install plug 451 B or 452 B on indicator light assembly.
3. Remove master switch panel from distribution box (WP 0260 00 or WP 0261 00).
4. Remove plug 450 B (1) and plug 450 C (2) from front bilge pump circuit breaker (3); or remove plug 450 (4) and plug 450 A (5) from rear bilge pump circuit breaker (6).
5. Check continuity across circuit breaker jacks.
6. Is there continuity?



NO

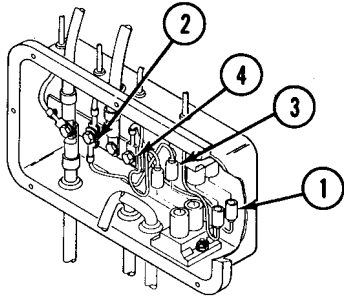
**B3YN**

1. Replace bilge pump circuit breaker (WP 0275 00).
2. Verify no faults found.

YES

**B4Y**

1. Check continuity between plug 450 A (1) to 450 A lead end at bus bar (2) for rear pump; or plug 450 C (3) to 450 C lead end at bus bar (4) for front pump.
2. Is there continuity?



NO

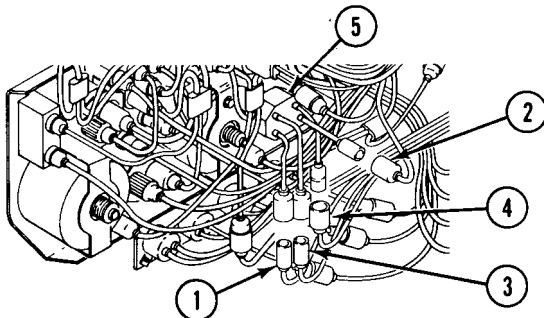
**B4YN**

1. Replace lead 10861710 (front), (WP 0270 00), or replace lead 10861711 (rear), (WP 0270 00).
2. Install bilge pump leads.
3. Verify no faults found.

YES

**B5Y**

1. Remove instrument panel for access (WP 0295 00).
2. Remove plug 450 B (1) and plug 452 B (2) (front) or plug 450 (3) and 451 A (4) (rear) from bilge pump switch (5).
3. Check continuity between bilge pump switch jacks with BILGE PUMPS switch on.
4. Is there continuity?



NO

**B5YN**

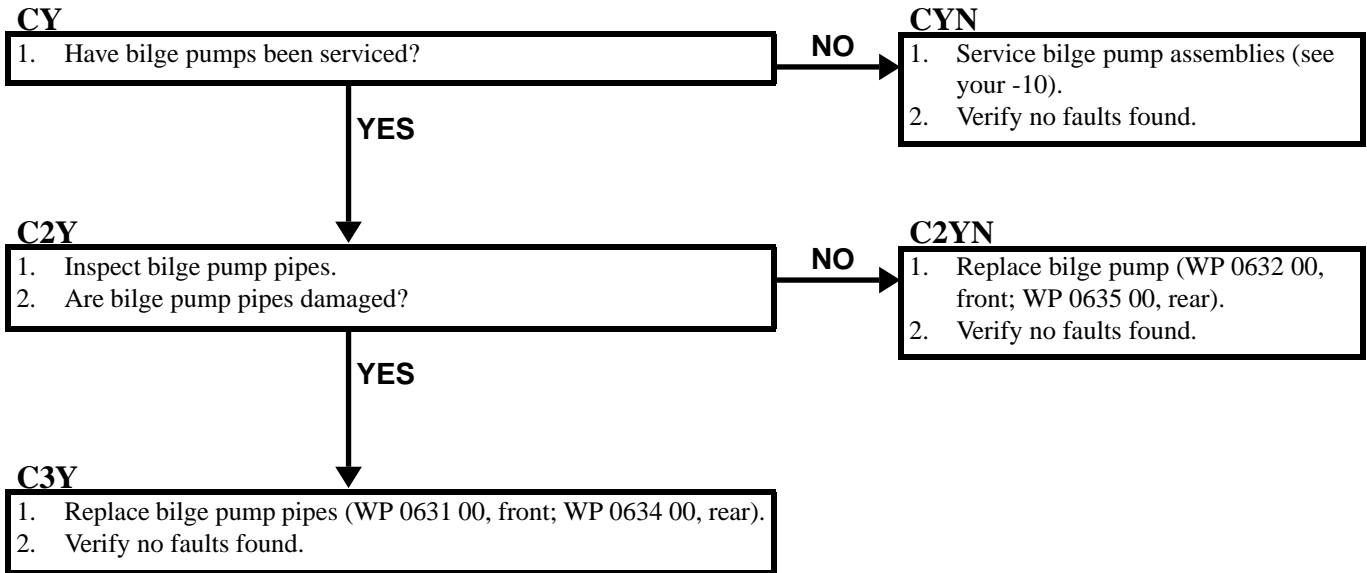
1. Install master switch panel (WP 0260 00).
2. Replace bilge pump switch (WP 0281 00).
3. Verify no faults found.

YES

**B6Y**

1. Repair harness 12268797 circuit 450 or 450B (WP 0382 00).
2. Verify no faults found.

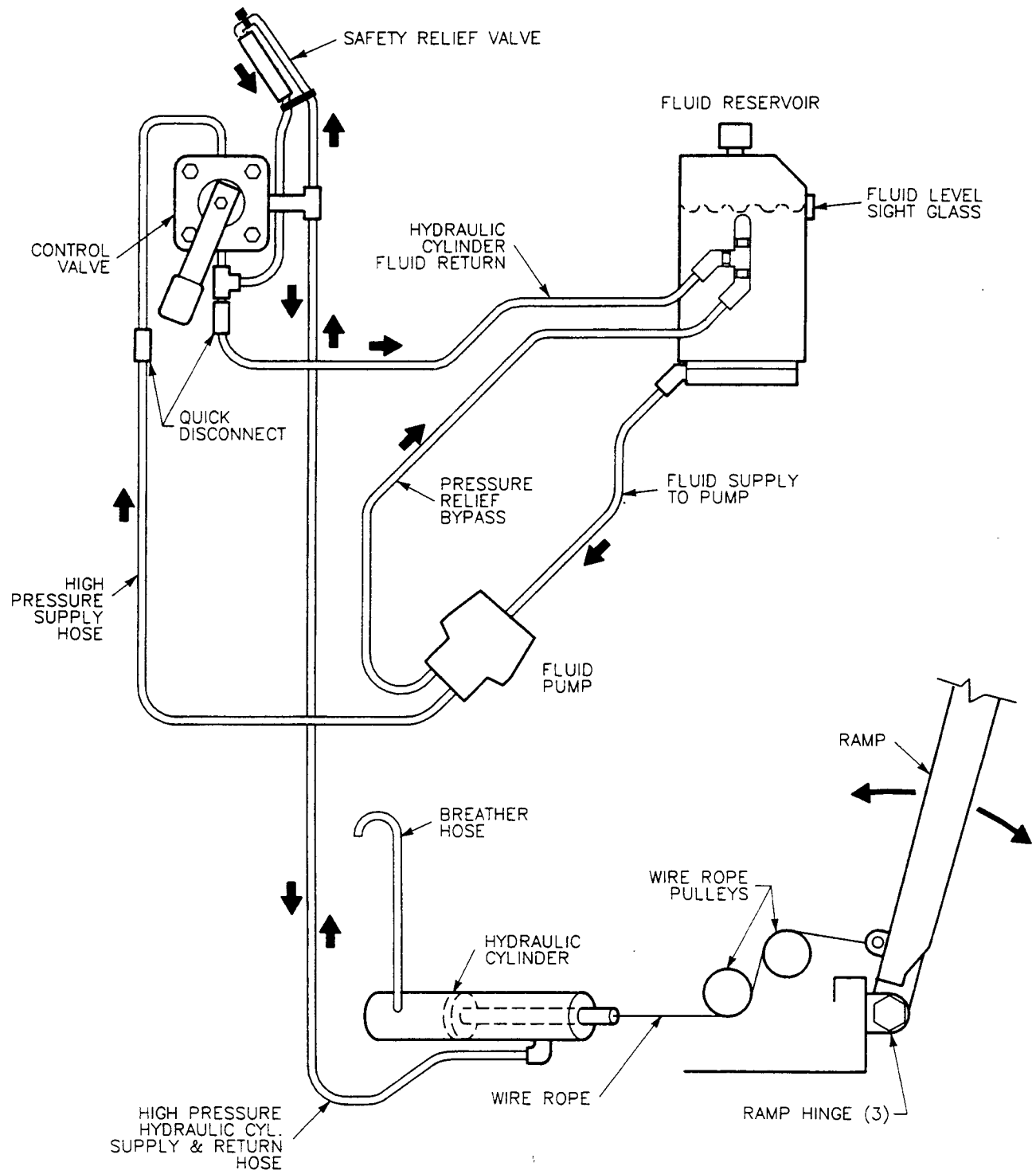






RAMP SCHEMATIC

0081 00





**RAMP WILL NOT LOWER**

**0082 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Equipment Condition

Engine stopped (see your 10)

Carrier blocked (see your -10)

Rear floor plates removed (WP 0539 00)

Driver's power plant access panel removed (WP 0441 00)

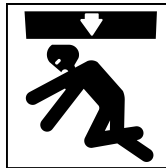
Power plant rear access panels removed (WP 0439 00)

Personnel Required

Unit Mechanic

Helper (H)

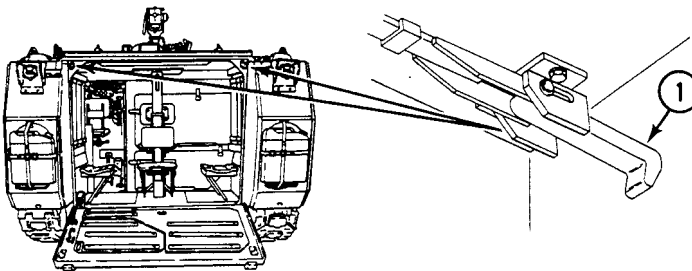
**WARNING**



**Lowering ramp could injure personnel. Make sure no one is in ramp zone before you lower ramp. If tactical situation permits, sound horn before dropping ramp.**

**T**

1. Release ramp (see your -10).
2. Observe ramp latches (1).
3. Do ramp latches release ramp?



**YES**

**NO**

**TN**

1. Repair or replace and/or adjust ramp latches and/or linkage (WP 0521 00) thru (WP 0528 00).
2. Verify no faults found.

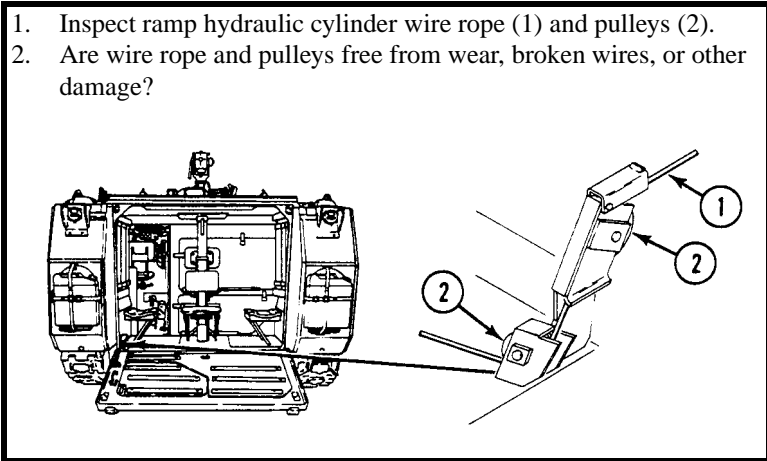
**Y**

1. Inspect ramp hydraulic cylinder wire rope (1) and pulleys (2).
2. Are wire rope and pulleys free from wear, broken wires, or other damage?

**NO**

**YN**

1. Replace wire rope and/or pulleys (WP 0657 00 or WP 0658 00).
2. Verify no faults found.



**YES**

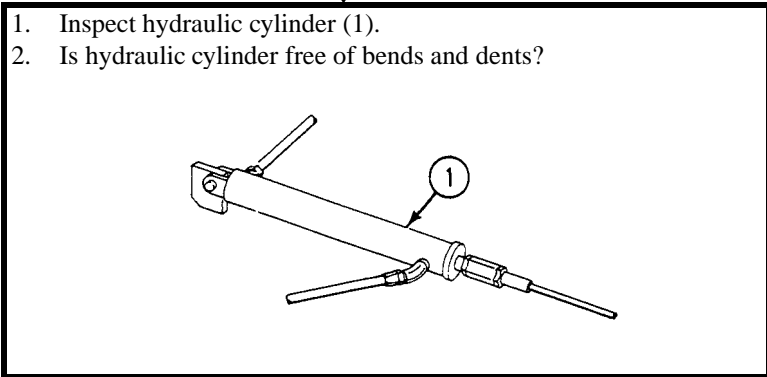
**2Y**

1. Inspect hydraulic cylinder (1).
2. Is hydraulic cylinder free of bends and dents?

**NO**

**2YN**

1. Replace hydraulic cylinder (WP 0656 00).
2. Verify no faults found.



**YES**

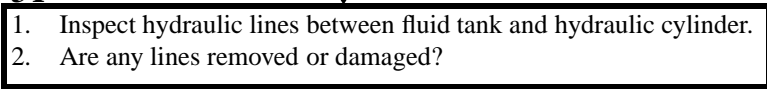
**3Y**

1. Inspect hydraulic lines between fluid tank and hydraulic cylinder.
2. Are any lines removed or damaged?

**NO**

**3YN**

1. Replace control valve (WP 0659 00 or WP 0661 00).
2. Verify no faults found.



**YES**

**4Y**

1. Repair/replace lines as necessary. (See Table of Contents).
2. Verify no faults found.

**RAMP OPERATION IS SLOW OR SLUGGISH**

**0083 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Equipment Condition

Engine stopped (see your -10)

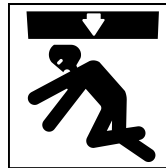
Carrier blocked (see your -10)

Personnel Required

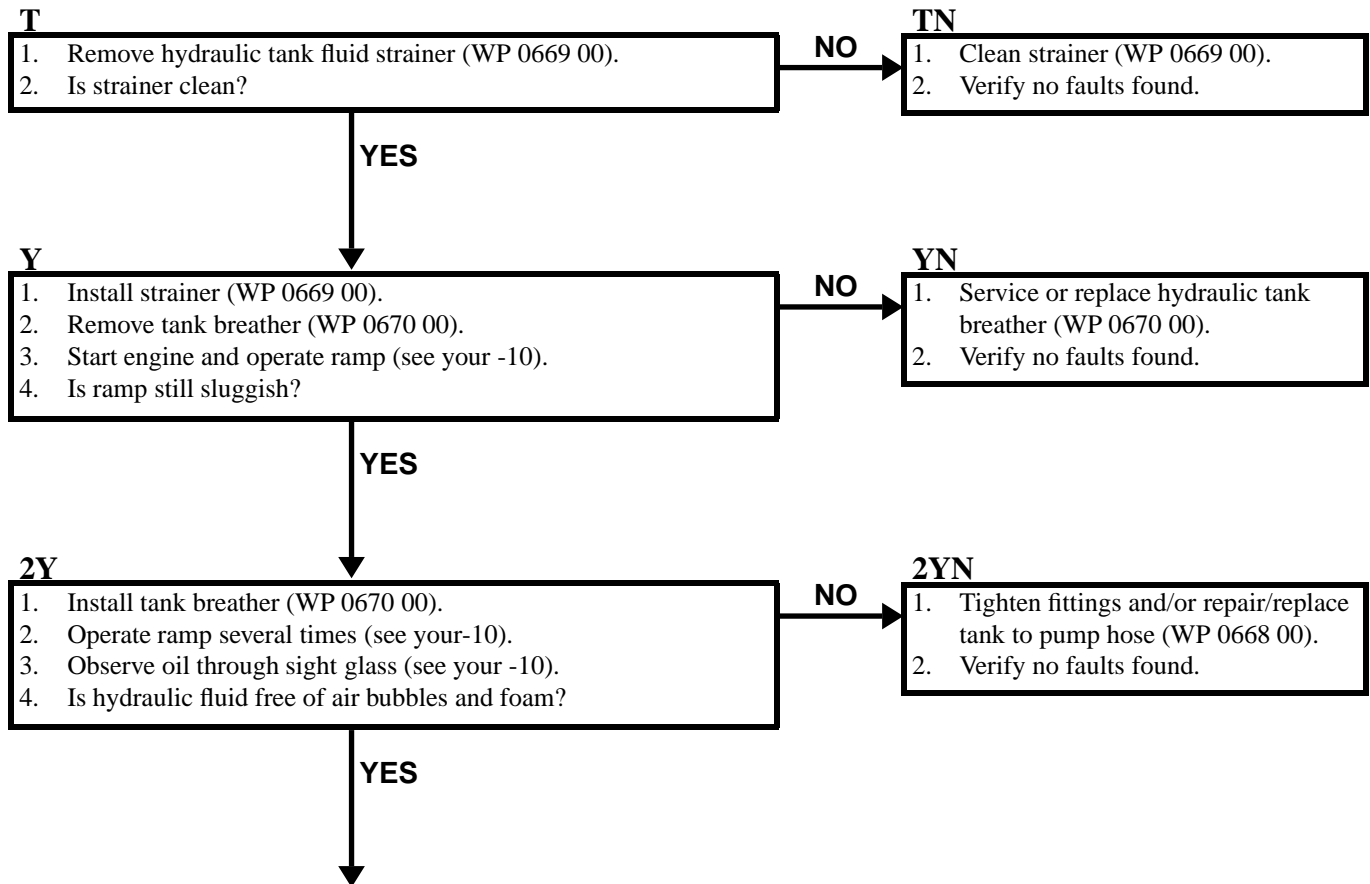
Unit Mechanic

Power plant rear access panel removed (WP 0439 00)

**WARNING**



**Lowering ramp could injure personnel. Make sure no one is in ramp zone before you lower ramp. If tactical situation permits, sound horn before dropping ramp.**



**3Y**

- |   |
|---|
| 1. Go to: Ramp Will Not Raise or Free Falls (WP 0084 00). |
|---|



**RAMP WILL NOT RAISE OR FREE FALLS**

**0084 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Personnel Required

Unit Mechanic

References

See your -10

Equipment Condition

Engine stopped (see your -10)

Carrier blocked (see your -10)

Ramp lowered (see your -10)

Trim vane lowered (see your -10)

Power plant access door opened (see your -10)

Driver's power plant access panel removed  
(WP 0441 00)

Power plant rear access panels removed (WP 0439 00)

Rear floor plates removed (WP 0539 00) thru  
(WP 0545 00)

**WARNING**



**Lowering ramp could injure personnel. Make sure no one is in ramp zone before you lower ramp. If tactical situation permits, sound horn before dropping ramp.**

**T**

1. Check ramp hydraulic fluid level in sight-glass (See your -10).
2. Is fluid level correct?

**NO**

**GO TO AY (PAGE 0084 00-3)**

**YES**

RAMP WILL NOT RAISE OR FREE FALLS—Continued

0084 00

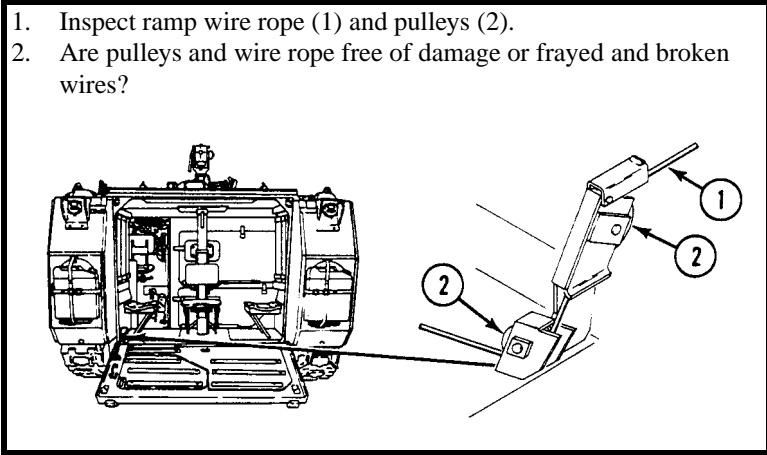
**Y**

1. Inspect ramp wire rope (1) and pulleys (2).
2. Are pulleys and wire rope free of damage or frayed and broken wires?

**NO**

**YN**

1. Replace wire rope and/or pulleys (WP 0657 00) or (WP 0658 00).



**YES**

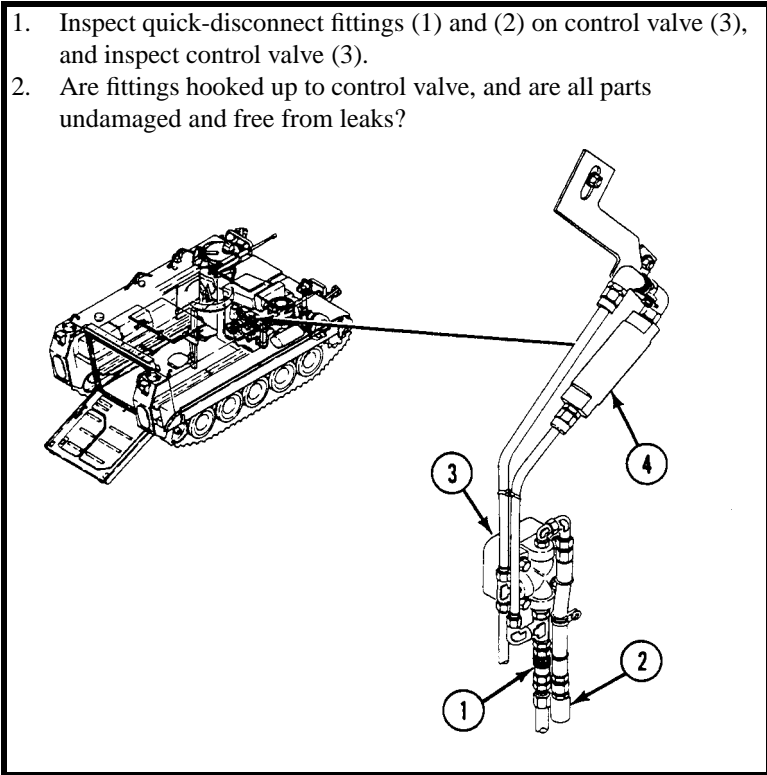
**2Y**

1. Inspect quick-disconnect fittings (1) and (2) on control valve (3), and inspect control valve (3).
2. Are fittings hooked up to control valve, and are all parts undamaged and free from leaks?

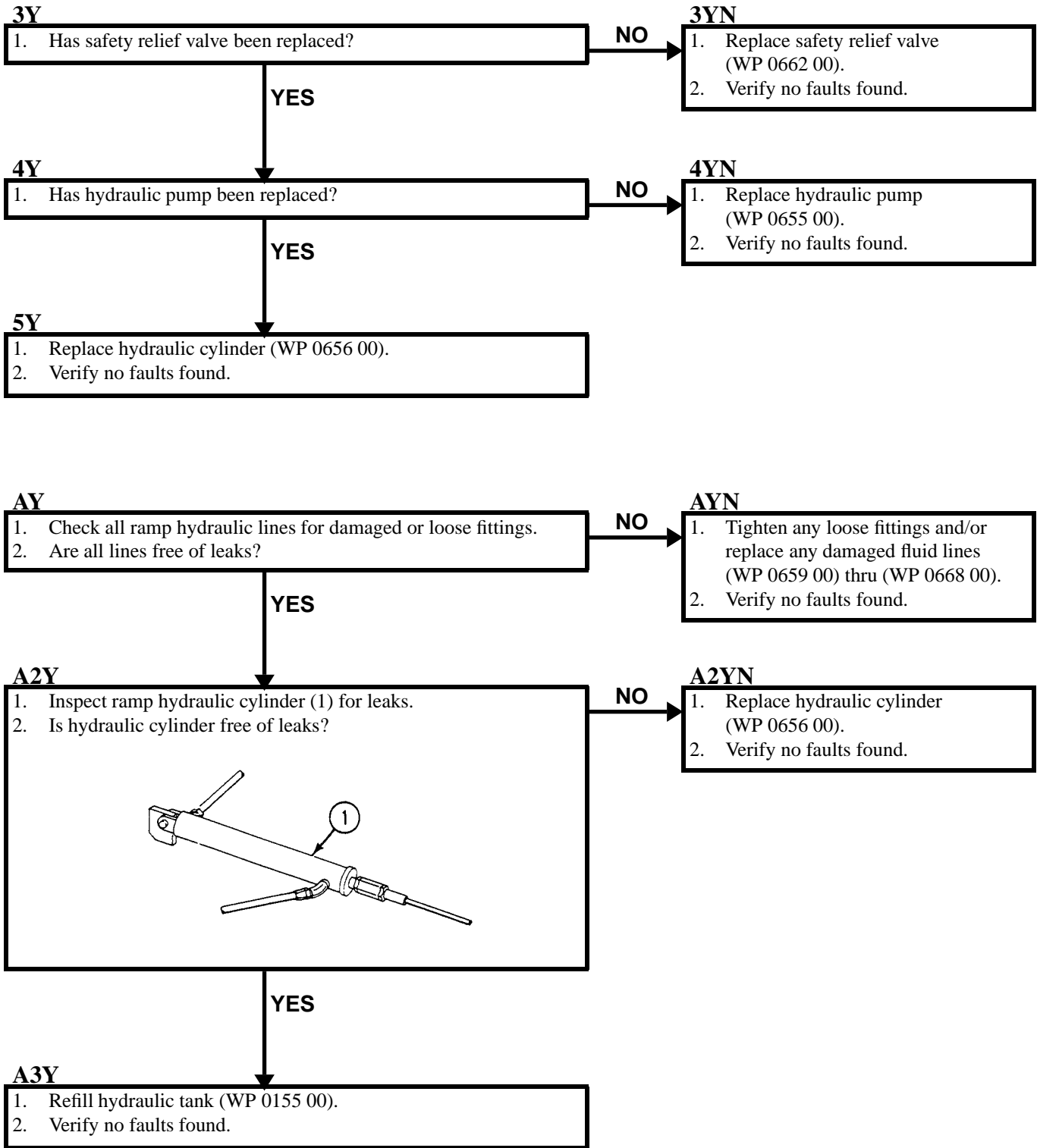
**NO**

**2YN**

1. Repair and/or replace parts as needed (WP 0659 00) thru (WP 0668 00).
2. Verify no faults found.



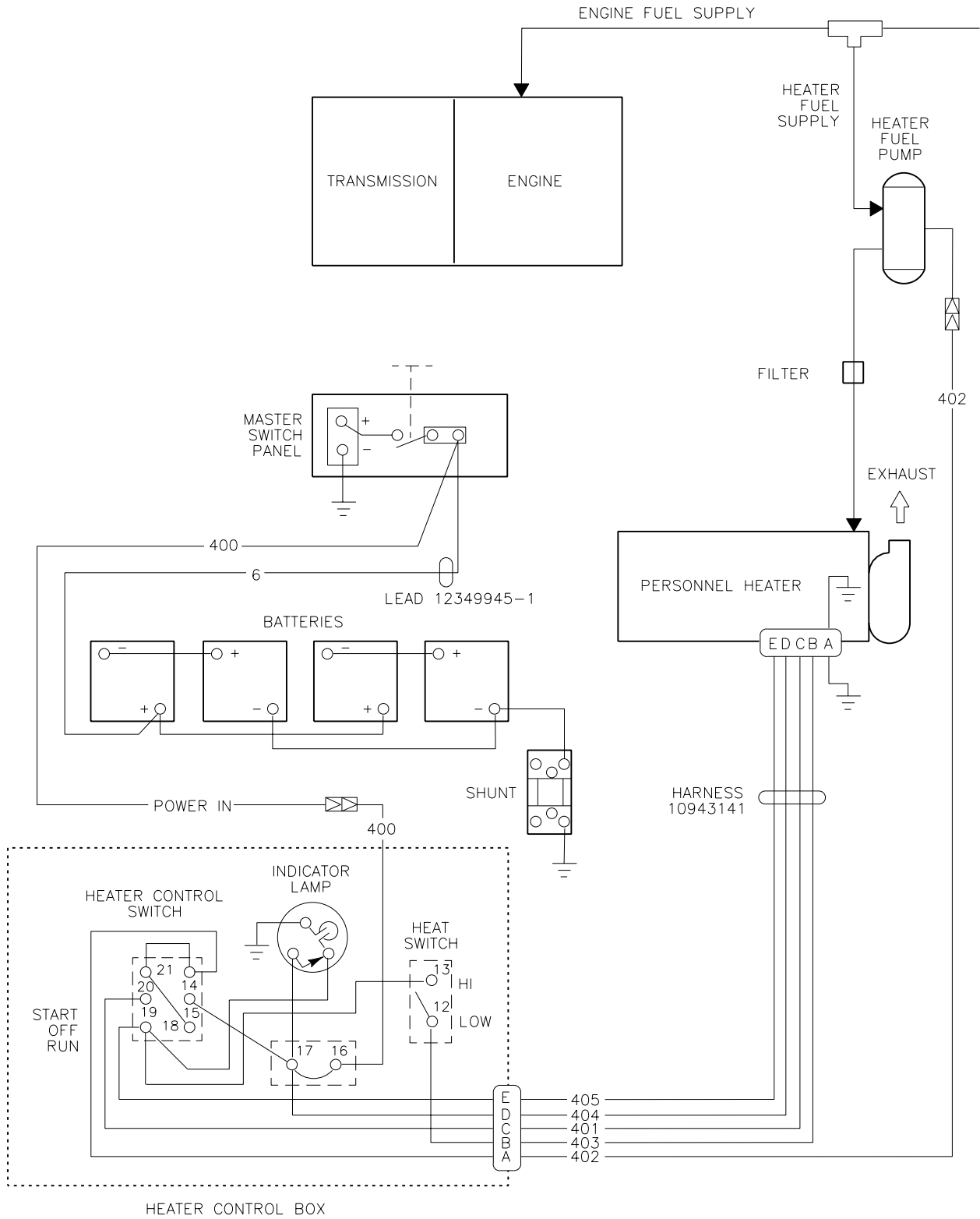
**YES**





PERSONNEL HEATER SCHEMATIC

0085 00





**PERSONNEL HEATER MALFUNCTIONS**

**0086 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Multimeter (WP 0926 00, Item 30)
- Electrical Connector Pliers (WP 0926 00, Item 31)

Personnel Required

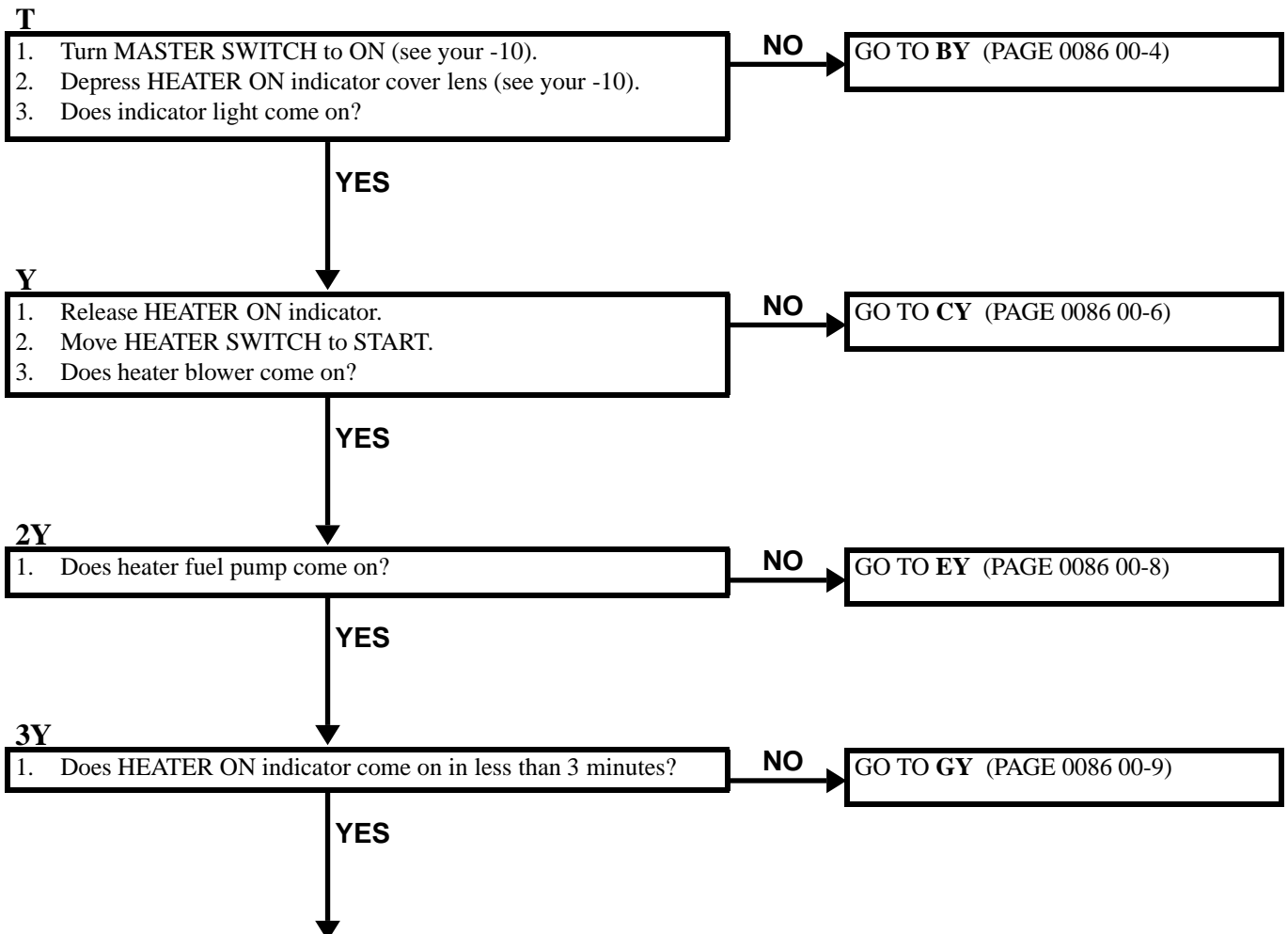
Unit Mechanic

References

- See your -10
- TM 9-2540-205-24&P

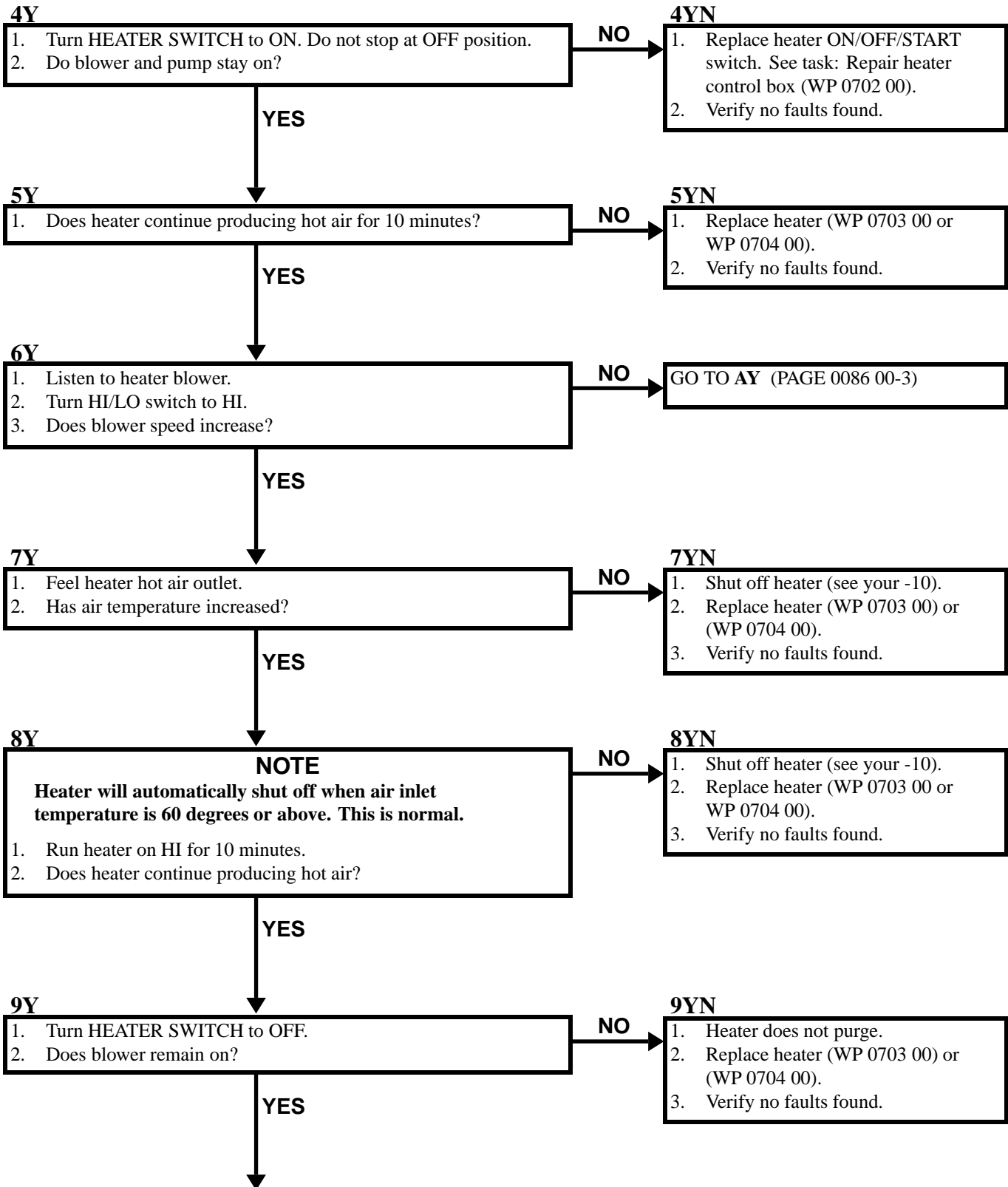
Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)
- Ramp lowered (see your -10)
- Drivers power plant access panel removed (see your -10)
- Power plant rear access panel removed (see your -10)
- Heater on LOW (see your -10)
- Rear floor plates removed (WP 0539 00) thru (WP 0545 00)



PERSONNEL HEATER MALFUNCTIONS—Continued

0086 00





**10Y**

1. Listen to heater until blower shuts off.
2. Does blower shut off in less than 5 minutes?

NO

**10YN**

1. Replace heater (WP 0703 00 or WP 0704 00).
2. Verify no faults found.

YES

**11Y**

1. Heater is operating properly.
2. No faults found.

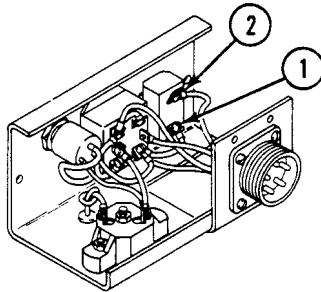
**AY**

1. Remove heater control box (WP 0701 00).
2. Check continuity on HI/LO switch between terminals 12 (1) and 13 (2).
3. Does multimeter read 0 ohms?

NO

**AYN**

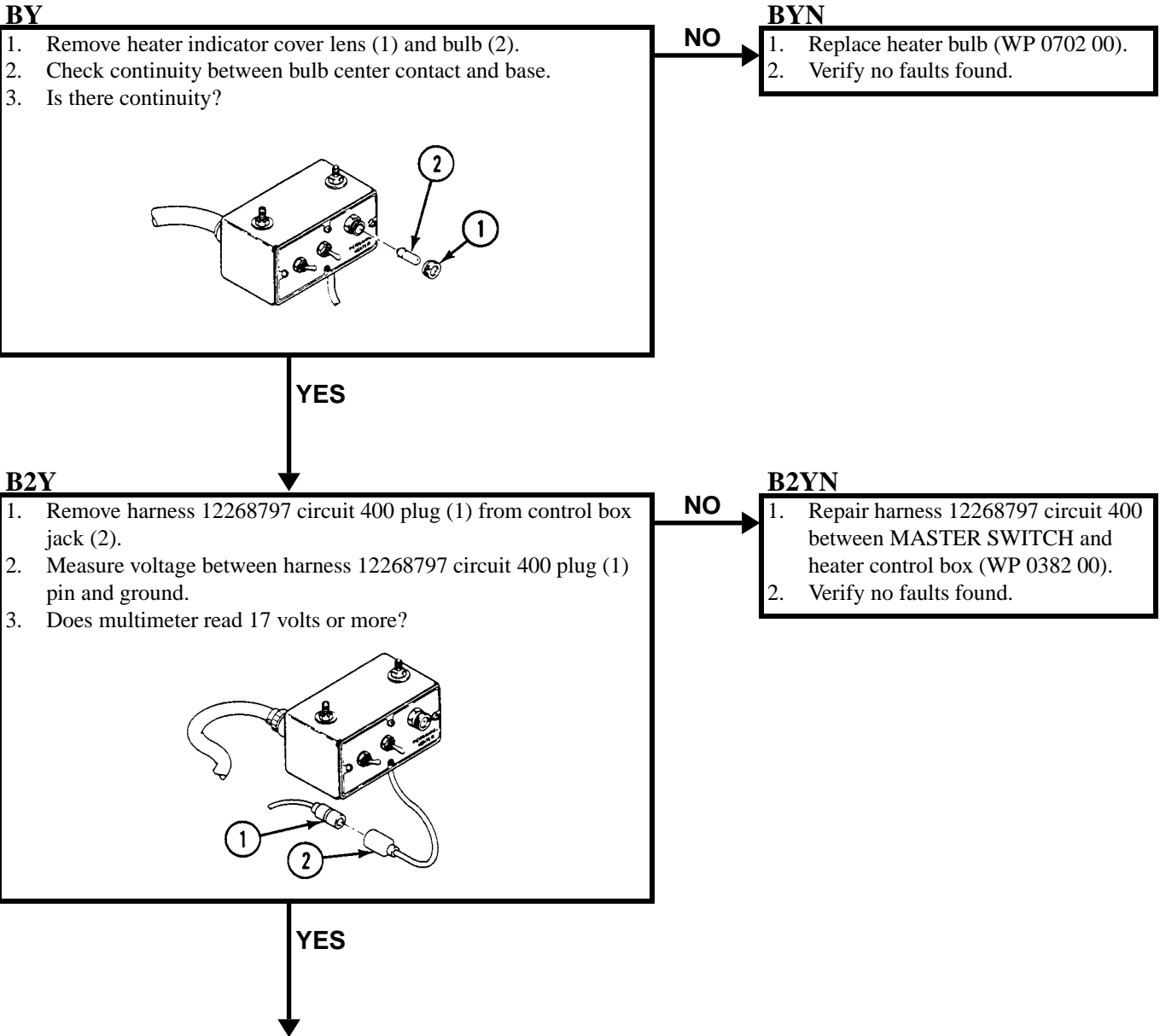
1. Replace heater HI/LO switch (WP 0702 00).
2. Verify no faults found.



YES

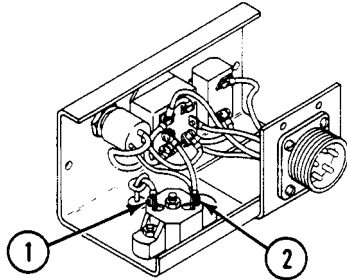
**A2Y**

1. Repair lead between heater switch and jack or heater switch and ON/OFF/START switch (WP 0382 00).
2. Verify no faults found.



**B3Y**

1. Remove heater control box (WP 0701 00).
2. Check continuity between circuit breaker terminals 16 (1) and 17 (2).
3. Does multimeter read 0 ohms?



NO

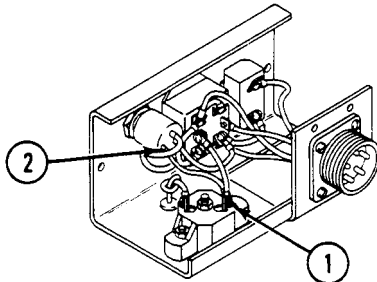
**B3YN**

1. Replace heater circuit breaker (WP 0702 00).
2. Verify no faults found.

YES

**B4Y**

1. Check continuity between lead ends, from circuit breaker terminal 17 (1) to indicator light terminal 3 (2).
2. Does multimeter read 0 ohms?



NO

**B4YN**

1. Repair/replace faulty lead (WP 0382 00 or WP 0702 00).
2. Verify no faults found.

YES

**B5Y**

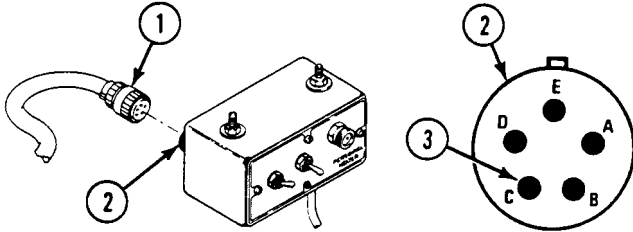
1. Replace indicator light assembly (WP 0702 00).
2. Verify no faults found.

PERSONNEL HEATER MALFUNCTIONS—Continued

0086 00

**CY**

1. Remove harness 10942956 plug (1) from heater control box jack (2).
2. Measure voltage between heater control box jack (2), pin C (3), and ground, with HEATER switch on START.
3. Does multimeter read 17 volts or more?

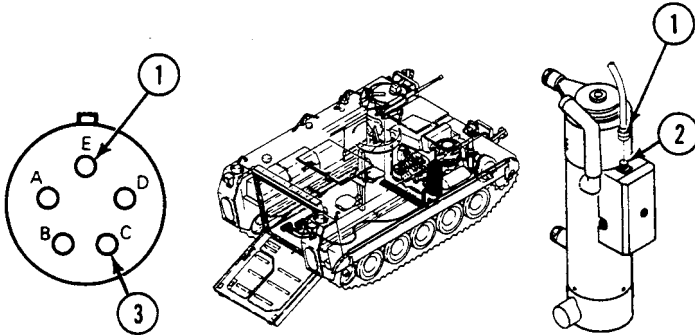


**NO** → GO TO **DY** (PAGE 0086 00-7)

**YES**

**C2Y**

1. Install harness 10942956 plug on heater control box jack.
2. Remove harness 10942956 plug (1) from heater jack (2).
3. Measure voltage between harness 10942956 plug (1), pin C (3), and ground, with HEATER switch on START.
4. Does multimeter read 17 volts or more?



**NO** → **C2YN**  
 1. Replace heater wiring harness.  
 2. Verify no faults found.

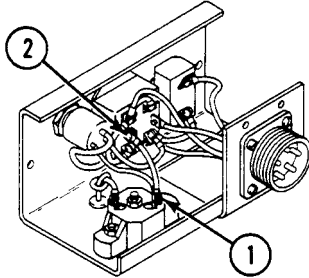
**YES**

**C3Y**

1. Replace heater (WP 0703 00 or WP 0704 00).
2. Verify no faults found.

**DY**

1. Remove heater control box (WP 0701 00).
2. Check continuity between lead ends, from circuit breaker terminal 17 (1) and ON/OFF/START switch terminal 15 (2).
3. Does multimeter read 0 ohms?



NO

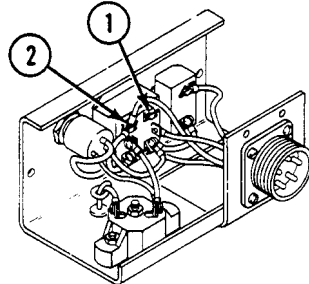
**DYN**

1. Repair faulty lead (WP 0382 00).
2. Verify no faults found.

YES

**D2Y**

1. Check continuity between lead ends from ON/OFF/START switch terminals 21 (1) and 14 (2).
2. Does multimeter read 0 ohms?



NO

**D2YN**

1. Repair heater switch jumper lead between terminal 21 and 14 (WP 0382 00).
2. Verify no faults found.

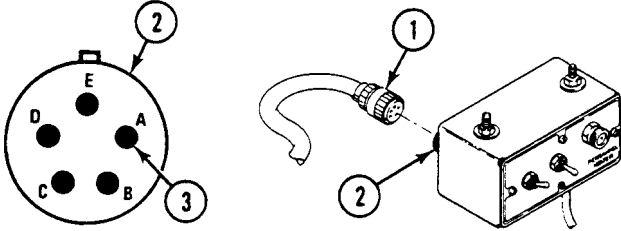
YES

**D3Y**

1. Replace heater ON/OFF/START switch (WP 0702 00).
2. Verify no faults found.

**EY**

1. Remove harness 10942956 plug (1) from heater control jack (2).
2. Measure voltage between heater control jack (2), pin A (3), and ground, with HEATER switch on START.
3. Does multimeter read 17 volts or more?

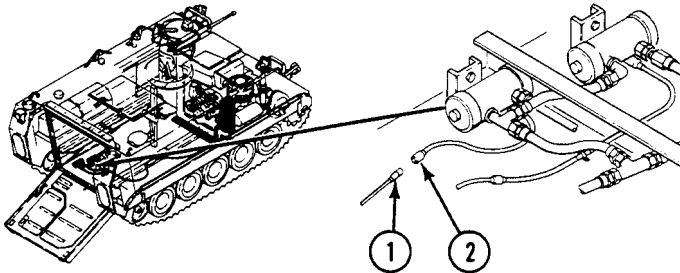


**NO** → GO TO FY (PAGE 0086 00-9)

**YES**

**E2Y**

1. Install harness 10942956 on heater control box jack.
2. Remove harness 10942956 plug (1) from heater fuel pump jack (2).
3. Measure voltage between harness 10942956, plug (1) pin, and ground, with HEATER switch on START.
4. Does multimeter read 17 volts or more?



**NO** → **E2YN**  
 1. Replace harness 10942956 circuit 402.  
 2. Verify no faults found.

**YES**

**E3Y**

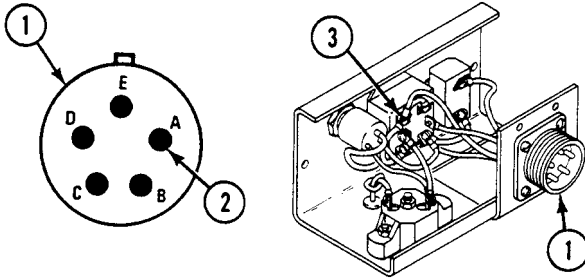
1. Replace heater fuel pump (WP 0695 00, WP 0696 00, or WP 0697 00).
2. Verify no faults found.

PERSONNEL HEATER MALFUNCTIONS—Continued

0086 00

**FY**

1. Remove heater control box (WP 0702 00).
2. Check continuity between lead ends of heater output jack (1), pin A (2), and ON/OFF/START switch terminal 14 (3).
3. Does multimeter read 0 ohms?



NO

**FYN**

1. Replace faulty lead (WP 0702 00).
2. Verify no faults found.

YES

**F2Y**

1. Replace heater ON/OFF/START switch (WP 0702 00).
2. Verify no faults found.

**GY**

1. Is heater exhaust cold?

NO

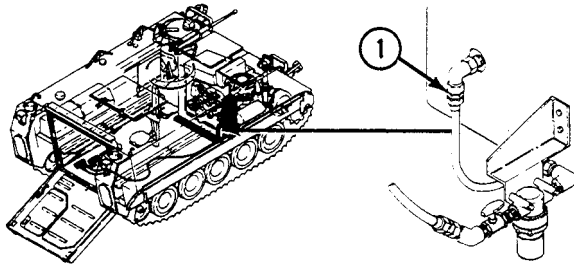
**GYN**

1. Replace heater (WP 0703 00 or WP 0704 00).
2. Verify no faults found.

YES

**G2Y**

1. Loosen fuel inlet line (1) to heater with heater switch on START.
2. Does fuel fail to flow out of loosened fitting?



NO

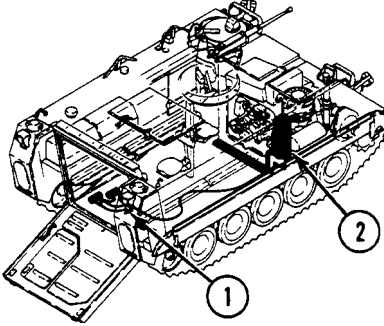
**G2YN**

1. Replace heater (WP 0703 00 or WP 0704 00).
2. Verify no faults found.

YES

**G3Y**

1. Inspect fuel lines between tee valve (1) and heater (2).
2. Are all lines free from kinks, restrictions, or other damage?



**NO**

**G3YN**

1. Replace heater fuel lines as required (WP 0685 00).
2. Verify no faults found.

**YES**

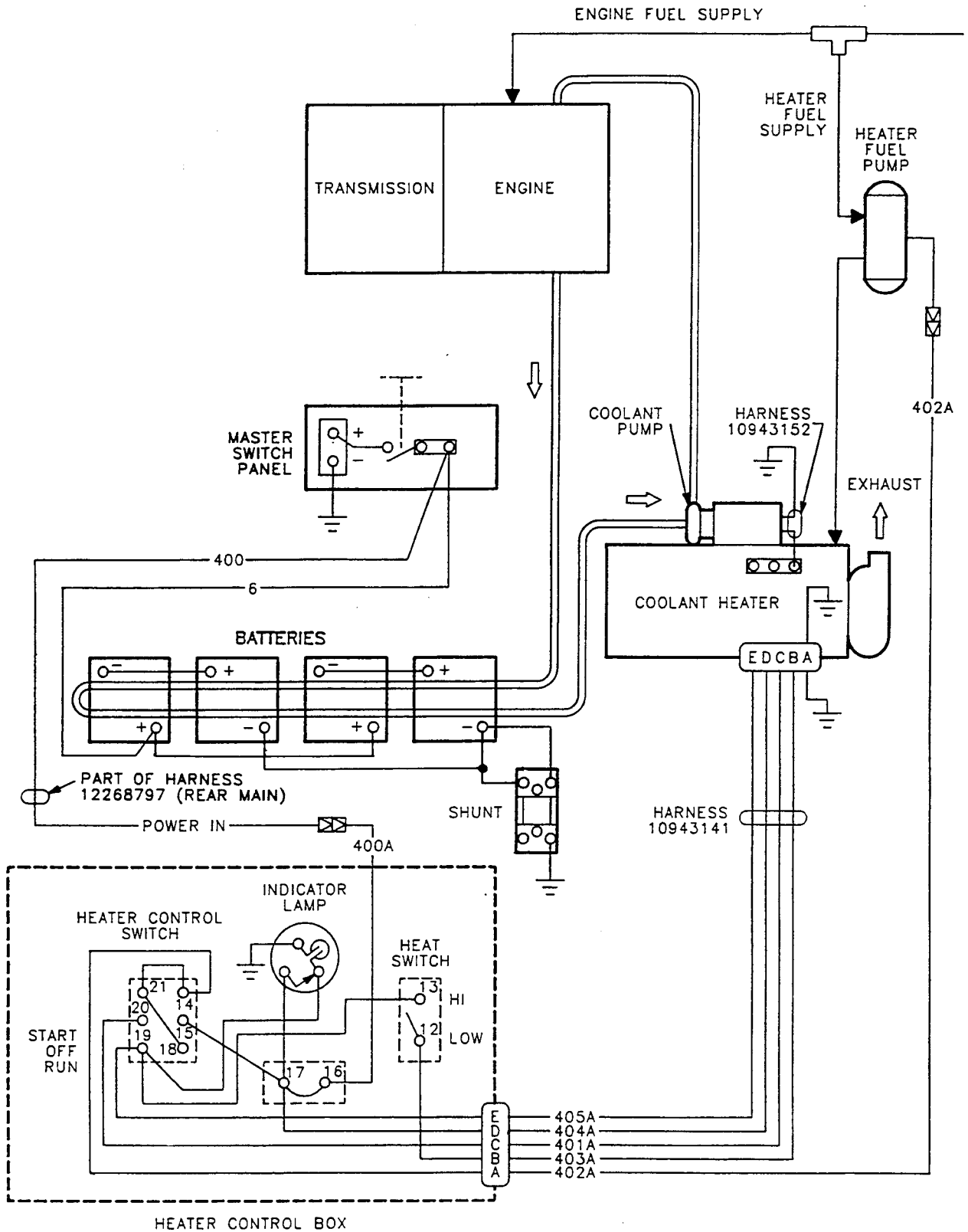
**G4Y**

1. Replace heater fuel pump (WP 0695 00, WP 0696 00, or WP 0697 00).
2. Verify no faults found.



COOLANT HEATER SCHEMATIC (ALL EXCEPT M981A3)

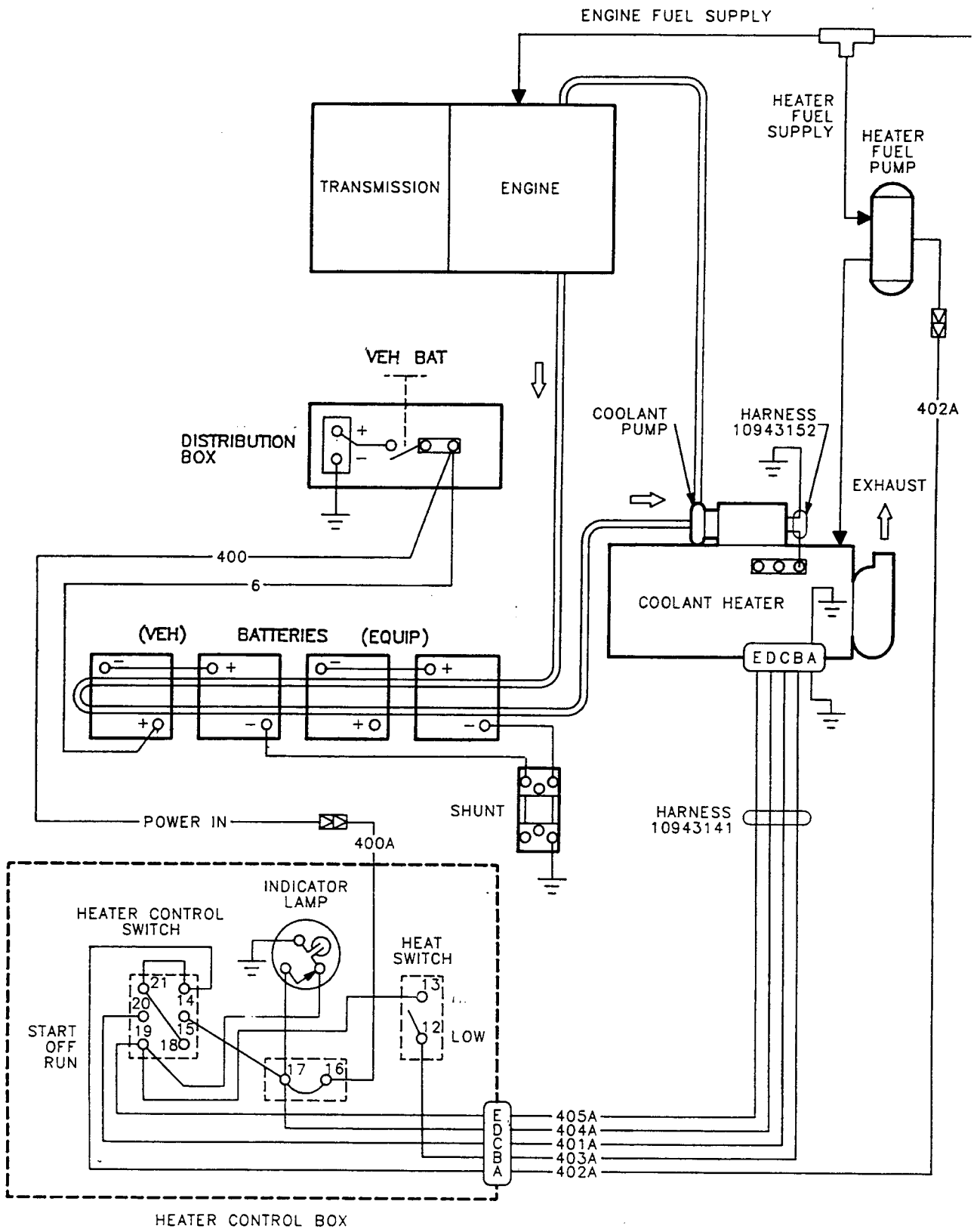
0087 00





COOLANT HEATER SCHEMATIC (M981A3 ONLY)

0088 00





**COOLANT HEATER MALFUNCTIONS**

**0089 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0926 00, Item 65)
- Electrical Connector Pliers (WP 0926 00, Item 31)
- Multimeter (WP 0926 00, Item 30)

Personnel Required

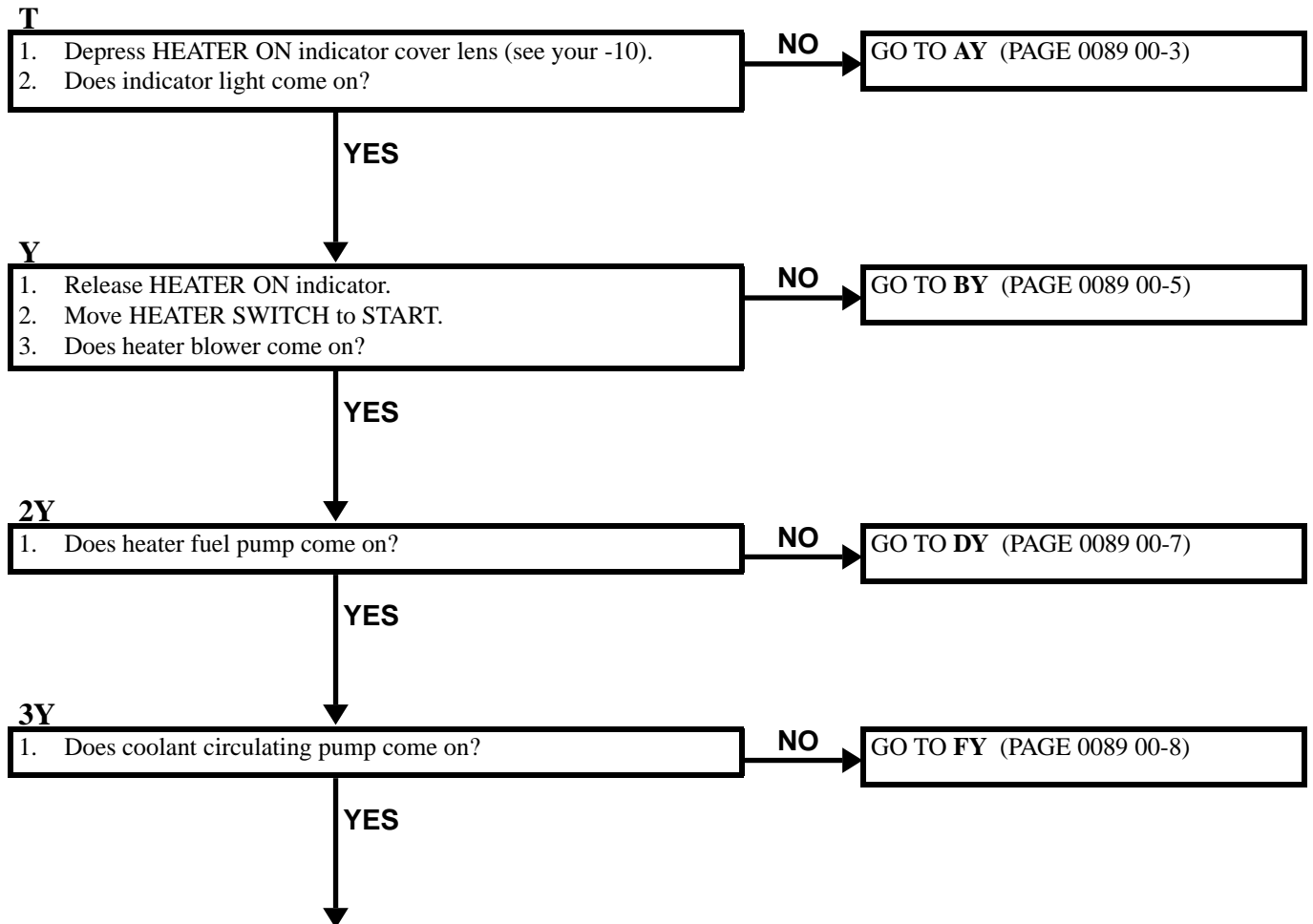
Unit Mechanic 63T10

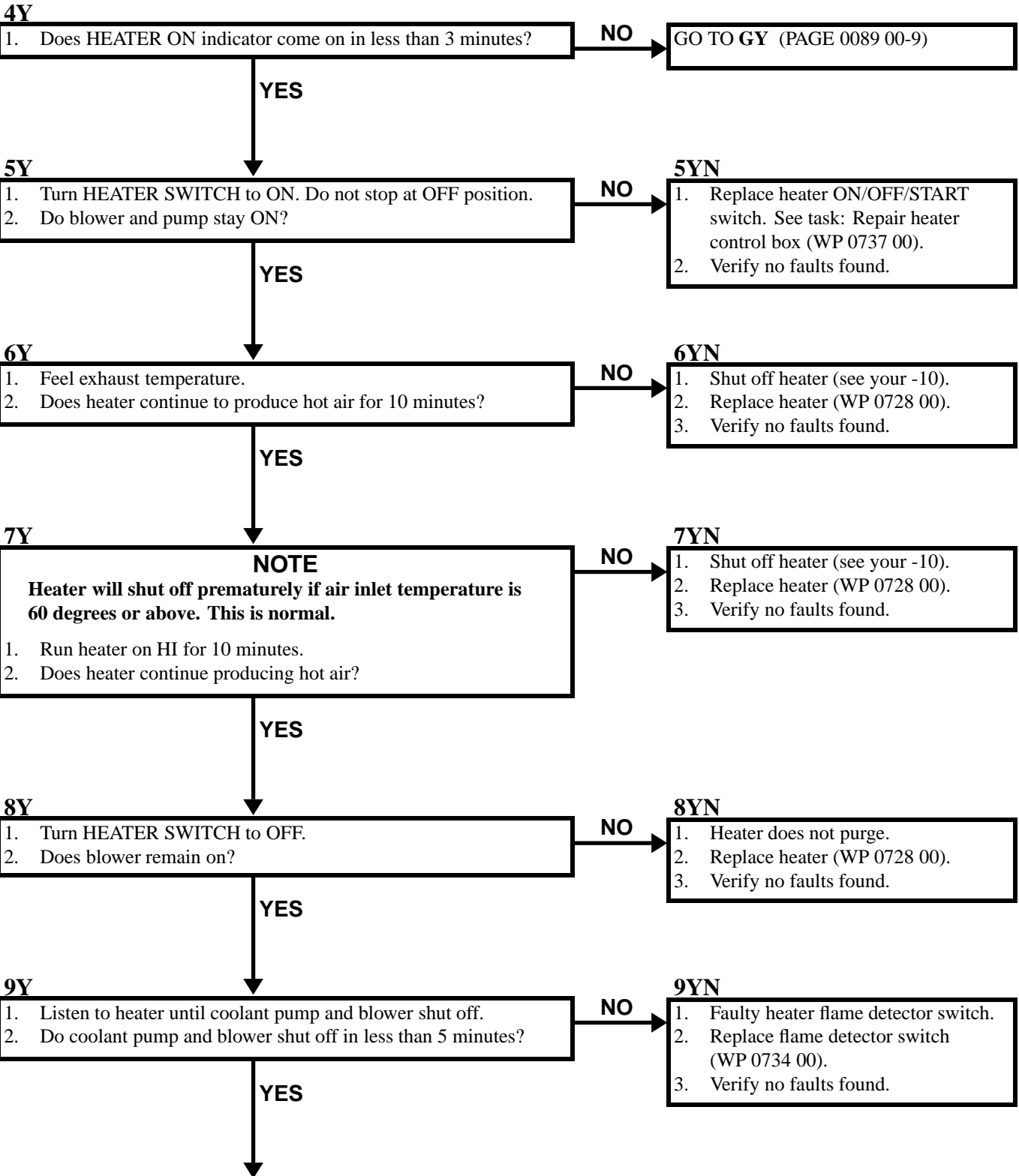
References

- See your -10
- TM 9-2450-205-24&P

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)
- Driver's power plant access panel removed (see your -10)
- Power plant rear access panel removed (see your -10)
- Ramp lowered (see your -10)
- Heater on HI (see your -10)
- Rear floor plates removed (WP 0539 00) thru (WP 0545 00)
- Engine cold





COOLANT HEATER MALFUNCTIONS—Continued

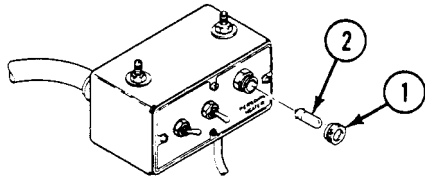
0089 00

**10Y**

1. Replace heater (WP 0728 00).
2. Verify no faults found.

**AY**

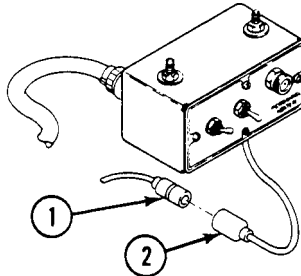
1. Remove heater indicator cover lens (1) and bulb (2).
2. Measure resistance between bulb center contact and base.
3. Does multimeter read less than 100 ohms?



YES

**A2Y**

1. Remove harness 12268797 circuit 400 plug (1) from control box jack (2).
2. Measure voltage between harness 12268797 circuit 400 plug (1) pin and ground.
3. Does multimeter read 17 volts or more?



YES

NO

**AYN**

1. Replace heater bulb (WP 0702 00).
2. Verify no faults found.

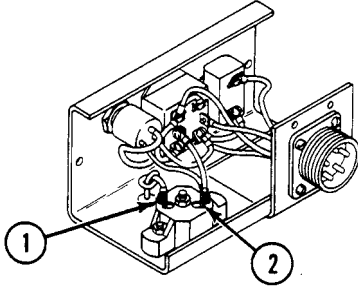
NO

**A2YN**

1. Repair harness 12268797 circuit 400 between MASTER SWITCH and heater control box (WP 0382 00).
2. Verify no faults found.

**A3Y**

1. Remove heater control box (WP 0736 00).
2. Measure resistance between lead ends from circuit breaker terminals 16 (1) and 17 (2).
3. Does multimeter read 0 ohms?



NO

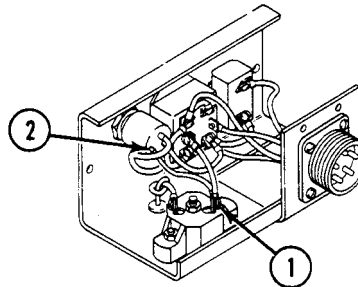
**A3YN**

1. Replace heater circuit breaker (WP 0737 00).
2. Verify no faults found.

YES

**A4Y**

1. Measure resistance between lead ends from circuit breaker terminal 17 (1) to indicator light terminal 3 (2).
2. Does multimeter read 0 ohms?



NO

**A4YN**

1. Repair/replace faulty lead (WP 0382 00) or (WP 0737 00).
2. Verify no faults found.

YES

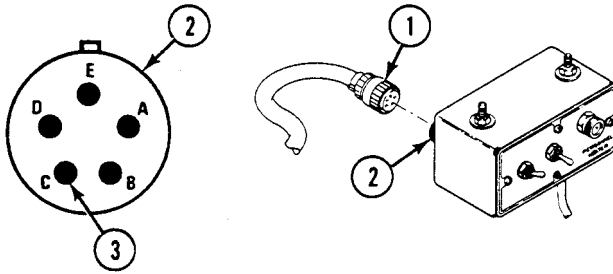
**A5Y**

1. Replace indicator light assembly (WP 0737 00).
2. Verify no faults found.



**BY**

1. Remove harness 10943141 plug (1) from heater control box jack (2).
2. Measure voltage between heater control box jack (2) pin C (3) and ground with HEATER switch on START.
3. Does multimeter read at 17 volts or more?



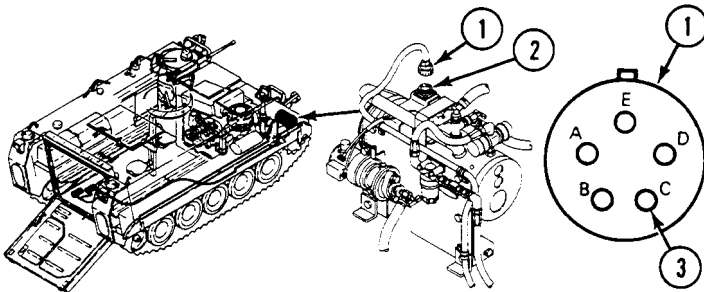
NO

GO TO CY (PAGE 0089 00-6)

YES

**B2Y**

1. Install harness 10943141 plug on heater control box jack.
2. Remove harness 10943141 plug (1) from heater jack (2).
3. Measure voltage between harness 10943141 plug (1) pin C (3) and ground with HEATER switch on START.
4. Does multimeter read at least 17 volts?



NO

**B2YN**

1. Replace faulty harness 10943141 (WP 0382 00).
2. Verify no faults found.

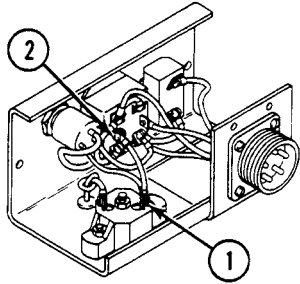
YES

**B3Y**

1. Replace heater (WP 0728 00).
2. Notify supervisor.

**CY**

1. Remove heater control box (WP 0736 00).
2. Measure resistance between lead ends from circuit breaker terminal 17 (1) and ON/OFF/START switch terminal 15 (2) lead ends.
3. Does multimeter read 0 ohms?



**NO**

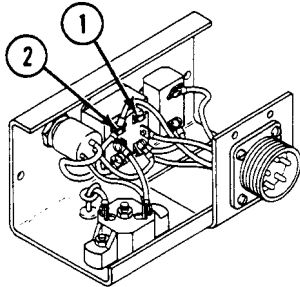
**CYN**

1. Repair faulty lead (WP 0382 00).
2. Verify no faults found.

**YES**

**C2Y**

1. Measure resistance between lead ends from ON/OFF/START switch terminals 21 (1) and 14 (2).
2. Does multimeter read 0 ohms?



**NO**

**C2YN**

1. Repair heater switch jumper lead between terminal 21 and 14 (WP 0382 00).
2. Verify no faults found.

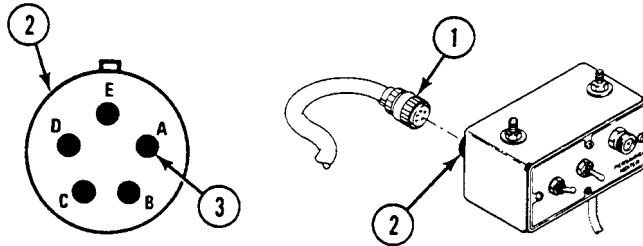
**YES**

**C3Y**

1. Replace heater ON/OFF/START switch (WP 0737 00).
2. Verify no faults found.

**DY**

1. Remove harness 10943141 plug (1) from heater control jack (2).
2. Measure voltage between heater control jack (2) pin A (3) and ground with HEATER switch on START.
3. Does multimeter read 17 volts or more?



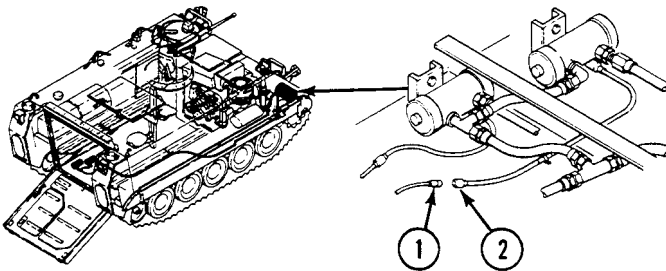
NO

GO TO EY (PAGE 0089 00-8)

YES

**D2Y**

1. Install harness 10943141 on heater control box jack.
2. Remove harness 10943141 plug (1) from heater fuel pump jack (2).
3. Measure voltage between harness 10943141 plug (1) pin and ground with HEATER switch on START.
4. Does multimeter read 17 volts or more?



NO

**D2YN**

1. Replace harness 10943141 circuit 402 (WP 0382 00).
2. Verify no faults found.

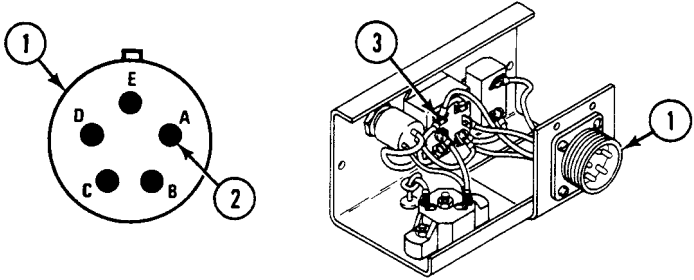
YES

**D3Y**

1. Replace coolant heater fuel pump (WP 0731 00).
2. Verify no faults found.

**EY**

1. Remove heater control box (WP 0736 00).
2. Measure resistance between lead ends of heater output jack (1) pin A (2) and ON/OFF/START switch terminal 14 (3).
3. Does multimeter read 0 ohms?



NO

**EYN**

1. Replace faulty lead (WP 0737 00).
2. Verify no faults found.

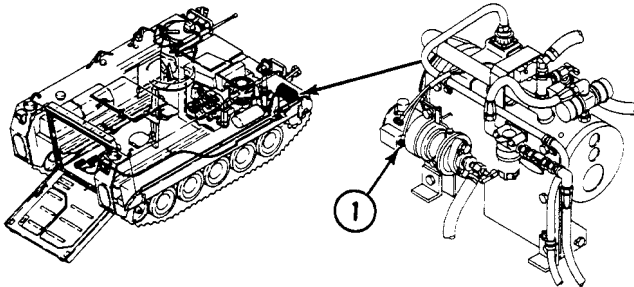
YES

**E2Y**

1. Replace heater ON/OFF/START switch (WP 0737 00).
2. Verify no faults found.

**FY**

1. Measure voltage between harness 10943152 circuit 402B terminal (1) on coolant pump and ground (switch on start).
2. Does multimeter read less than 17 volts?



NO

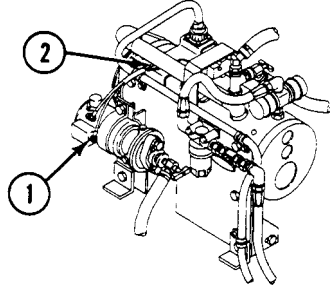
**FYN**

1. Replace coolant heater pump (WP 0731 00).
2. Verify no faults found.

YES

**F2Y**

1. Measure voltage between harness 10943152 circuit 402B (1) on terminal strip (2) and ground (switch on start).
2. Does multimeter read less than 17 volts?



NO

**F2YN**

1. Replace harness 10943152 (WP 0382 00).
2. Verify no faults found.

YES

**F3Y**

1. Faulty heater wiring. Beyond unit maintenance repair.
2. Notify supervisor.

**GY**

1. Is heater exhaust cold?

NO

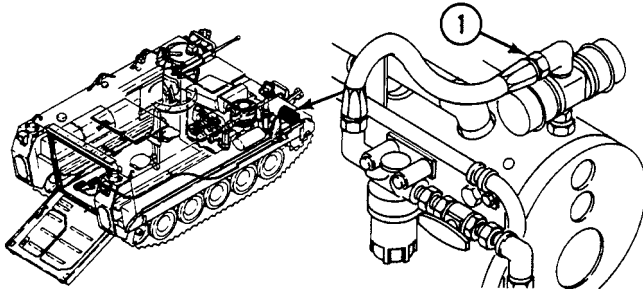
**GYN**

1. Replace flame detector switch (WP 0734 00).
2. Verify no faults found.

YES

**G2Y**

1. Loosen fuel inlet line (1) to heater with heater switch on start.
2. Does fuel fail to flow out of loosened fitting?



NO

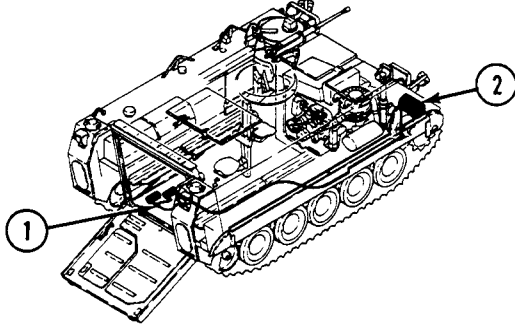
**G2YN**

1. Replace heater (WP 0728 00).
2. Verify no faults found.

YES

**G3Y**

1. Inspect fuel lines between tee valve (1) and heater (2).
2. Are all lines free from kinks, restrictions, or other damage?



**NO**

**G3YN**

1. Replace heater fuel lines as required (WP 0708 00) thru (WP 0737 00).
2. Verify no faults found.

**YES**

**G4Y**

1. Replace coolant heater fuel pump (WP 0723 00).
2. Verify no faults found.

**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE  
(M1068A3 ONLY)**

**0090 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital Multimeter (WP 0926 00, Item 30)

Materials/Parts

Lockwasher (10)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Battery box cover removed (see your -10)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

**WARNING**



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

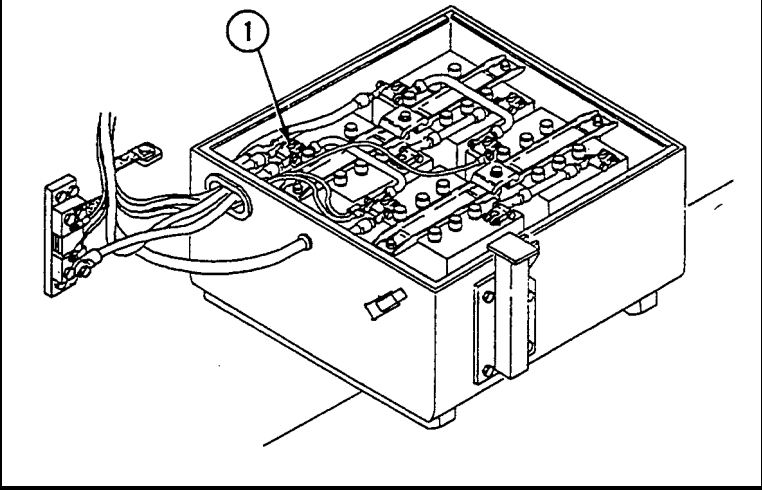
**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued

0090 00

**T**

1. Measure voltage between positive battery terminal (1) and ground.
2. Does multimeter read 22 volts DC or more?



**NO**

**TN**

1. Service carrier batteries (see your -10).
2. Verify no faults found.

**YES**

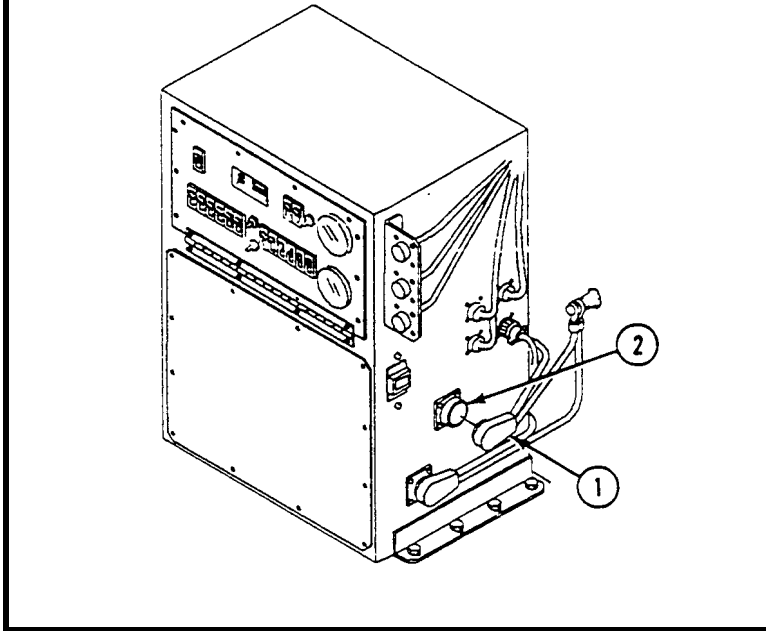


**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

0090 00

**Y**

1. Remove cable W4 plug P1 (1) from Power Control Enclosure jack J25 (2).
2. Measure voltage between center of P1 (1) and ground.
3. Does multimeter read 22 volts DC or more?



**YES**



**NO**

**YN**

1. Replace cable W4 (WP 0838 00).
2. Verify no faults found.

**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

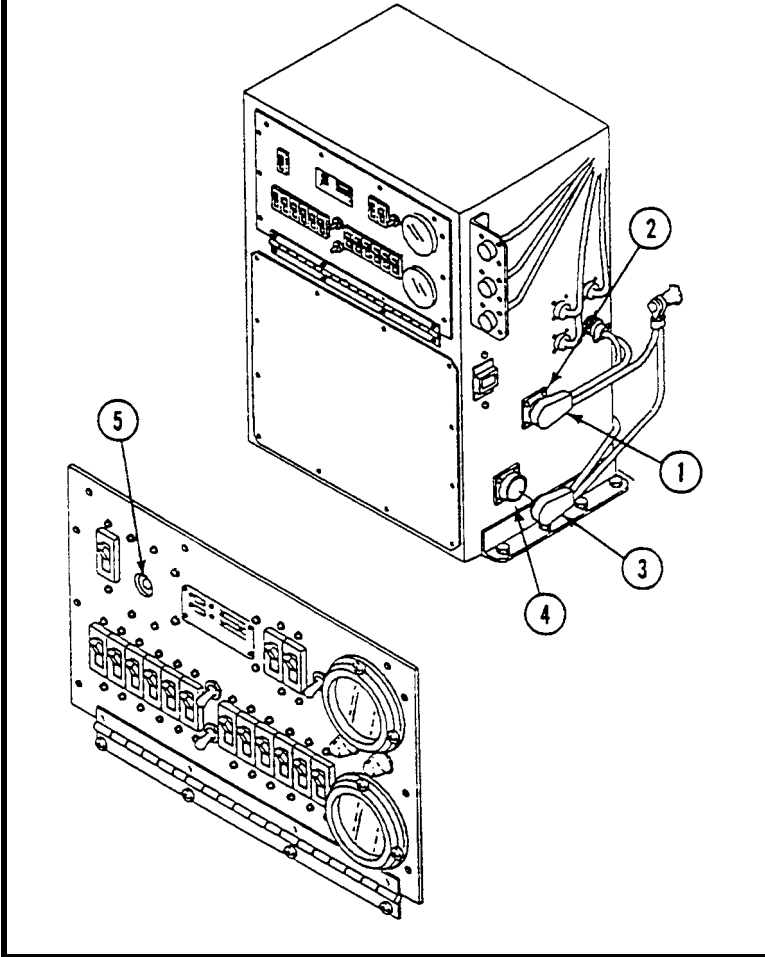
0090 00

**2Y**

1. Install cable W4 plug P1 (1) on Power Control Enclosure jack J25 (2).
2. Remove cable W6 plug P5 (3) from Power Control Enclosure jack J26 (4).
3. Turn MASTER SWITCH to ON and have helper press DC TO INVERTERS button (5) on Power Control Enclosure panel.
4. Measure voltage between center of J26 (4) and ground.
5. Does multimeter read 22 volts DC or more?

**NO**

**GO TO AY (PAGE 0090 00-6)**



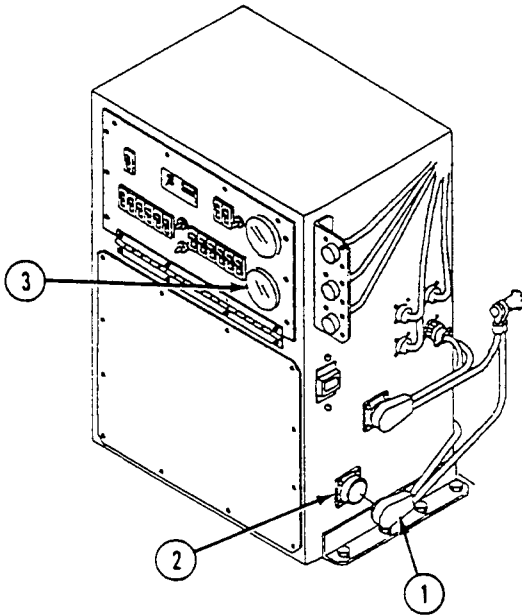
**YES**

**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

0090 00

**3Y**

1. Set MASTER SWITCH to OFF.
2. Install cable W6 plug P5 (1) on Power Control Enclosure jack J26 (2).
3. Set MASTER SWITCH to ON.
4. Does voltage on DC VOLTS meter (3) on Power Control Enclosure panel read the same as voltage at carrier batteries?



**NO**

**GO TO BY (PAGE 0090 00-11)**

**YES**

**4Y**

1. Verify no faults found.

**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

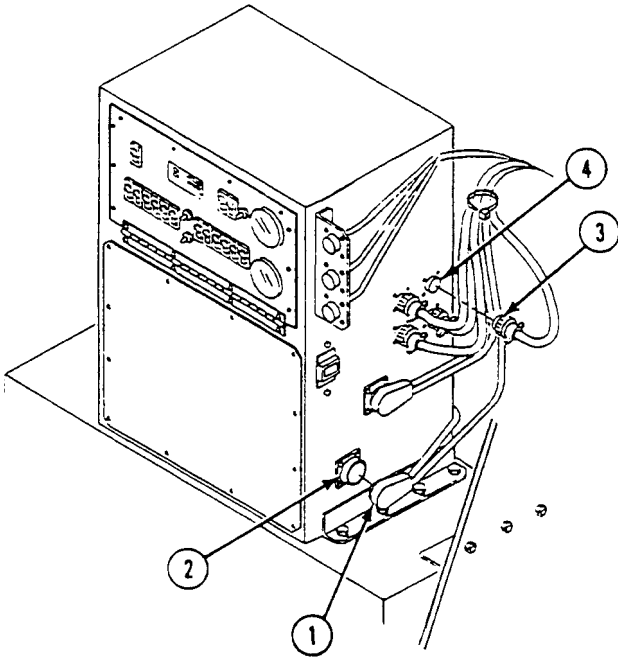
0090 00

**AY**

1. Set MASTER SWITCH to OFF.
2. Install cable W6 plug P5 (1) on Power Control Enclosure jack J26 (2).
3. Remove cable W38 plug P7 (3) from Power Control Enclosure jack J28 (4).
4. Set MASTER SWITCH to ON.
5. Measure voltage between center of P7 (3) and ground.
6. Does multimeter read 22 volts DC or more?

**NO**

**GO TO CY (PAGE 0090 00-12)**



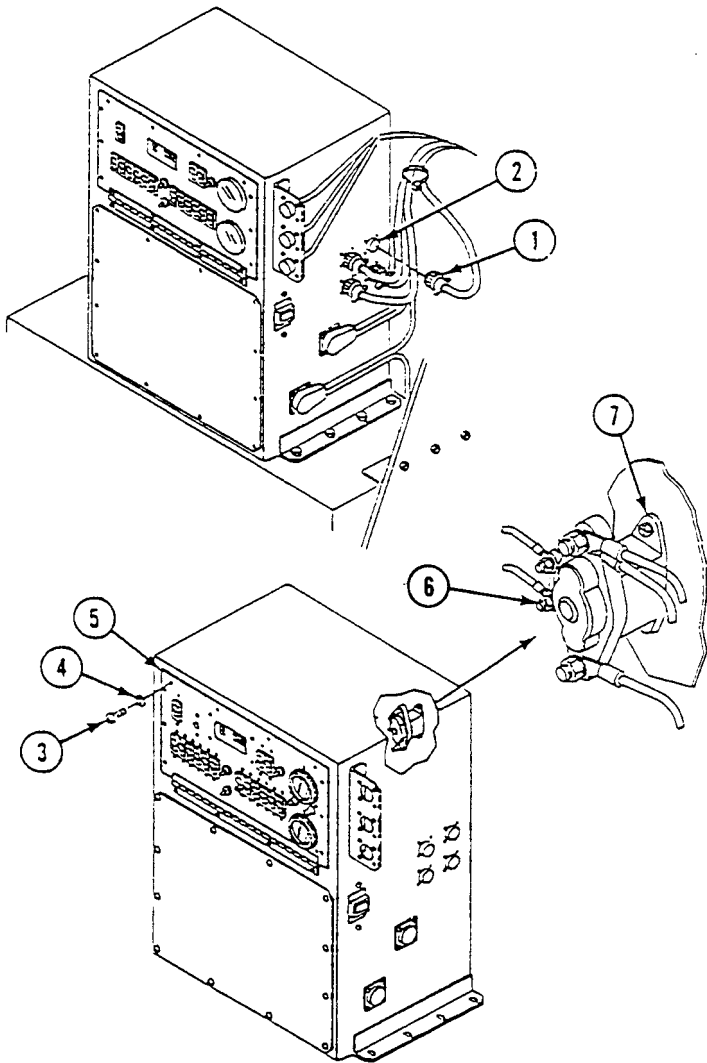
**YES**

**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

0090 00

**A2Y**

1. Set MASTER SWITCH to OFF.
2. Install cable W38 plug P7 (1) on Power Control Enclosure jack J28 (2).
3. Remove ten screws (3) and lockwashers (4), and lower faceplate (5). Discard lockwashers.
4. Set MASTER SWITCH to ON.
5. Measure voltage between terminal X1 (6) of relay K6 (7) and ground.
6. Does multimeter read 22 volts DC or more?



**NO**

**A2YN**

1. Replace circuit 44A lead (WP 0829 00).
2. Verify no faults found.

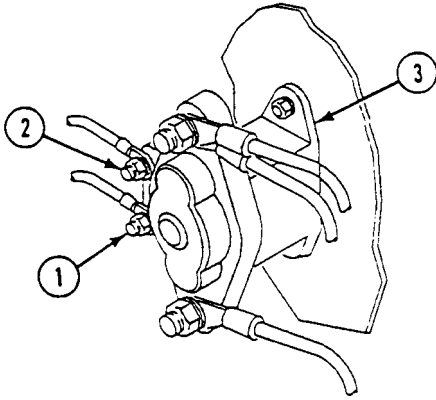
**YES**

**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

0090 00

**A3Y**

1. Measure voltage between terminals X1 (1) and X2 (2) of relay K6 (3).
2. Does multimeter read 22 volts DC or more?



**NO**

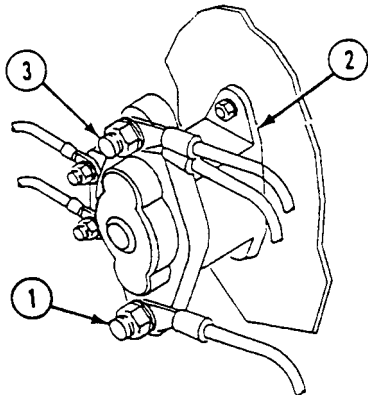
**A3YN**

1. Faulty relay K6 in Power Control Enclosure. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**A4Y**

1. Measure voltage between terminal A1 (1) of relay K6 (2) and ground.
2. Repeat measurement between terminal A2 (3) and ground.
3. Does multimeter read 22 volts DC or more for both measurements?



**NO**

**A4YN**

1. Faulty relay K6 in Power Control Enclosure. Beyond unit maintenance repair.
2. Notify supervisor.

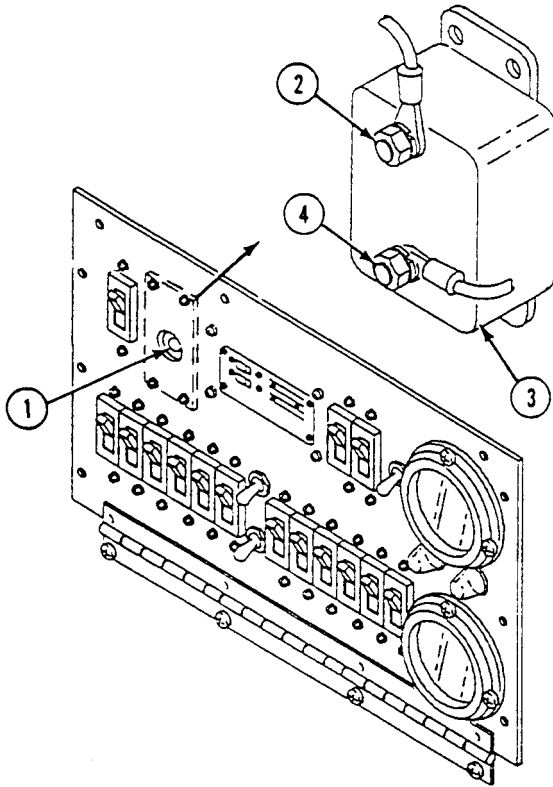
**YES**

**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

0090 00

**A5Y**

1. Have helper depress DC TO INVERTERS button (1) on Power Control Enclosure panel.
2. Measure voltage between terminal 1 (2) of circuit breaker CB2 (3) and ground.
3. Repeat measurement between terminal 2 (4) and ground.
4. Does multimeter read 22 volts DC or more for both measurements?



**NO**

**A5YN**

1. Replace circuit breaker CB2 (WP 0828 00).
2. Verify no faults found.

**YES**

---

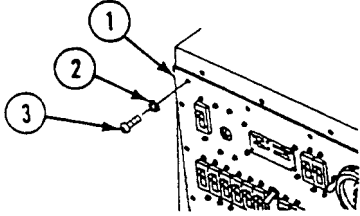
**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

---

0090 00

**A6Y**

1. Raise faceplate (1) and secure to Power Control Enclosure with ten new lockwashers (2) and screws(3).



2. Verify no faults found.

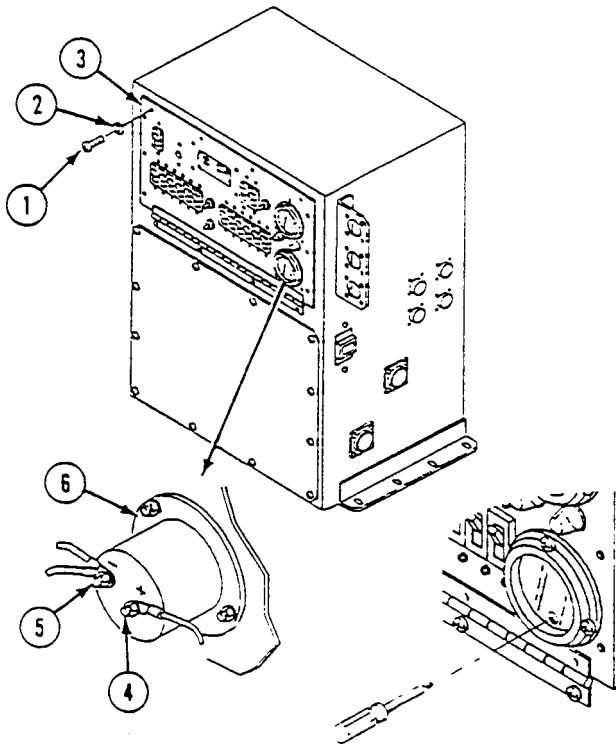


**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

0090 00

**BY**

1. Turn all vehicle power OFF (see your -10 and TM 11-7010-256-12&P).
2. Remove ten screws (1) and lockwashers (2), and lower faceplate (3). Discard lockwashers.
3. Set MASTER SWITCH to ON
4. Measure voltage between positive (4) and negative (5) terminals on meter M2 (6).
5. Does multimeter read 22 volts DC or more, and the same as meter M2?



**YES**

**BYN**

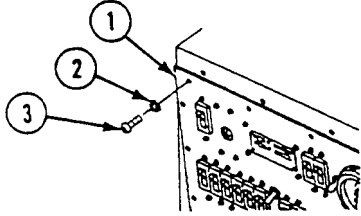
1. Adjust meter M2 needle to match multimeter reading.
2. If meter cannot be adjusted, replace DC meter M2 (WP 0827 00).
3. Verify no faults found.

**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

0090 00

**B2Y**

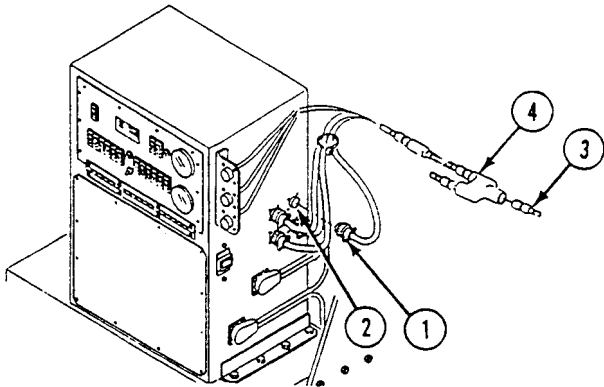
1. Raise faceplate (1) and secure to Power Control Enclosure with ten new lockwashers (2) and screws(3).



2. Verify no faults found.

**CY**

1. Set MASTER SWITCH to OFF.
2. Install cable W38 plug P7 (1) on Power Control Enclosure jack J28 (2).
3. Remove circuit 415 plug P1 (3) from adapter T2 plug P1 (4).
4. Set MASTER SWITCH to ON.
5. Measure voltage between circuit 415 plug P1 (3) and ground.
6. Does multimeter read 22 volts DC or more?



YES

NO

**CYN**

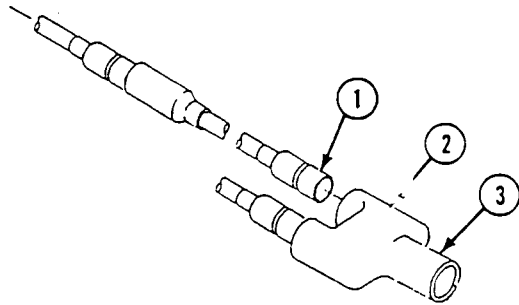
1. Go to: MASTER SWITCH ON indicator does not light (WP 0048 00).

**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

0090 00

**C2Y**

1. Set MASTER SWITCH to OFF.
2. Remove cable W29 plug P1 (1) from adapter T2 plug P2 (2).
3. Measure resistance between adapter T2 plugs P2 (2) and P1 (3).
4. Does multimeter read 0 ohms?



NO

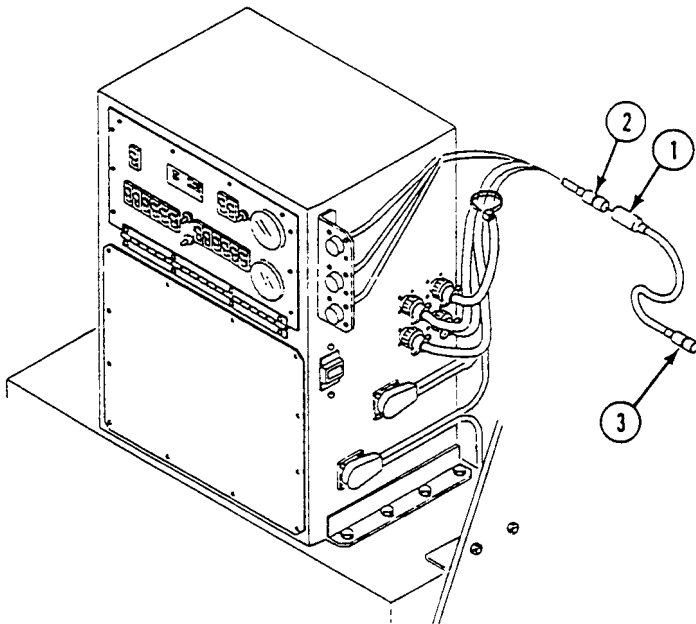
**C2YN**

1. Replace adapter T2 (WP 0850 00).
2. Verify no faults found.

YES

**C3Y**

1. Remove cable W29 plug P2 (1) from cable W38 plug P6 (2).
2. Measure resistance between plugs P2 (1) and P1 (3) of cable W29.
3. Does multimeter read 0 ohms?



NO

**C3YN**

1. Replace cable W29 (WP 0850 00).
2. Verify no faults found.

YES

**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

0090 00

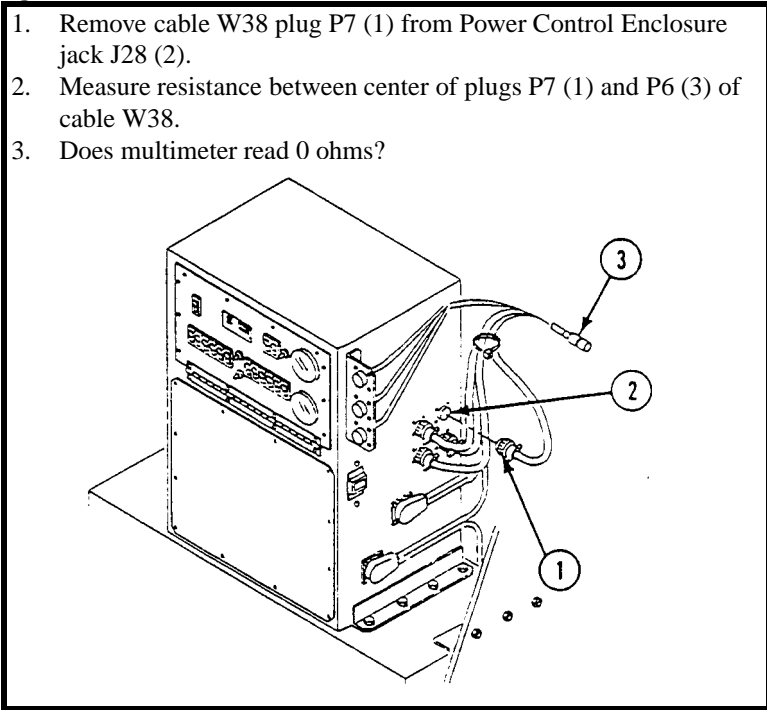
**C4Y**

1. Remove cable W38 plug P7 (1) from Power Control Enclosure jack J28 (2).
2. Measure resistance between center of plugs P7 (1) and P6 (3) of cable W38.
3. Does multimeter read 0 ohms?

**NO**

**C4YN**

1. Replace cable W38 (WP 0850 00).
2. Verify no faults found.



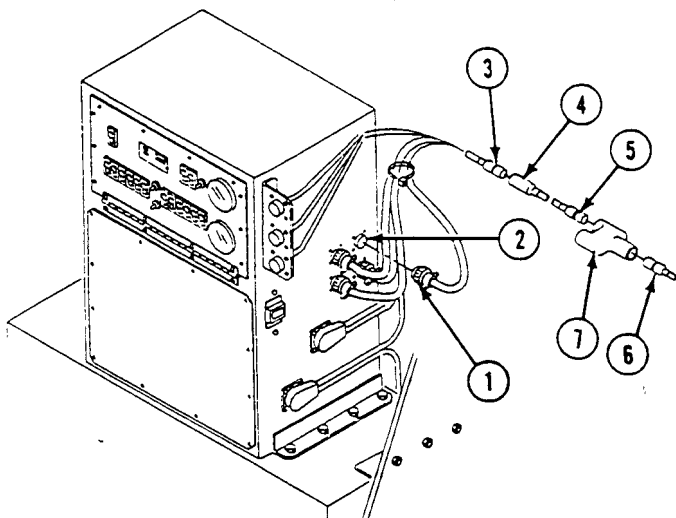
**YES**

**POWER CONTROL ENCLOSURE A1 DC INPUT/OUTPUT INOPERATIVE (M1068A3 ONLY)—Continued**

0090 00

**C5Y**

1. Install cable W38 plug P7 (1) on Power Control Enclosure jack J28(2).
2. Install cable W38 plug P6 (3) on cable W29 plug P2 (4).
3. Install cable W29 plug P1 (5) and circuit 415 plug P1 (6) on adapter T2 (7).



4. Verify no faults found.



---

**NO AC POWER FROM TENT INTERFACE PANEL A5 (M1068A3 ONLY)**

---

**0091 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

Materials/Parts

Lockwasher (10)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

**WARNING**



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

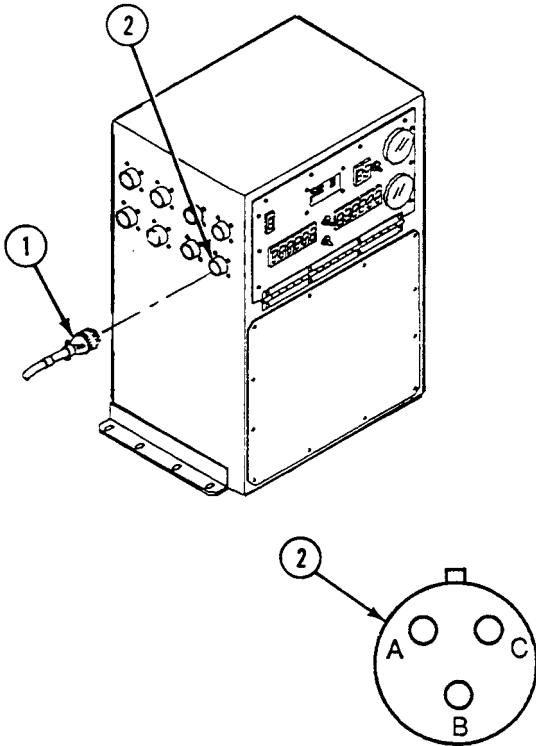
**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

T

1. Remove cable W32, plug P15 (1) from Power Control Enclosure jack J32 (2).
2. Apply AC power to SICPS system, TM 11-7010-256-12&P.
3. Measure voltage between socket A and socket B of jack J32 (2) and then between socket A and socket C.
4. Does multimeter read 110 volts AC or more for each measurement?

NO

GO TO BY (PAGE 0091 00-4)

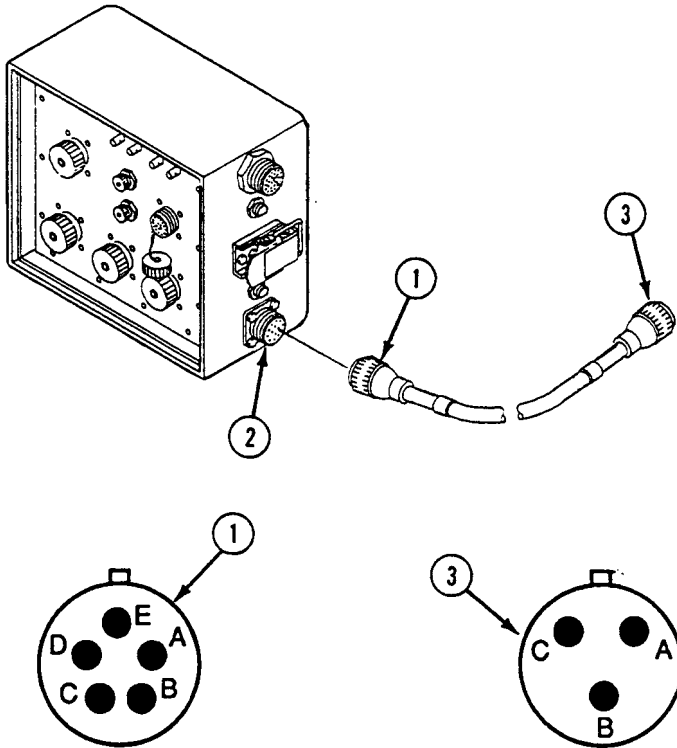


YES



**Y**

1. Turn all power OFF, (see your -10) and TM 11-7010-256-12&P.
2. Remove cable W32, plug P6 (1) from Tent Interface Panel jack J7 (2).
3. Measure resistance between pins on P6 (1) and P15 (3) of cable W32 as follows:
  - P6 pin C to P15 pin A
  - P6 pin D to P15 pin B
  - P6 pin E to P15 pin C
4. Does multimeter read 0 ohms for each set of measurements?



**NO**

**YN**

1. Replace cable W32 (WP 0848 00).
2. Verify no faults found.

**YES**

**2Y**

1. Faulty Tent Interface Panel. Beyond unit maintenance repair.
2. Notify supervisor.

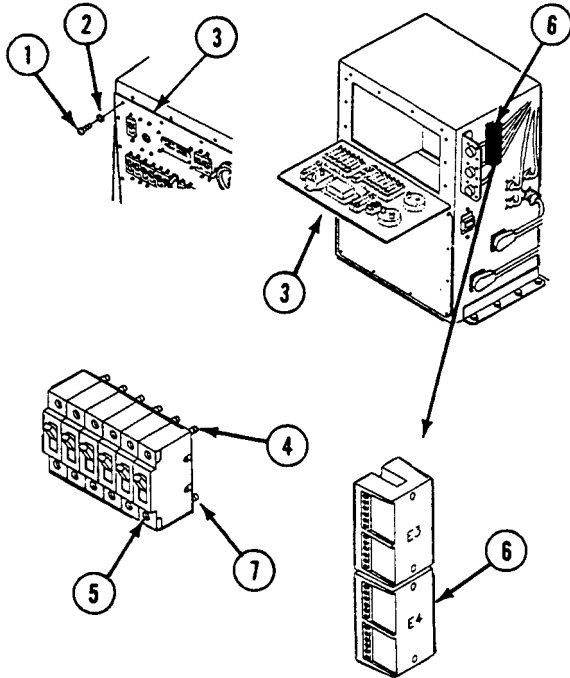
**BY**

1. Remove ALL power from SICPS system, (see your -10) and TM 11-7010-256-12&P.
2. Remove ten screws (1) and lockwashers (2), and lower faceplate (3). Discard lockwashers.
3. Apply AC power to the SICPS system, (see your -10) and TM 11-7010-256-12&P.
4. Set AC TENT INTERFACE PANEL circuit breaker to ON, TM 11-7010-256-12&P.
5. Measure voltage between terminal 1 (4) of circuit breaker CB10 (5) to anywhere on bus bar E4 (6). Repeat measurement for terminal 2 (7) to bus bar E4.
6. Does multimeter read 110 volts AC for each measurement?

NO

**BYN**

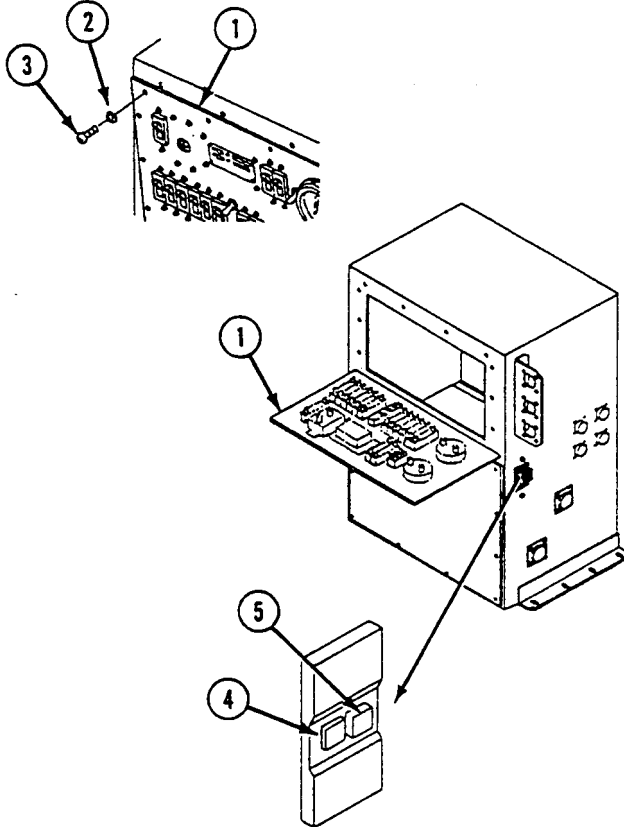
1. Replace circuit breaker CB10 (WP 0828 00).
2. Verify no faults found.



YES

**B2Y**

1. Raise faceplate (1) and secure to Power Control Enclosure with ten new lockwashers (2) and screws (3).
2. Press ground fault interrupter TEST button (4).
3. Does RESET button (5) pop out?



NO

**B2YN**

1. Faulty ground fault interrupter. Beyond unit maintenance repair.
2. Verify no faults found.

YES

**B3Y**

1. Go to: No Power To AC Circuits (M1068A3 Only) (WP 0107 00).



---

**NO DC POWER FROM TENT INTERFACE PANEL A5 (M1068A3 ONLY)**

---

**0092 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

Materials/Parts

Lockwasher (10)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

---

**WARNING**

---



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

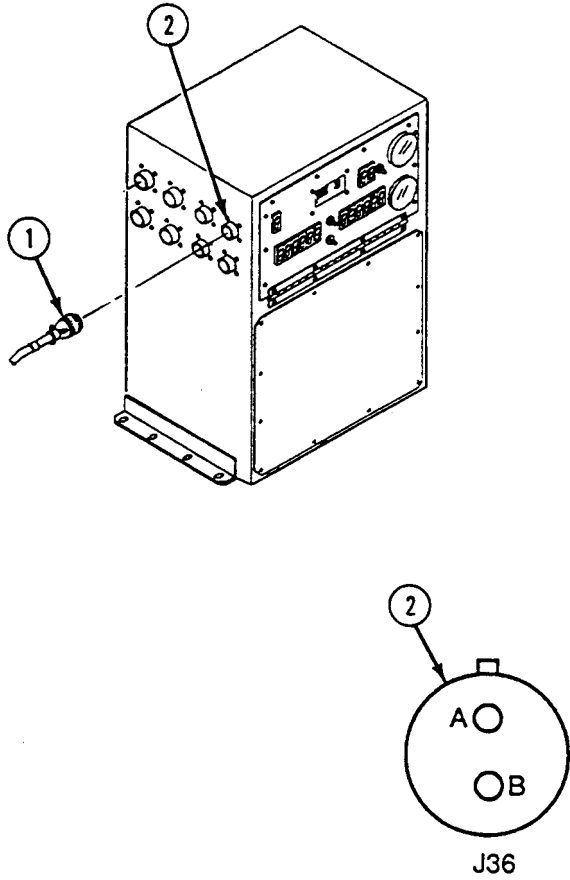
**DO NOT** attempt power cable connections until grounding system and signal/data cabling have been completed.

T

1. Remove cable W32, plug P16 (1) from Power Control Enclosure jack J36 (2).
2. Turn MASTER SWITCH to ON (see your -10).
3. Set DC TENT INTERFACE panel switch to ON TM 11-7010-256-12&P.
4. Measure voltage between jack J36 (2) socket A to socket B.
5. Does multimeter read 22 volts DC or more?

NO

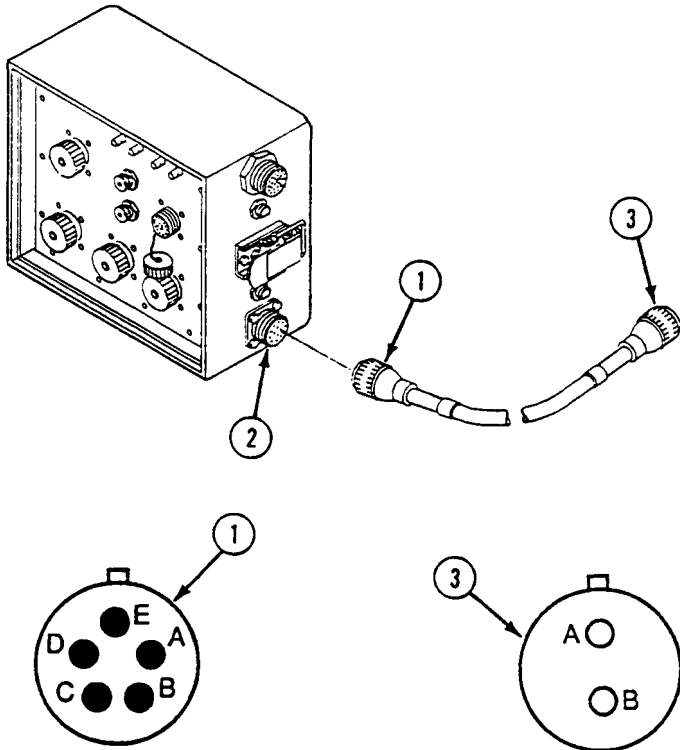
GO TO BY (PAGE 0092 00-4)



YES

**Y**

1. Turn MASTER SWITCH to OFF (see your -10).
2. Remove cable W32, plug P6 (1) from TENT INTERFACE panel jack J7 (2).
3. Measure resistance between pin A on plug P6 (1) and pin A on plug P16 (3) of cable W32.
3. Measure resistance between pin B on plug P6 (1) and pin B on plug P16 (3) of cable W32.
4. Does multimeter read 0 ohms for each set of measurements?



**NO**

**YN**

1. Replace cable W32 (WP 0848 00).
2. Verify no faults found.

**YES**

**2Y**

1. Faulty Tent Interface Panel. Beyond unit maintenance repair.
2. Notify supervisor.

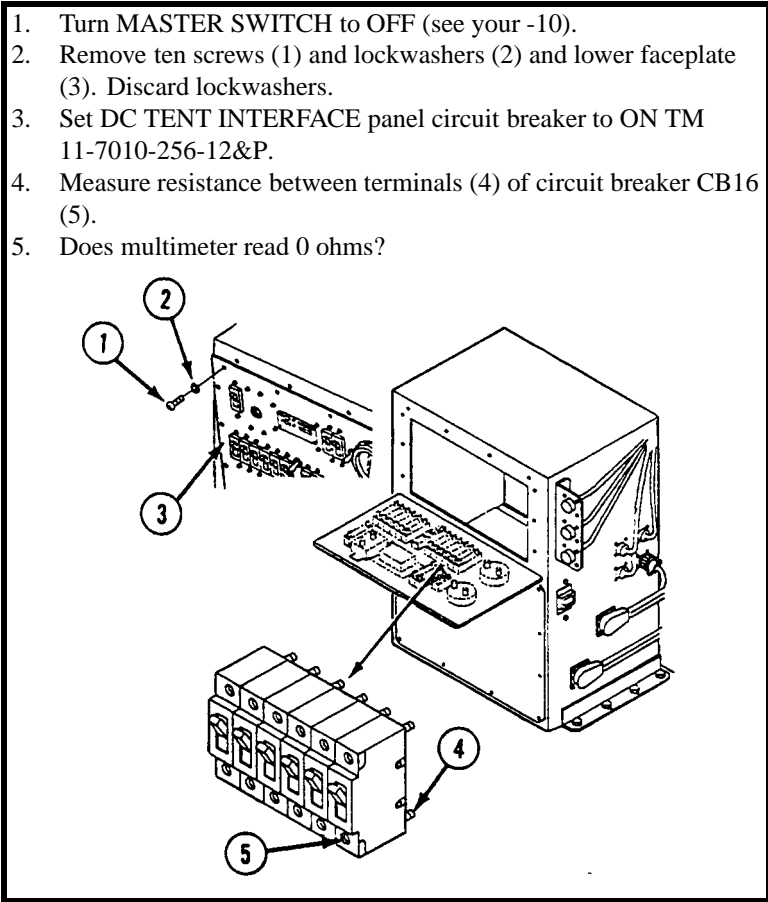
**BY**

1. Turn MASTER SWITCH to OFF (see your -10).
2. Remove ten screws (1) and lockwashers (2) and lower faceplate (3). Discard lockwashers.
3. Set DC TENT INTERFACE panel circuit breaker to ON TM 11-7010-256-12&P.
4. Measure resistance between terminals (4) of circuit breaker CB16 (5).
5. Does multimeter read 0 ohms?

NO

**BYN**

1. Replace circuit breaker CB16 (WP 0827 00).
2. Verify no faults found.



YES

**B2Y**

1. Raise faceplate and secure to Power Control Enclosure with ten new lockwashers and screws.
2. Go to: Power Control Enclosure A1 DC Input/Output Inoperative (M1068A3 Only) (WP 0090 00).



---

**NO POWER FROM ROADSIDE AC POWER EXTENSION BOX A6 (M1068A3 ONLY)**

---

**0093 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

Materials/Parts

Lockwasher (10)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

---

**WARNING**



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

**NO POWER FROM ROADSIDE AC POWER EXTENSION BOX A6 (M1068A3 ONLY)—Continued**

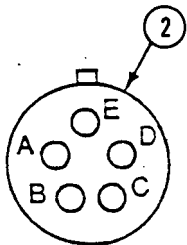
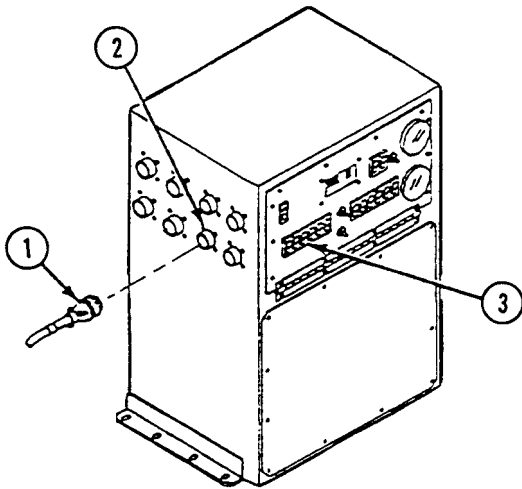
0093 00

**T**

1. Remove cable W7 plug P10 (1) from Power Control Enclosure jack J30 (2).
2. With AC power accepted, set AC LEFT OUTLETS switches (3) on Power Control Enclosure panel to ON, see TM 11-7010-256-12&P.
3. Measure voltage between sockets A and B of jack J30 (2).
4. Measure voltage between sockets C and D of jack J30 (2).
5. Does multimeter read 110 volts AC or more for both measurements?

**NO**

**GO TO BY (PAGE 0093 00-4)**



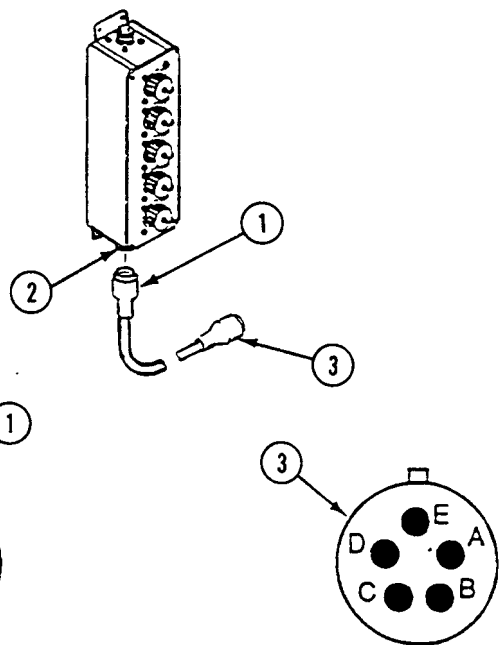
**YES**

**NO POWER FROM ROADSIDE AC POWER EXTENSION BOX A6 (M1068A3 ONLY)—Continued**

0093 00

**Y**

1. Set AC LEFT OUTLETS switches to OFF and remove all power from SICPS system (see your -10) and TM 11-7010-256-12&P.
2. Remove cable W7 plug P1 (1) from Roadside AC Power Extension Box jack J1 (2).
3. Measure resistance between pins of plugs P1 (1) and P10 (3) on cable W7 as follows:
  - P1 pin A to P10 pin A
  - P1 pin B to P10 pin B
  - P1 pin C to P10 pin C
  - P1 pin D to P10 pin D
  - P1 pin E to P10 pin E
4. Does multimeter read 0 ohms for each set of pins?



**NO**

**YN**

1. Replace cable W7 (WP 0842 00).
2. Verify no faults found.

**YES**

**2Y**

1. Replace Roadside AC Power Extension Box A6 (WP 0834 00).
2. Verify no faults found.

**NO POWER FROM ROADSIDE AC POWER EXTENSION BOX A6 (M1068A3 ONLY)—Continued**

0093 00

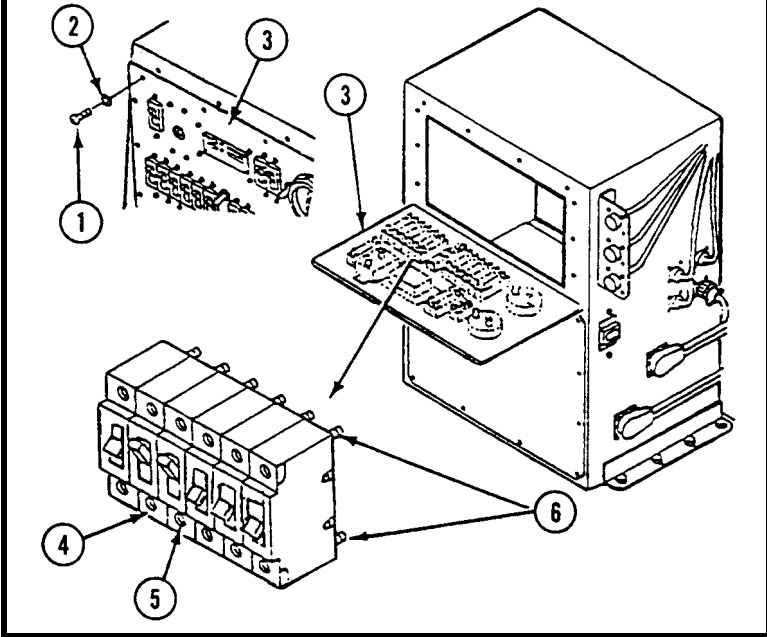
**BY**

1. Turn MASTER POWER switch to OFF (see your -10) and TM 11-7010-256-12&P.
2. Remove ten screws (1) and lockwashers (2), and lower faceplate (3). Discard lockwashers.
3. Turn ON AC LEFT OUTLETS circuit breakers CB6 (4) and CB7 (5).
4. Measure resistance between terminals 1 and 2 (6) of circuit breakers CB6 (4) and CB7 (5).
5. Does multimeter read 0 ohms for each measurement?

**NO**

**BYN**

1. Resistance in CB6 and CB7 should be 0 ohms. If any resistance is present, replace that CB (WP 0828 00).
2. Verify no faults found.



**YES**

**B2Y**

1. Raise faceplate and secure to Power Control Enclosure with ten new lockwashers and screws.
2. Go to: No Power To AC Circuits (M1068A3 Only) (WP 0107 00).

---

**NO POWER FROM CURBSIDE AC POWER EXTENSION BOX A7 (M1068A3 ONLY)**

---

**0094 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

Materials/Parts

Lockwasher (10)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

---

**WARNING**

---



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

**NO POWER FROM CURBSIDE AC POWER EXTENSION BOX A7 (M1068A3 ONLY)—Continued**

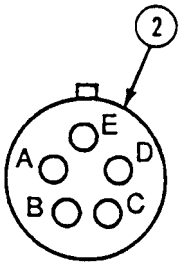
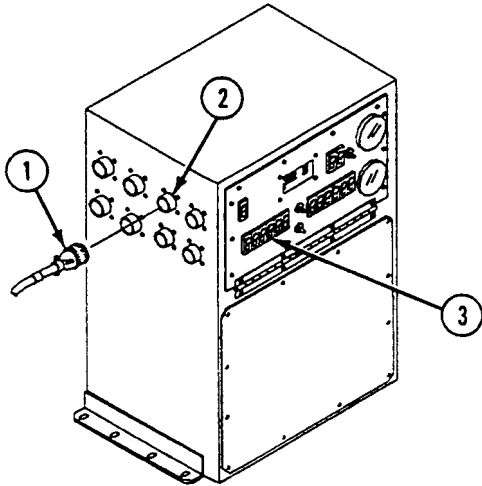
0094 00

**T**

1. With AC power accepted, set AC RIGHT OUTLETS switches (3) on Power Control Enclosure panel to ON, see TM 11-7010-256-12&P.
2. Measure voltage between sockets A and B of jack J31 (2).
3. Measure voltage between sockets C and D of jack J31 (2).
4. Does multimeter read 110 volts AC or more for both measurements?

**NO**

**GO TO BY (PAGE 0094 00-4)**



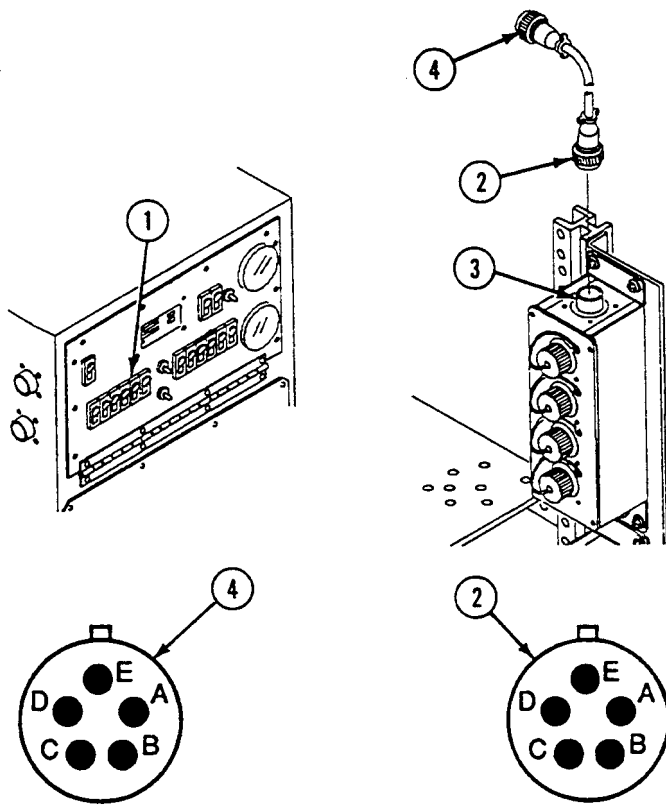
**YES**

**NO POWER FROM CURBSIDE AC POWER EXTENSION BOX A7 (M1068A3 ONLY)—Continued**

0094 00

**Y**

1. Set AC RIGHT OUTLETS switches (1) to OFF and remove ALL power from SICPS system (see your -10) and TM 11-7010-256-12&P.
2. Remove cable W8 plug P1 (2) from Curbside AC Power Extension Box jack J1 (3).
3. Measure resistance between pins of plugs P1 (2) and P11 (4) on cable W8 as follows:
  - P1 pin A to P11 pin A
  - P1 pin B to P11 pin B
  - P1 pin C to P11 pin C
  - P1 pin D to P11 pin D
  - P1 pin E to P11 pin E
4. Does multimeter read 0 ohms for each set of pins?



**NO**

**YN**

1. Replace cable W8 (WP 0843 00).
2. Verify no faults found.

**YES**

**2Y**

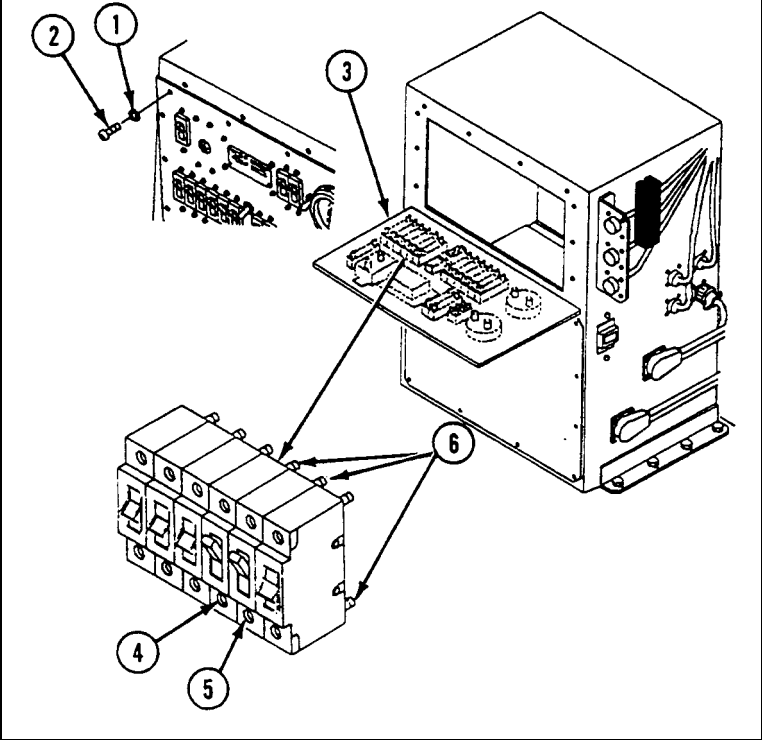
1. Replace Curbside AC Power Extension Box A7 (WP 0815 00).
2. Verify no faults found.

**NO POWER FROM CURBSIDE AC POWER EXTENSION BOX A7 (M1068A3 ONLY)—Continued**

0094 00

**BY**

1. Turn MASTER POWER switch to OFF (see your -10) and TM 11-7010-256-12&P.
2. Remove ten screws (1) and lockwashers (2). Lower faceplate (3). Discard lockwashers.
3. Turn ON AC RIGHT OUTLETS circuit breakers CB8 (4) and CB9 (5).
4. Measure resistance between terminal 1 and terminal 2 (6) of circuit breaker CB8 (4).
5. Measure resistance between terminal 1 and terminal 2 (6) of circuit breaker CB9 (5).
6. Does multimeter read 0 ohms for each measurement?



**NO** →

**BYN**

1. Resistance in CB8 and CB9 should be 0 ohms. If any resistance is present, replace that CB (WP 0828 00).
2. Verify no faults found.

**YES** ↓

**B2Y**

1. Raise faceplate and secure to Power Control Enclosure with ten new lockwashers and screws.
2. Go to: No Power To AC Circuits (M1068A3 Only) (WP 0107 00).



---

**NO POWER FROM DC POWER EXTENSION BOX A9 (ALL EXCEPT JACK J23) (M1068A3 ONLY)**

---

**0095 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

Materials/Parts

Lockwasher (10)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

---

**WARNING**

---



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

**NO POWER FROM DC POWER EXTENSION BOX A9 (ALL EXCEPT JACK J23) (M1068A3 ONLY)—Continued**

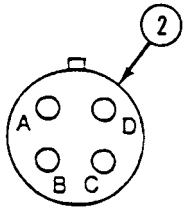
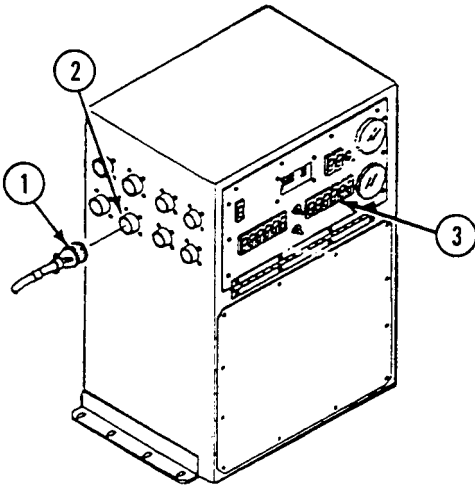
0095 00

**T**

1. Remove cable W10 plug P14 (1) from Power Control Enclosure jack J34 (2).
2. Turn MASTER SWITCH to ON.
3. Set DC LEFT OUTLETS switches (3) on Power Control Enclosure panel to ON (see TM 11-7010-256-12&P).
4. Measure voltage between sockets A and B of jack J34 (2). Repeat measurement for sockets C and D.
5. Does multimeter read 22 volts DC or more for each measurement?

**NO**

**GO TO AY (PAGE 0095 00-4)**



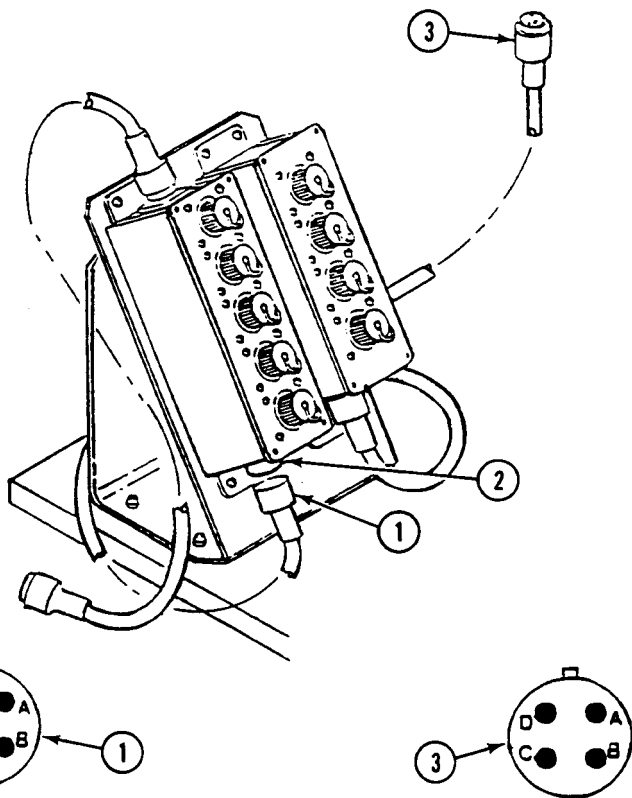
**YES**

**NO POWER FROM DC POWER EXTENSION BOX A9 (ALL EXCEPT JACK J23) (M1068A3 ONLY)—Continued**

0095 00

**Y**

1. Turn MASTER SWITCH to OFF.
2. Remove cable W10 plug P1 (1) from DC Power Extension Box A9 jack J1 (2).
3. Measure resistance between pins of plugs P1 (1) and P14 (3) on cable W10 as follows:
  - P1 pin A to P14 pin A
  - P1 pin B to P14 pin B
  - P1 pin C to P14 pin C
  - P1 pin D to P14 pin D
4. Does multimeter read 0 ohms for each set of pins?



**NO**

**YN**

1. Replace cable W10 (WP 0844 00).
2. Verify no faults found.

**YES**

**2Y**

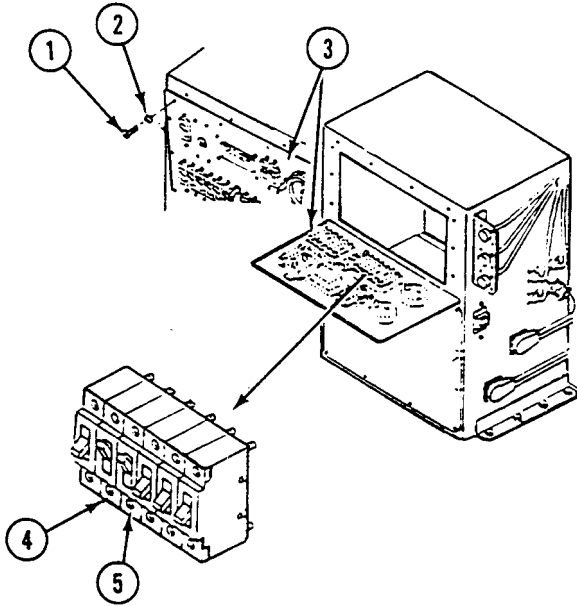
1. Replace DC Power Extension Box A9 (WP 0834 00).
2. Verify no faults found.

**NO POWER FROM DC POWER EXTENSION BOX A9 (ALL EXCEPT JACK J23) (M1068A3 ONLY)—Continued**

0095 00

**AY**

1. Turn MASTER SWITCH to OFF.
2. Remove ten screws (1) and lockwashers (2), and lower faceplate (3). Discard lockwashers.
3. Turn ON DC LEFT OUTLETS circuit breakers CB12 (4) and CB13 (5).
4. Measure resistance between terminals 1 and 2 of circuit breakers CB12 (4) and CB13 (5).
5. Does multimeter read 0 ohms for each measurement?

**NO****AYN**

1. Resistance in CB12 and CB13 should be 0 ohms. If any resistance is present, replace that CB (WP 0828 00).
2. Verify no faults found.

**YES****A2Y**

1. Raise faceplate and secure to Power Control Enclosure with ten new lockwashers and screws.
2. Go to: Power Control Enclosure A1 DC Input/Output Inoperative (M1068A3 Only) (WP 0090 00).

---

**NO POWER FROM DC POWER EXTENSION BOX A9, JACK J23 (JTIDS)  
(M1068A3 ONLY)**

---

**0096 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

Materials/Parts

Lockwasher (10)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

---

**WARNING**



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

**NO POWER FROM DC POWER EXTENSION BOX A9, JACK J23 (JTIDS) (M1068A3 ONLY)—Continued**

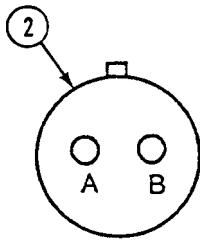
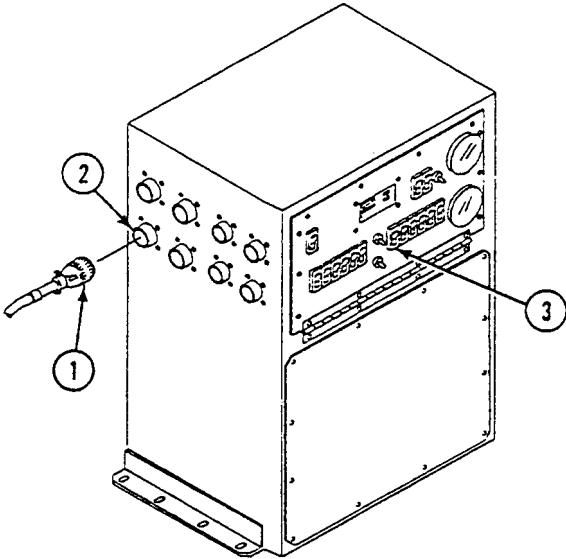
0096 00

**T**

1. Remove cable W45 plug P13 (1) from Power Control Enclosure jack J33 (2).
2. Turn MASTER SWITCH to ON.
3. Set JTIDS switch (3) on Power Control Enclosure panel to ON (see TM 11-7010-256-12&P).
4. Measure voltage between sockets A and B of J33 (2).
5. Does multimeter read 22 volts DC or more?

**NO**

**GO TO AY (PAGE 0096 00-4)**



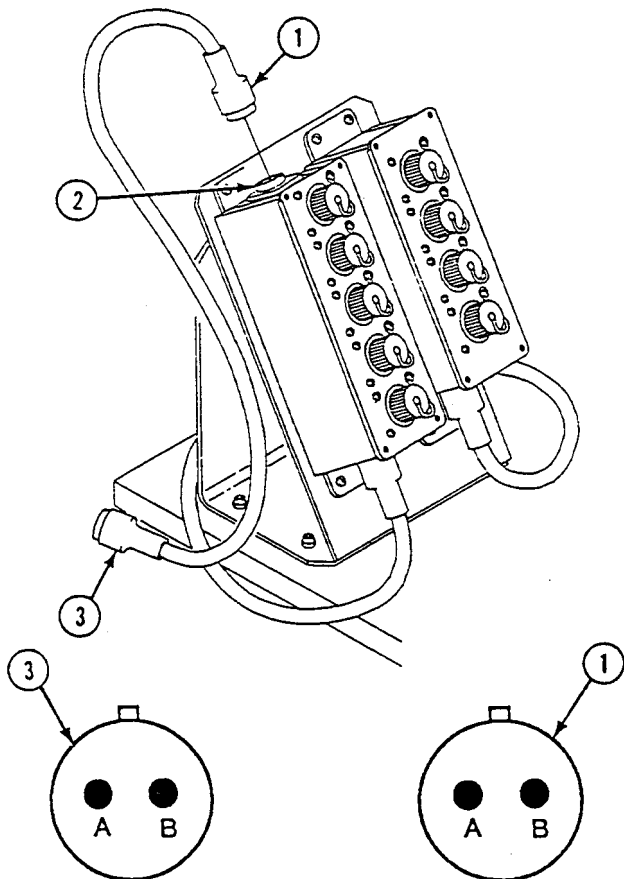
**YES**

**NO POWER FROM DC POWER EXTENSION BOX A9, JACK J23 (JTIDS) (M1068A3 ONLY)—Continued**

0096 00

**Y**

1. Turn MASTER SWITCH to OFF.
2. Remove cable W45 plug P1 (1) from DC Power Extension Box A9 jack J2 (2).
3. Measure resistance between plug P1 (1) pin A and P13 (3) pin A of cable W45. Repeat measurement for pins B.
4. Does multimeter read 0 ohms for each measurement?



**NO**

**YN**

1. Replace cable W45 (WP 0853 00).
2. Verify no faults found.

**YES**

**2Y**

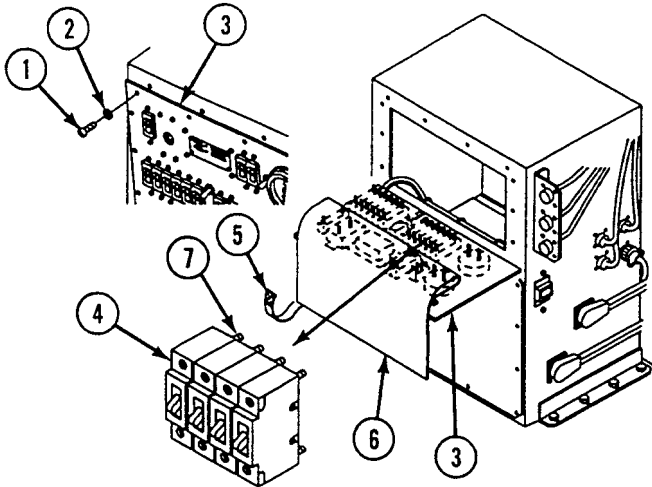
1. Replace DC Power Extension Box A9 (WP 0834 00).
2. Verify no faults found.

**NO POWER FROM DC POWER EXTENSION BOX A9, JACK J23 (JTIDS) (M1068A3 ONLY)—Continued**

0096 00

**AY**

1. Turn MASTER SWITCH to OFF.
2. Remove ten screws (1) and lockwashers (2), and lower faceplate (3). Discard lockwashers.
3. Turn ON JTIDS circuit breaker CB11 (4).
4. Undo velcro strap (5) and lift safety cover (6) over top of faceplate (3).
5. Measure resistance between terminals 1 and 2 (7) of circuit breaker CB11 (4).
6. Does multimeter read 0 ohms?



**NO**

**AYN**

1. Replace circuit breaker CB11 (WP 0828 00).
2. Verify no faults found.

**YES**

**A2Y**

1. Place safety cover over inside of faceplate and secure with velcro strap.
1. Raise faceplate and secure to Power Control Enclosure with ten new lockwashers and screws.
2. Go to: Power Control Enclosure A1 DC Input/Output Inoperative (M1068A3 Only) (WP 0090 00).



---

**NO DC POWER TO SINGLE POINT LAN GROUND BOX A15 (M1068A3 ONLY)**

---

**0097 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
 Digital Multimeter (WP 0926 00, Item 30)

Equipment Condition

Personnel Required

Power-Generation Equipment Repairer 52D10  
 Helper (H)

Engine stopped (see your -10)

Carrier blocked (see your -10)

---

**WARNING**



**HIGH VOLTAGE** is used in the operation of this equipment.

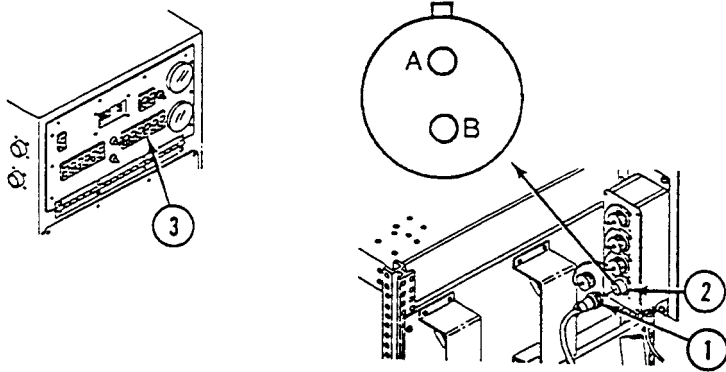
**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

- T**
1. Remove cable W40 plug P1 (1) from DC Power Extension Box A8 jack J17 (2).
  2. Turn MASTER SWITCH to ON (See your -10).
  3. Set DC RIGHT OUTLETS switches (3) on Power Control Enclosure to ON (see TM 11-7010-256-12&P).
  4. Measure voltage between sockets A and B of J17 (2).
  5. Does multimeter read 22 volts DC or more?

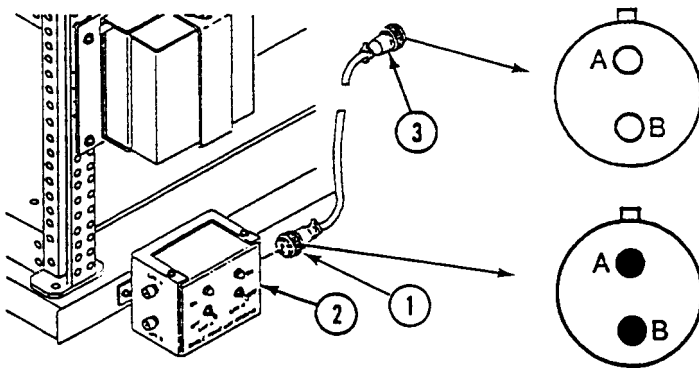


NO

- TN**
1. Go To: No Power From DC Power Extension Box A8.
  2. Verify no faults found.

YES

- Y**
1. Turn MASTER SWITCH to OFF (see your -10).
  2. Disconnect cable W40 plug P2 (1) from Single Point LAN Ground Box A15 jack J1 (2).
  3. Measure resistance between plug P1 (3) pin A and P2 (1) pin A of cable W40. Repeat measurement for pins B.
  4. Does multimeter read 0 ohms for each measurement?



NO

- YN**
1. Replace cable W40 (WP 0851 00).
  2. Verify no faults found.

YES

**2Y**

- |   |
|---|
| <ol style="list-style-type: none"><li>1. Repair LAN Ground Box A15 (WP 0820 00).</li><li>2. Verify no faults found.</li></ol> |
|---|



---

**NO POWER FROM UPS POWER EXTENSION BOX A18 (M1068A3 ONLY)**

---

**0098 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

**WARNING**



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

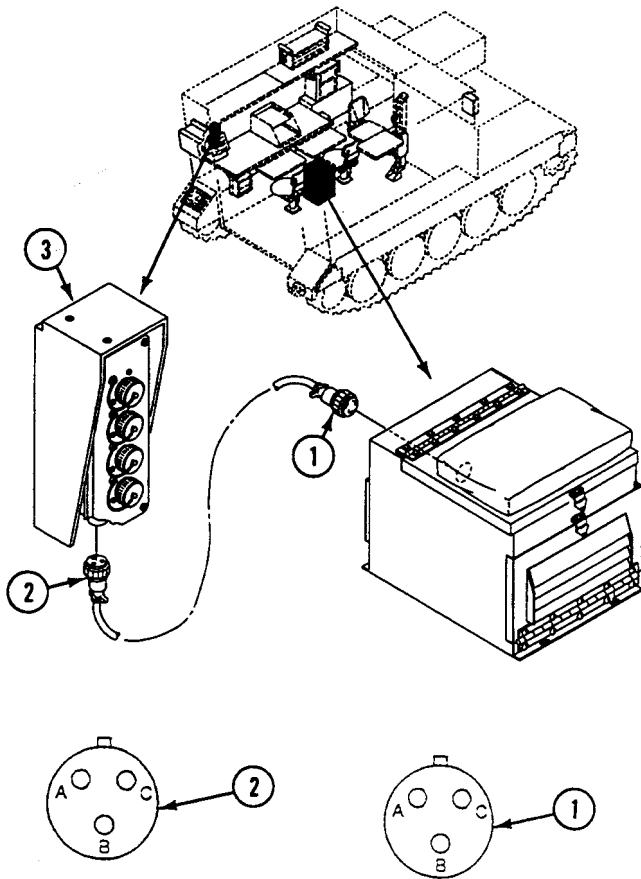
**T**

1. Open front cover on ATCCS UPS Storage Box and remove cable W251 plug P1 (1) from UPS jack AC OUT.
2. Remove cable W251 plug P2 (2) from UPS Power Extension Box A18 jack J6 (3).
3. Measure resistance between pins of plugs P1 (1) and P2 (2) of cable W251 as follows:
  - P1 pin A to P2 socket A
  - P1 pin B to P2 socket B
  - P1 pin C to P2 socket C
4. Does multimeter read 0 ohms for each measurement?

**NO**

**TN**

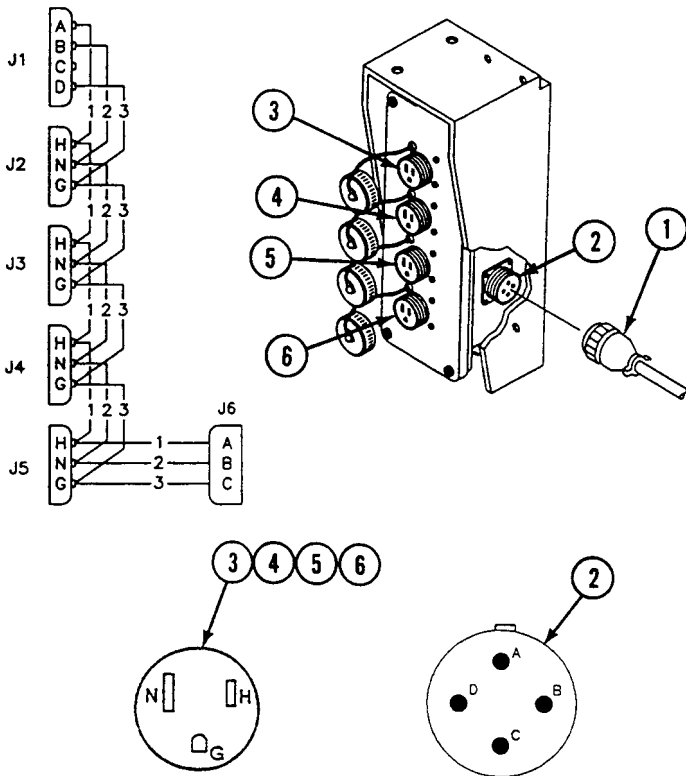
1. Replace cable W251 (WP 0852 00).
2. Verify no faults found.



**YES**

**Y**

1. Remove cable W252 plug P1 (1) from UPS Power Extension Box A18 jack J1 (2).
2. Measure resistance between jacks J1 (2), J2 (3), J3 (4), J4 (5), J5 (6), and J6 (7) of UPS Power Extension Box A18 as follows:
  - J1 socket A to J2, J3, J4, and J5 socket H
  - J1 socket B to J2, J3, J4, and J5 socket N
  - J1 socket D to J2, J3, J4, and J5 socket G
  - J1 pin A to J6 socket A
  - J1 pin B to J6 socket B
  - J1 pin D to J6 socket C
3. Does multimeter read 0 ohms for each measurement?



**NO**

**YN**

1. Replace/repair UPS Power Extension Box A18 (WP 0836 00).
2. Verify no faults found.

**YES**

**2Y**

1. Faulty ATCCS UPS Power. Beyond unit maintenance repair.
2. Notify supervisor.





---

**NO POWER FROM CURBSIDE UPS POWER EXTENSION BOX A19  
(M1068A3 ONLY)**

---

**0099 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

---

**WARNING**

---



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

**NO POWER FROM CURBSIDE UPS POWER EXTENSION BOX A19 (M1068A3 ONLY)—Continued**

0099 00

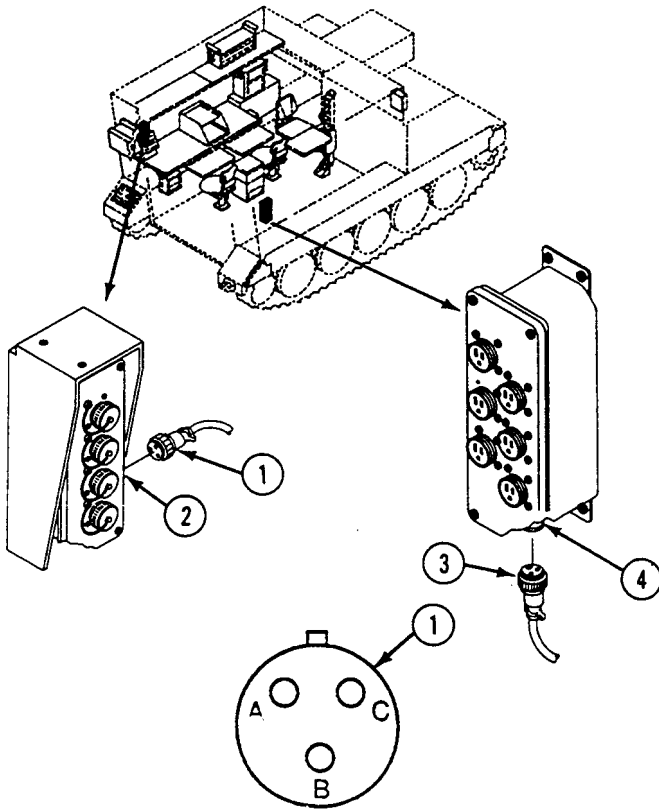
**T**

1. Remove cable W252 plug P1 (1) from UPS Power Extension Box A18 jack J1 (2).
2. Remove cable W252 plug P2 (3) from UPS Power Extension Box A19 jack J15 (4).
3. Measure resistance between pins of plugs P1 (1) and P2 (3) of cable W252 as follows:
  - P1 pin A to P2 socket A
  - P1 pin B to P2 socket B
  - P1 pin C to P2 socket C
4. Does multimeter read 0 ohms for each measurement?

**NO**

**TN**

1. Replace cable W252 (WP 0857 00).
2. Verify no faults found.



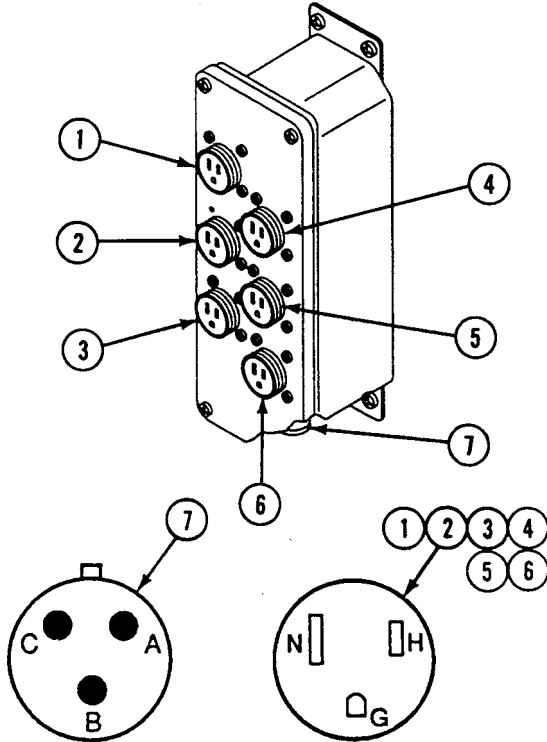
**YES**

**NO POWER FROM CURBSIDE UPS POWER EXTENSION BOX A19 (M1068A3 ONLY)—Continued**

0099 00

**Y**

1. Measure resistance between jacks J9 (1), J10 (2), J11 (3), J12 (4), J13 (5), J14 (6), and J15 (7) of UPS Power Extension Box A19 as follows:
  - J15 socket A to J9, J10, J11, J12, J13, and J14 socket H.
  - J15 socket B to J9, J10, J11, J12, J13, and J14 socket N.
  - J15 socket C to J9, J10, J11, J12, J13, and J14 socket G.
2. Does multimeter read 0 ohms for each measurement?



**NO**

**YN**

1. Replace/repair UPS Power Extension Box A19 (WP 0822 00).
2. Verify no faults found.

**YES**

**2Y**

1. Faulty ATCCS UPS Power. Beyond unit maintenance repair.
2. Notify supervisor.



---

**NO AC/DC INPUT TO ATCCS UPS POWER BOX (M1068A3 ONLY)**

---

**0100 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

Materials/Parts

Lockwasher (2)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

---

**WARNING**



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

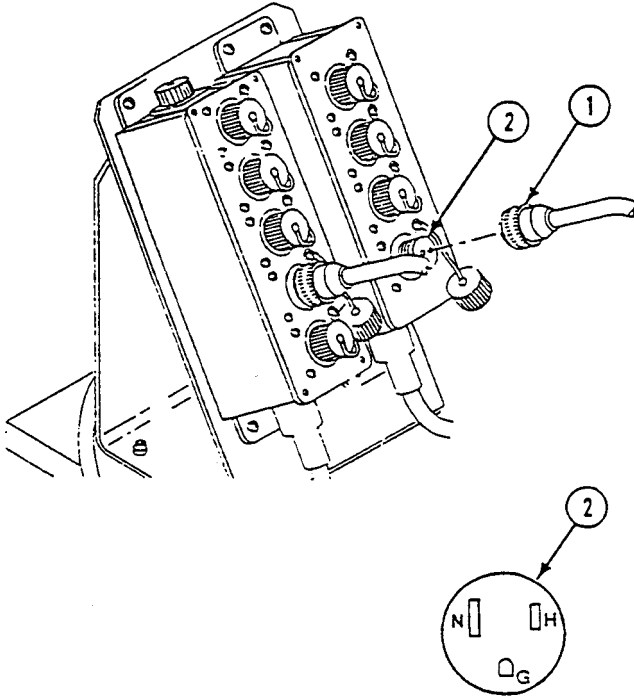
**T**

1. Remove cable W43 plug P2 (1) from Roadside AC Power Extension Box A6 jack J6 (2).
2. Apply AC power to SICPS system (TM 11-7010-256-12&P).
3. Set AC LEFT OUTLETS switches on Power Control Enclosure panel to ON.
4. Measure voltage between sockets H and N of J6 (2).
5. Does multimeter read 110 volts AC or more?

**NO**

**TN**

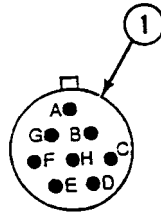
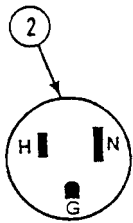
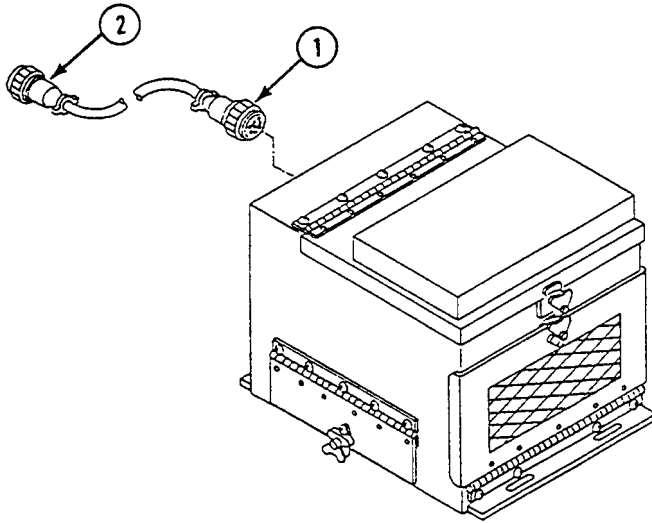
1. Go to: No Power From Roadside AC Power Extension Box A6 (WP 0093 00).



**YES**

**Y**

1. Turn all AC power OFF (TM 11-7010-256-12&P).
2. Open front cover on ATCCS UPS Storage Box and remove cable W43 plug P1 (1) from UPS jack AC IN.
3. Measure resistance between pins of plugs P2 (2) and P1 (1) of cable W43 as follows:
  - P2 pin H to P1 pin B
  - P2 pin N to P1 pin A
  - P2 pin G to P1 pin D
  - P1 pin F to P1 pin G
4. Does multimeter read 0 ohms for each measurement?



**NO**

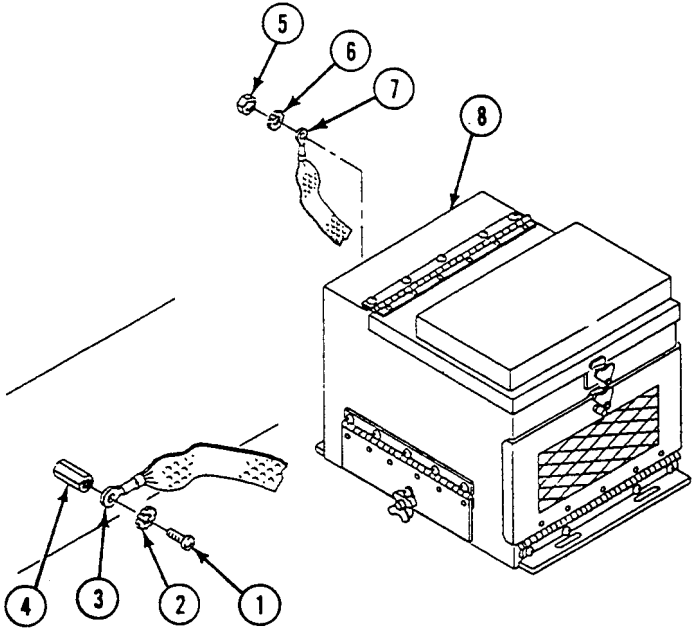
**YN**

1. Replace cable W43 (WP 0852 00).
2. Verify no faults found.

**YES**

**2Y**

1. Remove screw (1), lockwasher (2), and ground strap W12 terminal (3) from ground lug (4). Discard lockwasher.
2. Remove nut (5), lockwasher (6), and ground strap W12 terminal (7) from ATCCS UPS storage box (8). Discard lockwasher.
3. Measure resistance between terminals (3) and (7) of ground strap W12.
4. Does multimeter read 0 ohms?



**NO**

**2YN**

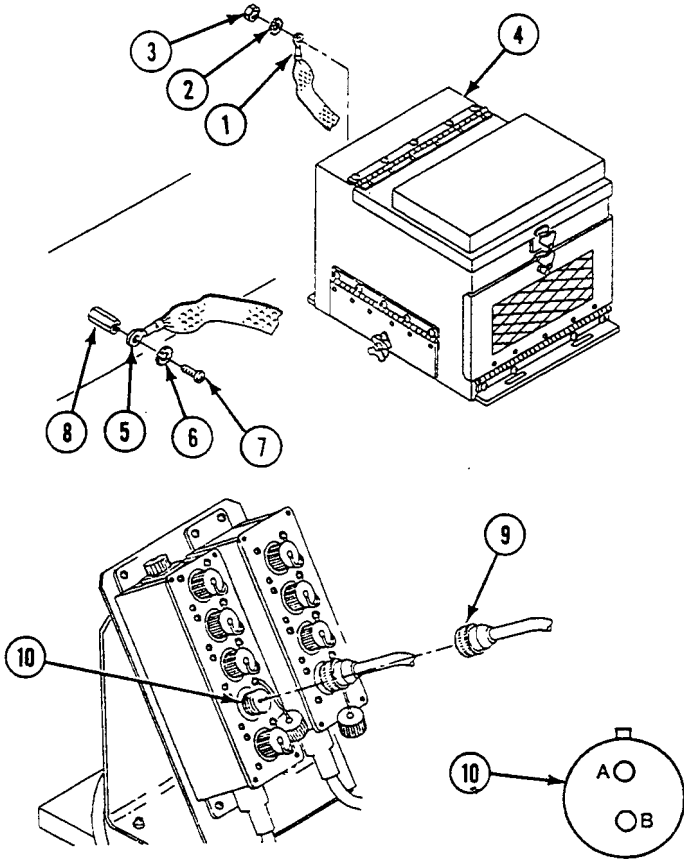
1. Replace ground strap W12 (WP 0846 00).
2. Verify no faults found.

**YES**



**3Y**

1. Install ground strap W12 terminal (1), new lockwasher (2), and nut (3) on ATCCS UPS storage box (4).
2. Install ground strap W12 terminal (5), new lockwasher (6), and screw (7) on ground lug (8).
3. Remove cable W42 plug P2 (9) from DC Power Extension Box A9 jack J21 (10).
4. Set MASTER SWITCH to ON.
5. Set DC LEFT OUTLETS switches on Power Control Enclosure panel to ON (TM 11-7010-256-12&P).
6. Measure voltage between sockets A and B of J21 (10).
7. Does multimeter read 22 volts DC or more?



**NO**

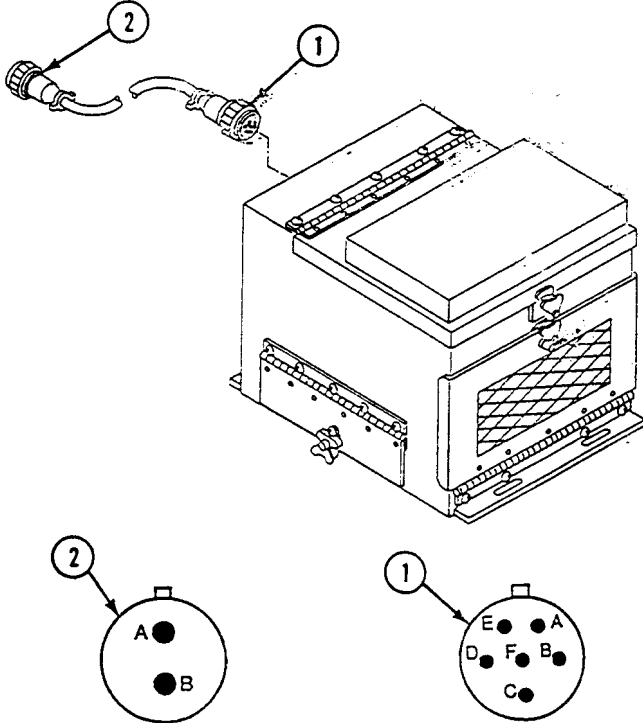
**3YN**

1. Go to: No Power from DC Power Extension Box A9 (WP 0095 00).

**YES**

**4Y**

1. Set MASTER SWITCH to OFF.
2. Open front cover on ATCCS UPS Storage Box and remove cable W42 plug P1 (1) from UPS jack DC IN.
3. Measure resistance between pins of plugs P2 (2) and P1 (1) of cable W42 as follows:  
 P2 pin A to P1 pin A, E, and F  
 P2 pin B to P1 pin B, C, and D
4. Does multimeter read 0 ohms for each measurement?



NO

**4YN**

1. Replace cable W42 (WP 0852 00).
2. Verify no faults found.

YES

**5Y**

1. Faulty ATCCS UPS Power. Beyond unit maintenance repair.
2. Notify supervisor.

---

**IN BLACKOUT MODE, FLUORESCENT LIGHTS OPERATE INCORRECTLY  
(M1068A3 ONLY)**

---

**0101 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)

Materials/Parts

Lockwasher (10)

Carrier blocked (see your -10)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

All AC External and Internal Power is OFF (see TM 710-256-12&P)

---

**WARNING**



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

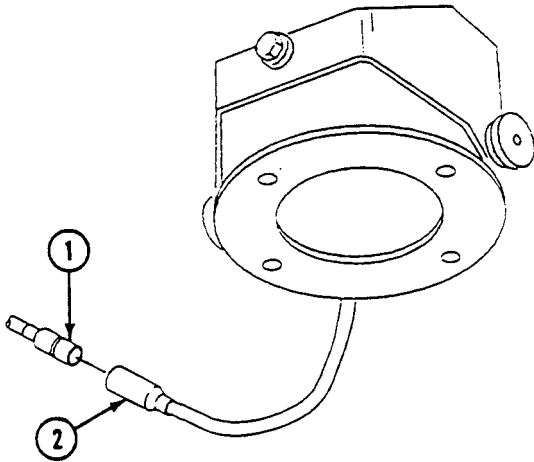
**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

**IN BLACKOUT MODE, FLUORESCENT LIGHTS OPERATE INCORRECTLY (M1068A3 ONLY)—Continued**

0101 00

**T**

1. Disconnect cable W28, plug P2 (1) from light lead (2).
2. Ensure ramp door is open or down. Set MASTER SWITCH to ON (see your -10).
3. Turn on dome lights from either the front dome light switch (on master switch panel) or at the rear dome light switch near the ramp. To do this, the blackout-bypass switch must be OFF, the ramp up, and the rear door closed.
4. Measure voltage between plug P2 (1) and ground.
5. Does multimeter read 22 volts DC or more?



**NO**

**GO TO AY (PAGE 0101 00-3)**

**YES**

**Y**

1. Turn MASTER SWITCH to OFF (see your -10).
2. Have light bulbs been replaced?

**NO**

**YN**

1. Replace light bulbs (WP 0312 00).
2. Verify no faults found.

**YES**

**2Y**

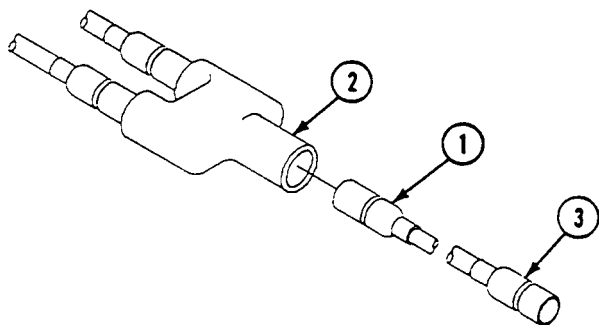
1. Repair light assembly (WP 0310 00).
2. Verify no faults found.

**IN BLACKOUT MODE, FLUORESCENT LIGHTS OPERATE INCORRECTLY (M1068A3 ONLY)—Continued**

0101 00

**AY**

1. Set MASTER SWITCH to OFF.
2. Remove cable W28, plug P1 (1) from adapter plug P1 (2).
3. Measure resistance between cable W28 plugs P1 and P2 (3).
4. Does multimeter read 0 ohms?



**NO**

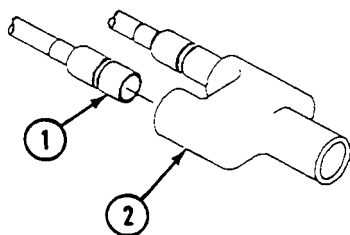
**AYN**

1. Replace cable W28 (WP 0849 00).
2. Verify no faults found.

**YES**

**A2Y**

1. Remove lead 38B (1) from adapter plug P3 (2).
2. Set MASTER SWITCH to ON.
3. Measure voltage between lead 38B (1) and ground.
4. Does multimeter read 22 volts DC or more?



**NO**

**A2YN**

1. Refer to: Dome Light Malfunction (M577A3 Only) (WP 0040 00).

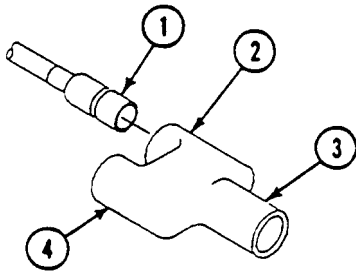
**YES**

**IN BLACKOUT MODE, FLUORESCENT LIGHTS OPERATE INCORRECTLY (M1068A3 ONLY)—Continued**

0101 00

**A3Y**

1. Set MASTER SWITCH to OFF.
2. Remove cable W35, plug P1 (1) from adapter plug P2 (2).
3. Measure resistance between plugs P1 (3), P2 (2), and P3 (4) of adapter.
4. Does multimeter read 0 ohms for each measurement?



NO

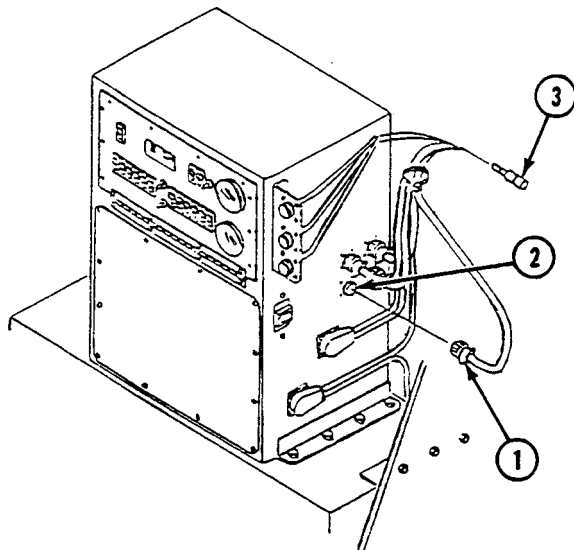
**A3YN**

1. Replace adapter (WP 0849 00).
2. Verify no faults found.

YES

**A4Y**

1. Remove cable W35 plug P9 (1) from jack J29 (2) of Power Control Enclosure.
2. Measure resistance between plugs P1 (3) and P9 (1) of cable W35.
3. Does multimeter read 0 ohms?



NO

**A4YN**

1. Replace cable W35 (WP 0849 00).
2. Verify no faults found.

YES

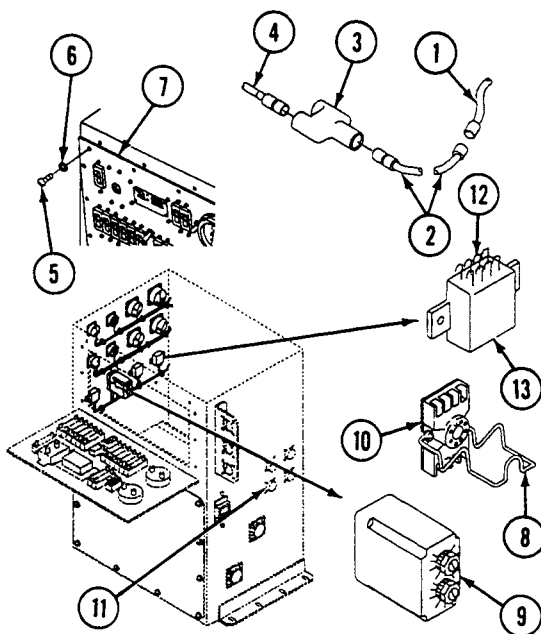
A5Y

**WARNING**



Make sure ALL AC external and internal power is OFF.

1. Install front light lead 38B (1) on cable W28 P2 (2) and cable to plug P1 of adapter (3).
2. Install rear domelight lead 38B (4) on plug P3 of adapter (3).
3. Remove ten screws (5) and lockwashers (6), and lower faceplate (7). Discard lockwashers.
4. Lift relay bail (8) and remove XK2 relay (9) from relay socket (10).
5. Measure resistance between jack J29 center pin (11) and pin X1 (12) of relay XK5 (13).
6. Does multimeter read 0 ohms?



YES

A5YN

1. Faulty inside lead 34A of Power Control Enclosure. Beyond unit maintenance repair.
2. Notify Supervisor.

**IN BLACKOUT MODE, FLUORESCENT LIGHTS OPERATE INCORRECTLY (M1068A3 ONLY)—Continued**

0101 00

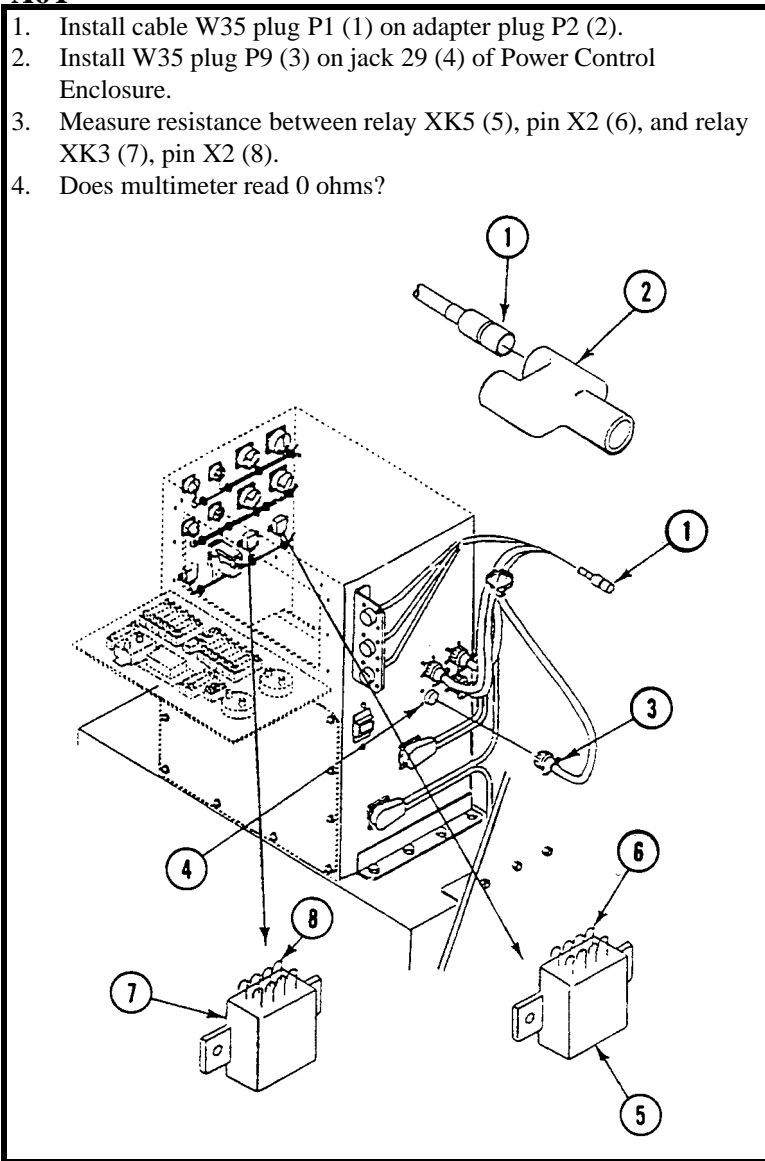
**A6Y**

1. Install cable W35 plug P1 (1) on adapter plug P2 (2).
2. Install W35 plug P9 (3) on jack 29 (4) of Power Control Enclosure.
3. Measure resistance between relay XK5 (5), pin X2 (6), and relay XK3 (7), pin X2 (8).
4. Does multimeter read 0 ohms?

**NO**

**A6YN**

1. Faulty lead 3F of XK2. Beyond unit maintenance repair.
2. Notify Supervisor.



**YES**

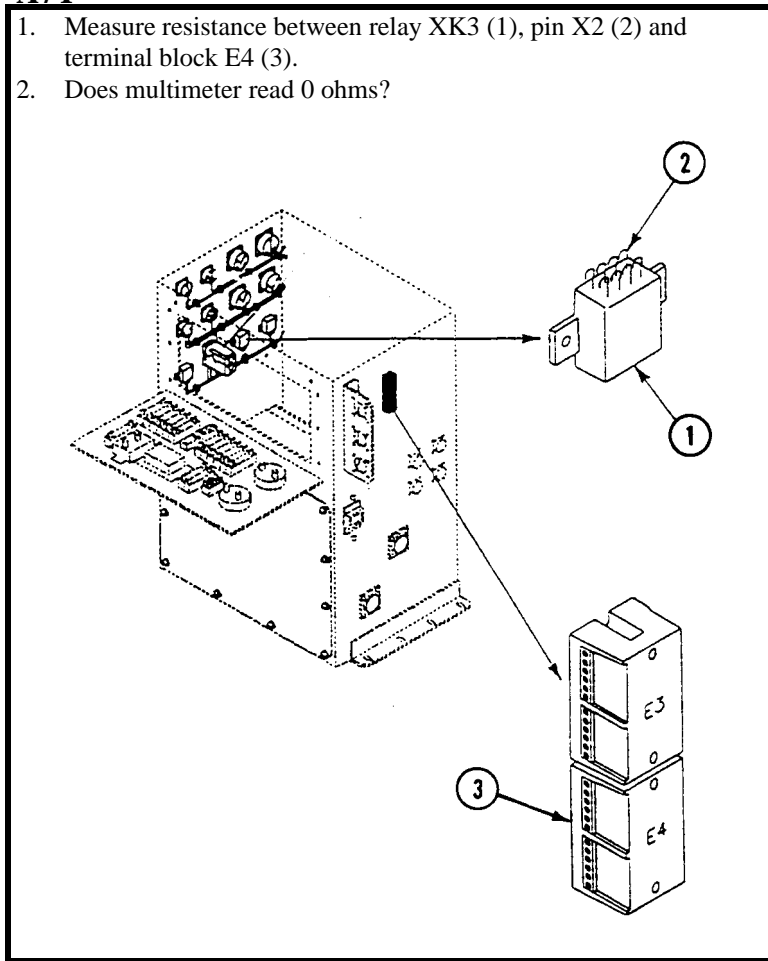


**IN BLACKOUT MODE, FLUORESCENT LIGHTS OPERATE INCORRECTLY (M1068A3 ONLY)—Continued**

0101 00

**A7Y**

1. Measure resistance between relay XK3 (1), pin X2 (2) and terminal block E4 (3).
2. Does multimeter read 0 ohms?



**NO**

**A7YN**

1. Faulty lead 3E of XK3. Beyond unit maintenance repair.
2. Notify Supervisor.

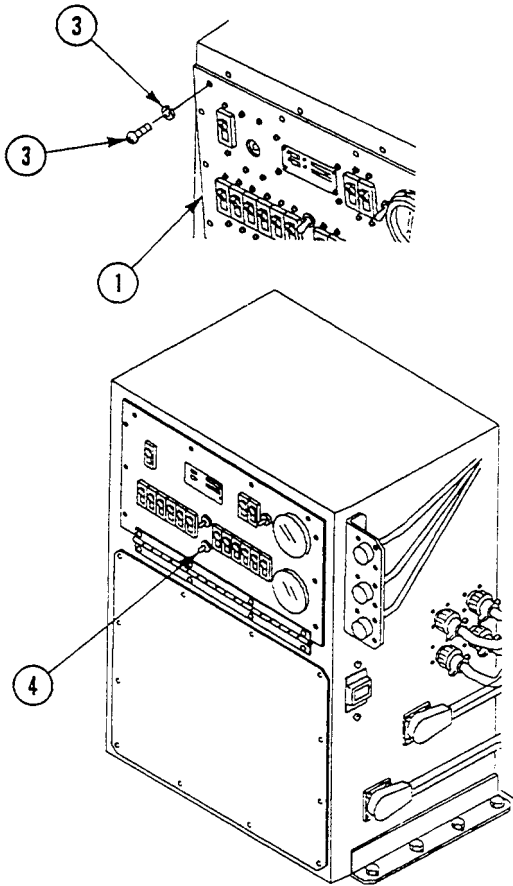
**YES**

**IN BLACKOUT MODE, FLUORESCENT LIGHTS OPERATE INCORRECTLY (M1068A3 ONLY)—Continued**

0101 00

**A8Y**

1. Lift relay bail and install XK2 relay on relay socket.
2. Raise faceplate (1) and secure to enclosure with ten new lockwashers (2) and screws (3).
3. Set MASTER SWITCH to ON. Set vehicle BLACKOUT LIGHT to ON. Be sure ramp door is open.
4. Apply AC power to SICPS system. Set BLACKOUT ENABLE switch (4) on Power Control Enclosure panel in upward position (TM 11-7010-256-12&P).
5. Do fluorescent lights illuminate?



**NO**

**A8YN**

1. Faulty relay XK5. Beyond unit maintenance repair.
2. Notify Supervisor.

**YES**

**A9Y**

1. Verify no faults found.

**FLUORESCENT LIGHTS DO NOT OPERATE (M1068A3 ONLY)**

**0102 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
 TM 10-5410-229-13&P  
 TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
 Digital multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
 Carrier blocked (see your -10)

Personnel Required

Power-Generation Equipment Repairer 52D10  
 Helper (H)

**WARNING**



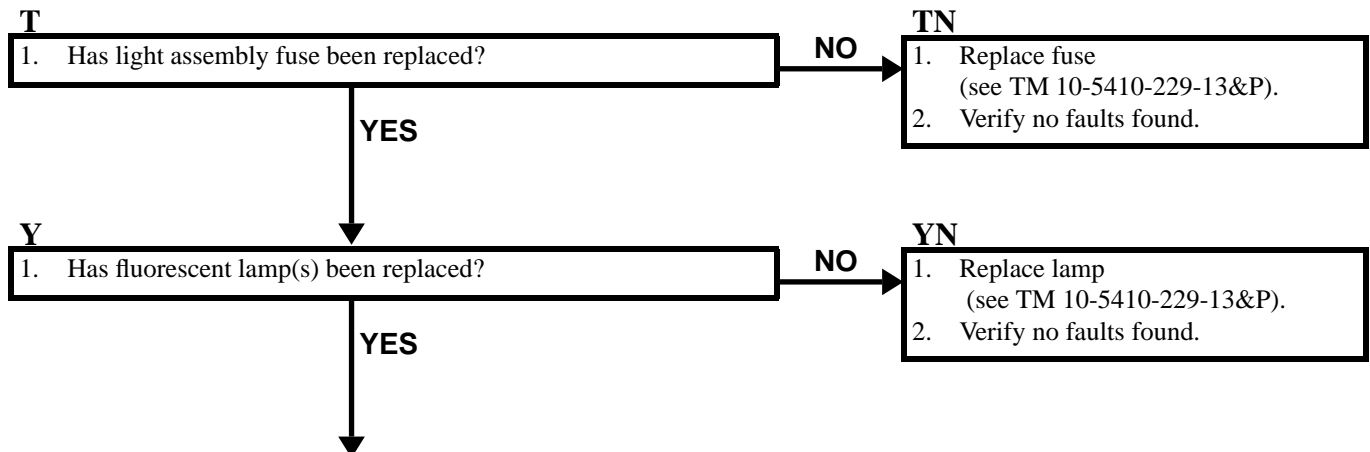
**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

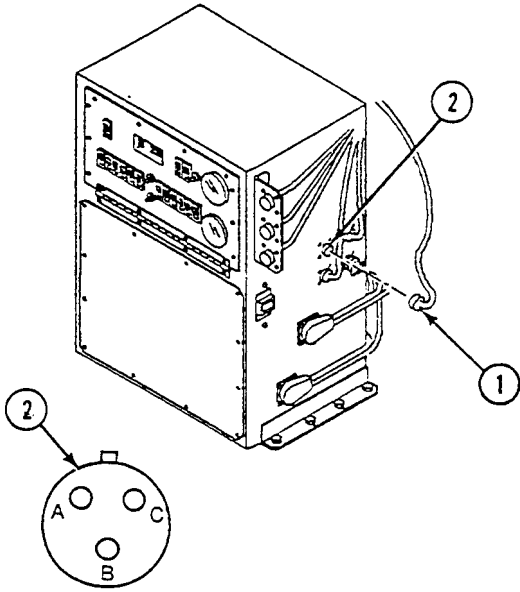
**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.



**2Y**

1. Remove all power (see your -10 and TM 11-7010-256-12&P).
2. Remove cable W11, plug P17 (1) from power control enclosure jack J37 (2).
3. Apply AC power and set AC LIGHTS and BLACKOUT ENABLE switches to upward position (see TM 11-7101-256-12&P).
4. Measure voltage between sockets A and B of jack J37 (2).
5. Does multimeter read 110 volts AC or more?



**NO**

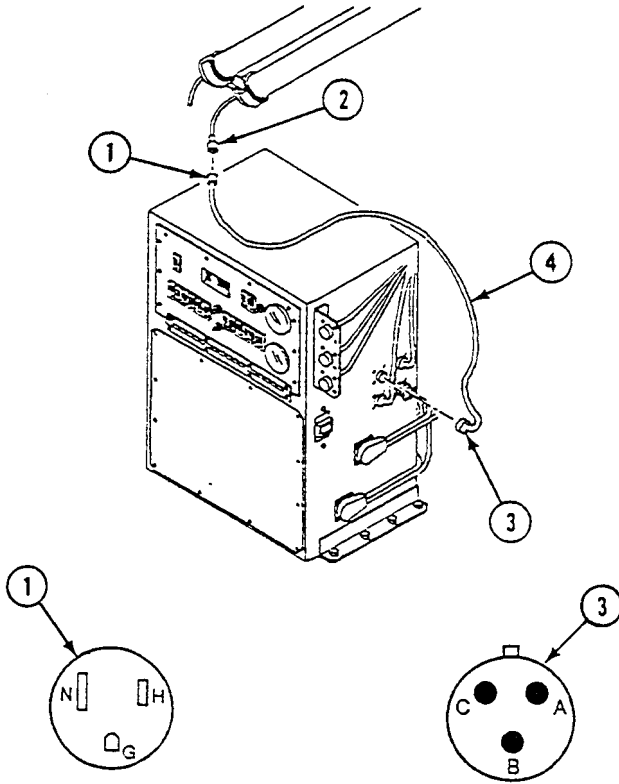
**2YN**

1. Go to: No Power To AC Circuits (M1068A3 Only) (WP 0107 00).

**YES**

**3Y**

1. Set power control enclosure AC MAIN switch to OFF (see TM 11-7010-256-12&P).
2. Remove cable W11 plug P2 (1) from light assembly plug P1 (2).
3. Measure resistance between sockets of P2 (1) and pins of plug P17 (3) on cable W11 (4) as follows:  
 P2 socket H to P17 pin A  
 P2 socket N to P17 pin B  
 P2 socket G to P17 pin C
4. Does multimeter read 0 ohms for each measurement?



**NO**

**3YN**

1. Replace cable W11 (WP 0845 00).
2. Verify no faults found.

**YES**

**4Y**

1. Replace/repair light set assembly (WP 0825 00 and TM 10-5410-229-13&P).



---

**VEHICLE BATTERIES DISCHARGE WITH EXTERNAL AC POWER APPLIED  
(M1068A3 ONLY)**

---

**0103 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

Materials/Parts

Lockwashers (22)

Personnel Required

Power-generation Equipment Repairer 52D10  
Helper (H)

---

**WARNING**



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

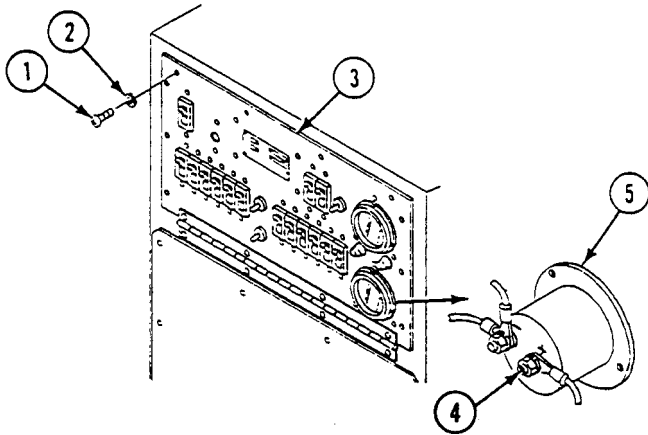
**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

VEHICLE BATTERIES DISCHARGE WITH EXTERNAL AC POWER APPLIED (M1068A3 ONLY)—Continued

0103 00

**T**

1. Remove ten screws (1), lockwashers (2), and lower faceplate (3) on Power Control Enclosure. Discard lockwashers.
2. Set MASTER SWITCH to ON.
3. Measure voltage between positive (+) terminal (4) on meter M2 (5) and ground.
4. Does multimeter read 22 volts DC or more?



**NO**

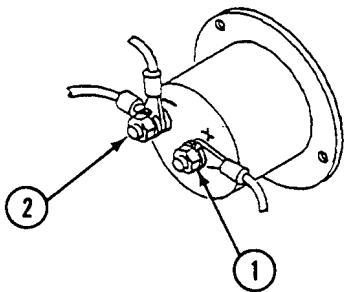
**TN**

1. Go to: Power Control Enclosure A1 DC Input/Output Inoperative (M1068A3 Only) (WP 0090 00).

**YES**

**Y**

1. Measure voltage between positive (+) terminal (1) and negative (-) terminal (2) of Power Control Enclosure A1 meter M2 (3).
2. Does multimeter read 22 volts DC or more?



**NO**

**YN**

1. Replace Power Control Enclosure A1 meter M2 (WP 0827 00).
2. Verify no faults found.

**YES**

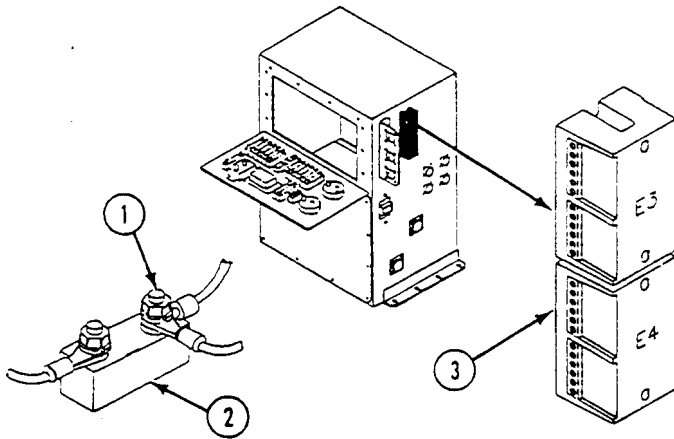


**VEHICLE BATTERIES DISCHARGE WITH EXTERNAL AC POWER APPLIED (M1068A3 ONLY)—Continued**

0103 00

**2Y**

1. Set MASTER SWITCH to OFF.
2. Apply external AC power to SICPS vehicle (TM 11-7010-256-12&P).
3. Measure voltage between terminal 1 (1) of circuit breaker CB1 (2) and terminal block E4 (3).
4. Does multimeter read 110 volts AC or more?



**YES**



**NO**

**2YN**

1. Go to: Vehicle Will Not Accept External AC Power (M1068A3 Only) (WP 0104 00).

VEHICLE BATTERIES DISCHARGE WITH EXTERNAL AC POWER APPLIED (M1068A3 ONLY)—Continued

0103 00

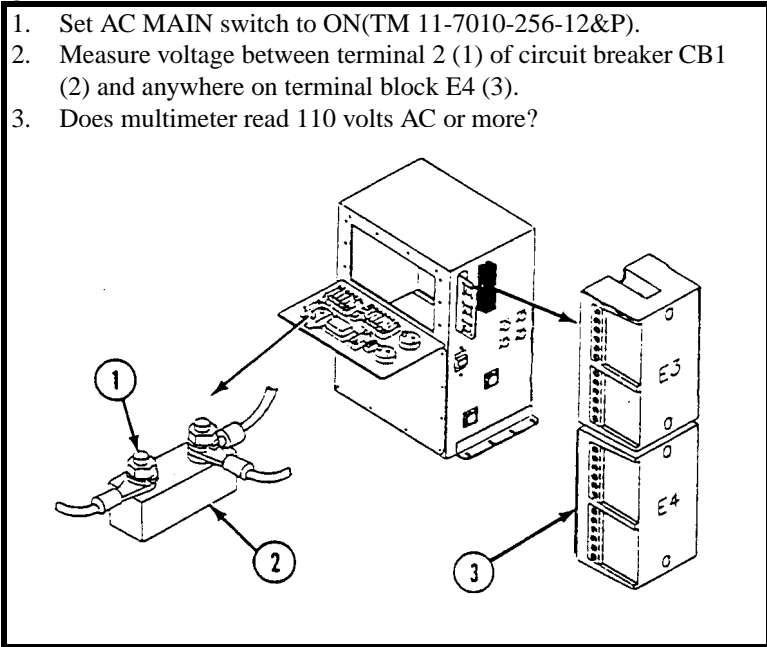
**3Y**

1. Set AC MAIN switch to ON(TM 11-7010-256-12&P).
2. Measure voltage between terminal 2 (1) of circuit breaker CB1 (2) and anywhere on terminal block E4 (3).
3. Does multimeter read 110 volts AC or more?

NO

**3YN**

1. Replace circuit breaker CB1 (WP 0828 00).
2. Verify no faults found.



YES

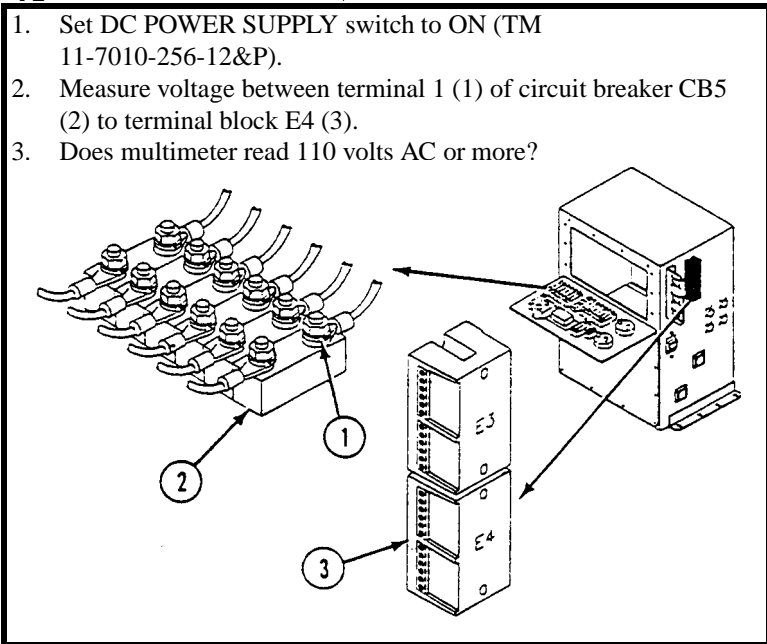
**4Y**

1. Set DC POWER SUPPLY switch to ON (TM 11-7010-256-12&P).
2. Measure voltage between terminal 1 (1) of circuit breaker CB5 (2) to terminal block E4 (3).
3. Does multimeter read 110 volts AC or more?

NO

**4YN**

1. Faulty circuit 9D. Beyond unit maintenance repair.
2. Notify supervisor.



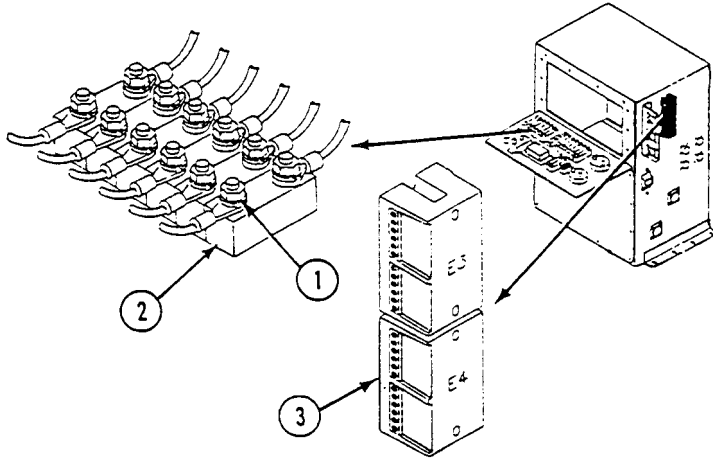
YES

VEHICLE BATTERIES DISCHARGE WITH EXTERNAL AC POWER APPLIED (M1068A3 ONLY)—Continued

0103 00

**5Y**

1. Measure voltage between terminal 2 (1) of circuit breaker CB5 (2) and terminal block E4 (3).
2. Does multimeter read 110 volts AC or more?



**NO**

**5YN**

1. Replace circuit breaker CB5 (WP 0828 00).
2. Verify no faults found.

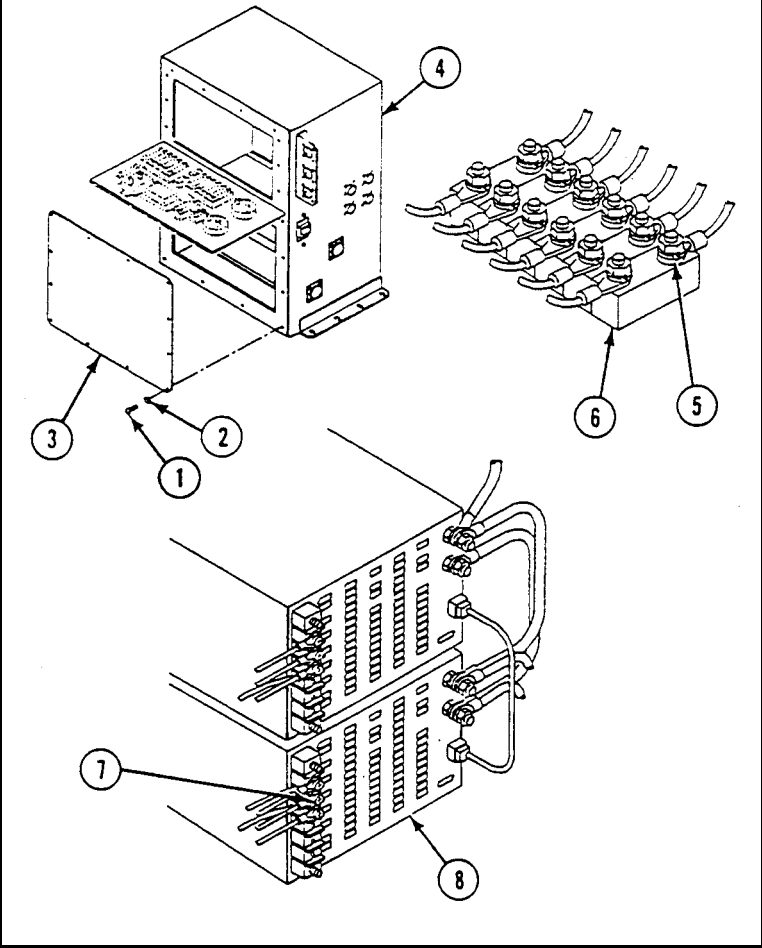
**YES**

VEHICLE BATTERIES DISCHARGE WITH EXTERNAL AC POWER APPLIED (M1068A3 ONLY)—Continued

0103 00

**6Y**

1. Turn OFF AC and DC Power (TM 11-7010-256-12&P).
2. Remove 12 screws (1), lockwashers (2), and cover (3) from Power Control Enclosure (4). Discard lockwashers.
3. Measure resistance between terminal 2 (5) of circuit breaker CB5 (6) and AC HIGH terminal (7) of power supply PS2 (8).
4. Does multimeter read 0 ohms?



**NO**

**6YN**

1. Faulty circuit 10A. Beyond unit maintenance repair.
2. Notify supervisor.

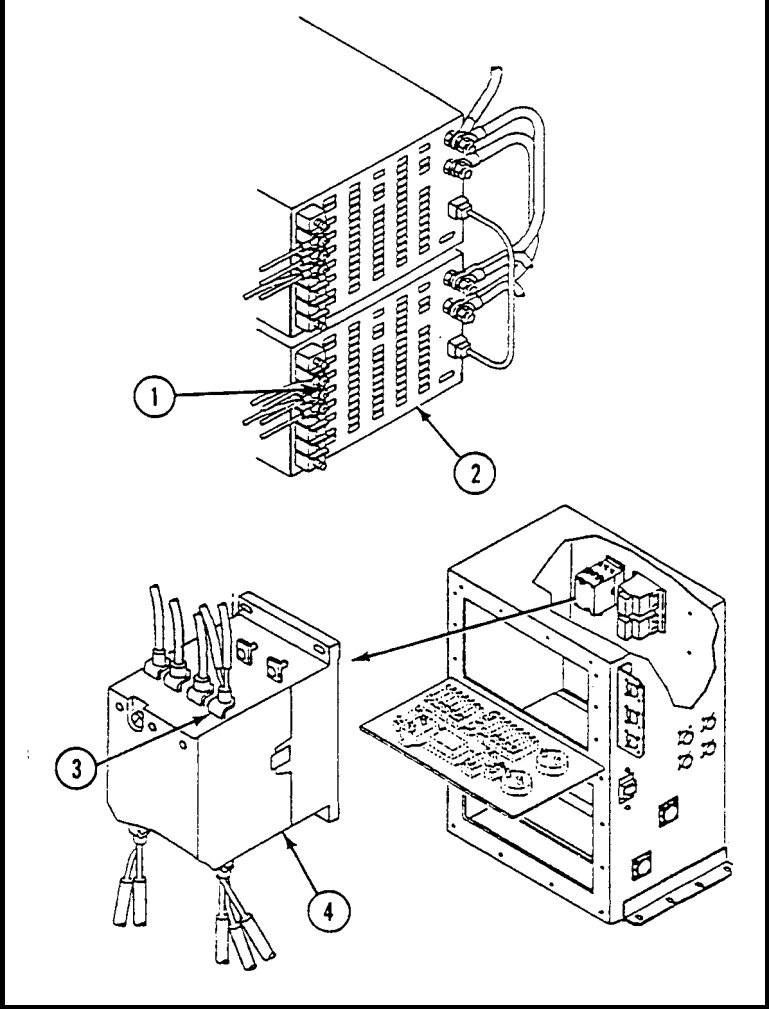
**YES**

VEHICLE BATTERIES DISCHARGE WITH EXTERNAL AC POWER APPLIED (M1068A3 ONLY)—Continued

0103 00

7Y

1. Measure resistance between terminal AC LOW (1) of power supply PS2 (2) and terminal L2 (3) of relay K1 (4).
2. Does multimeter read 0 ohms?



NO

7YN

1. Faulty circuit 8B. Beyond unit maintenance repair.
2. Notify supervisor.

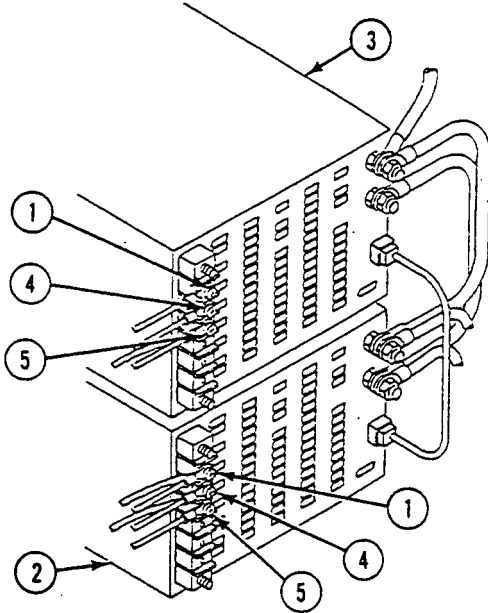
YES

VEHICLE BATTERIES DISCHARGE WITH EXTERNAL AC POWER APPLIED (M1068A3 ONLY)—Continued

0103 00

**8Y**

1. Measure resistance between circuit 10B terminals (1) on power supply PS2 (2) and power supply PS1 (3).
2. Measure resistance between circuit 8C terminals (4) on power supply PS2 (2) and power supply PS1 (3).
3. Measure resistance between circuit 3Z terminals (5) on power supply PS2 (2) and power supply PS1 (3).
4. Does multimeter read 0 ohms for each measurement?



NO

**8YN**

1. Faulty circuit 10B, 8C, and/or 3Z. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**9Y**

1. Install 12 screws, new lockwashers, and cover on Power Control Enclosure A1.
2. Raise faceplate on Power Control Enclosure A1 and secure with ten screws and new lockwashers.
3. Faulty power supply(s). Beyond unit maintenance repair.
4. Notify supervisor.

**VEHICLE WILL NOT ACCEPT EXTERNAL AC POWER (M1068A3 ONLY)**

**0104 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Vehicle grounded (see your -10) and  
(TM 11-7010-256-12&P)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

**WARNING**



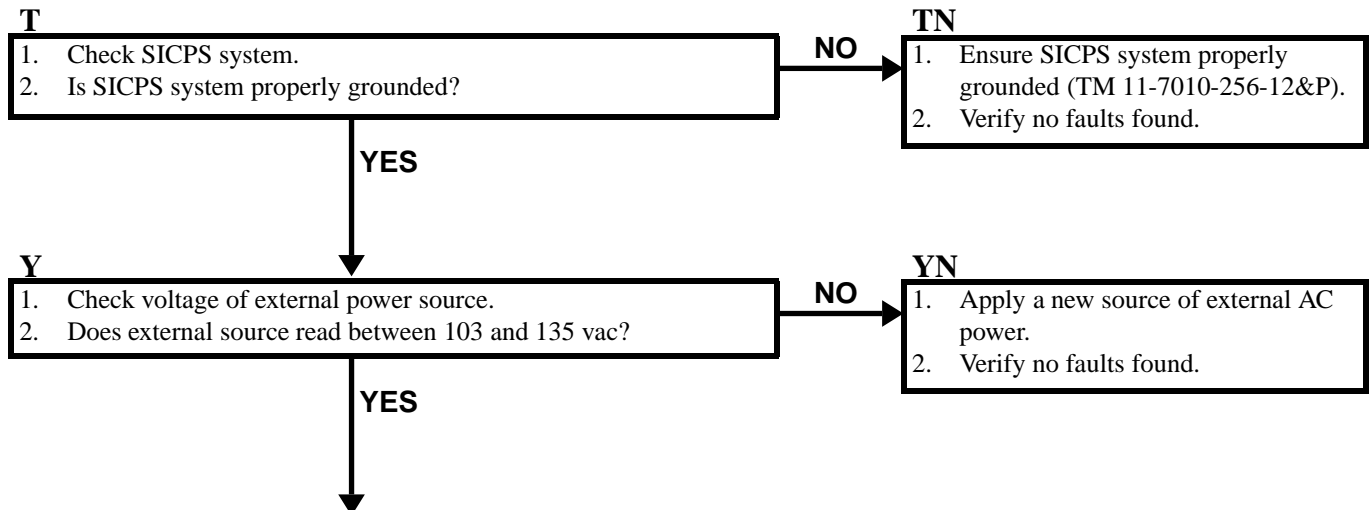
**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

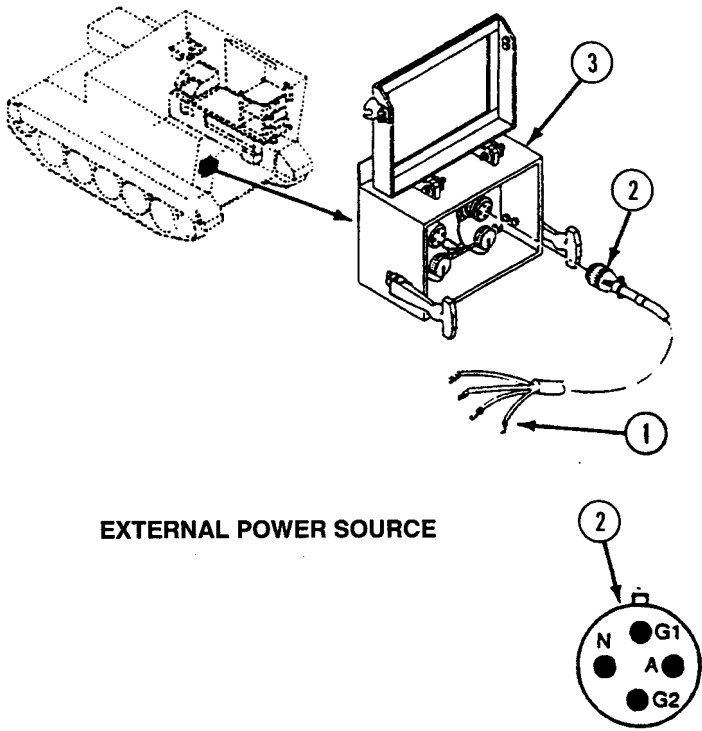
**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.



**2Y**

1. Apply external source of AC power to SICPS vehicle (TM 11-7010-256-12&P).
2. Remove cable W1 leads (1) from external power source, if applicable.
3. Remove cable W2, J1 (2) from Power Entry Box (3).
4. Measure resistance between W1 leads and W2 plug J1 (2) as follows:
  - W1 HOT to J1 pin A
  - W1 NEU to J1 pin N
  - W1 GND1 to J1 pin G1
  - W1 GND2 to J1 pin G2
5. Does multimeter read 0 ohms for all readings?



EXTERNAL POWER SOURCE

NO

**2YN**

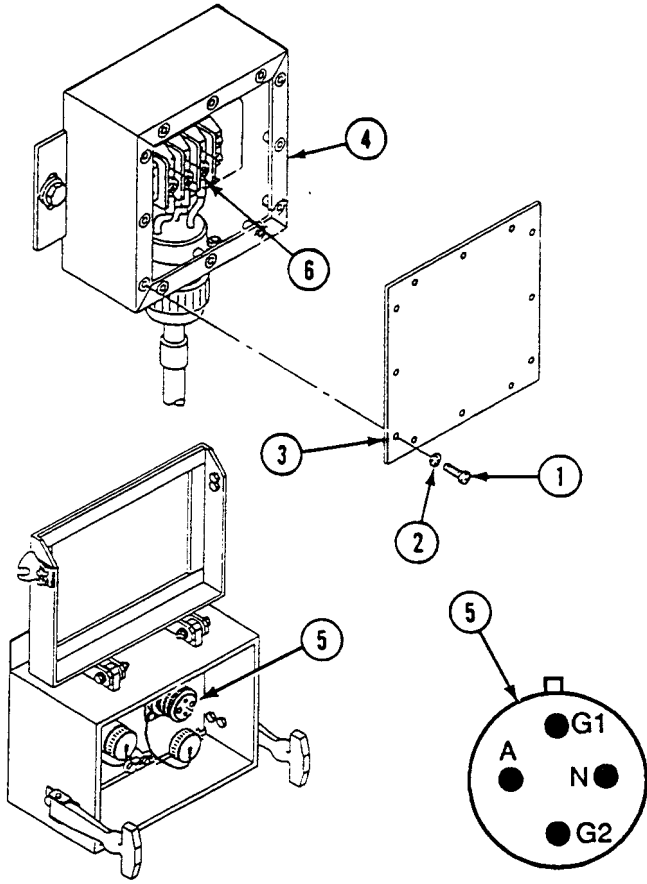
1. Replace cable W1/2 (see TM 11-7010-256-12&P).
2. Verify no faults found.

YES



**3Y**

1. Remove 12 screws (1), lockwashers (2), and cover (3) from Power Distribution Box (4).
2. Measure resistance between Power Entry Box A4 plug P1 (5) and Power Distribution Box A3 (4) terminal block as follows:
  - P1 socket A to post E1
  - P1 socket N to post E2
  - P1 socket G1 to post E3
  - P1 socket G2 to post E3
3. Does multimeter read 0 ohms for each reading?



YES  
↓

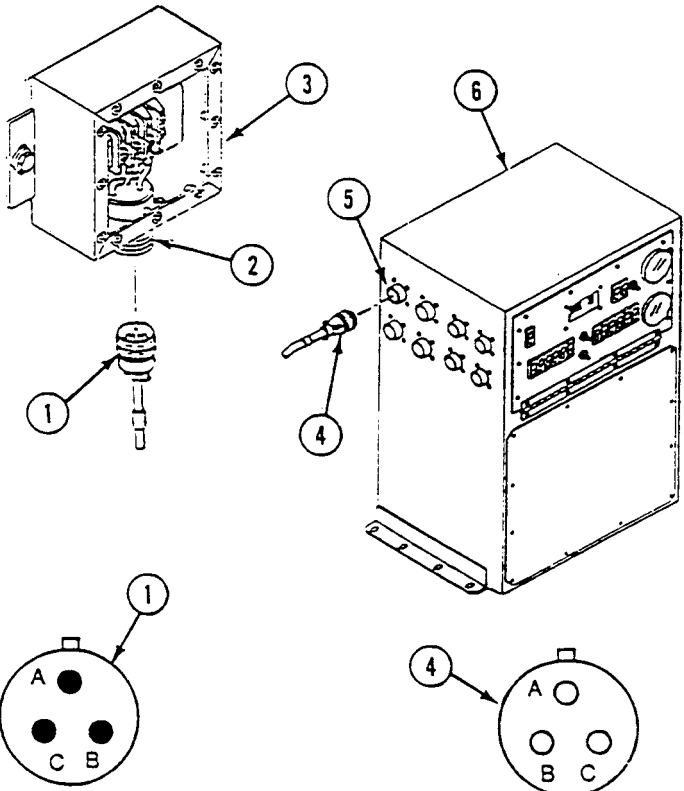
NO →

**3YN**

1. Replace Power Entry Box Assembly A4 (M1068A3 Only) (WP 0832 00).
2. Verify no faults found.

**4Y**

1. Remove cable W3 plug P1 (1) from jack J1 (2) on Power Distribution Box (3) and plug P3 (4) from jack J24 (5) on Power Control Enclosure (6).
2. Measure resistance between plug P1 (1) and plug P3 (4) as follows:
  - P1 pin A to P3 socket A
  - P1 pin B to P3 socket B
  - P1 pin C to P3 socket C
3. Does multimeter read 0 ohms for each reading?



NO

**4YN**

1. Replace cable W3 (WP 0837 00).
2. Verify no faults found.

YES

**5Y**

1. Faulty Power Control Enclosure. Beyond unit maintenance repair.
2. Notify supervisor.

---

**VEHICLE WILL NOT ACCEPT INVERTER AC POWER (M1068A3 ONLY)**

---

**0105 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)

Digital multimeter (WP 0926 00, Item 30)

Materials/Parts

Lockwasher (10)

Personnel Required

Power-Generation Equipment Repairer 52D10

Helper (H)

References

See your -10

TM 11-7010-256-12&P

Equipment Condition

Engine stopped (see your -10)

Carrier blocked (see your -10)

Carrier grounded (see your -10) and  
(TM 11-7010-256-12&P)

---

**WARNING**

---



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

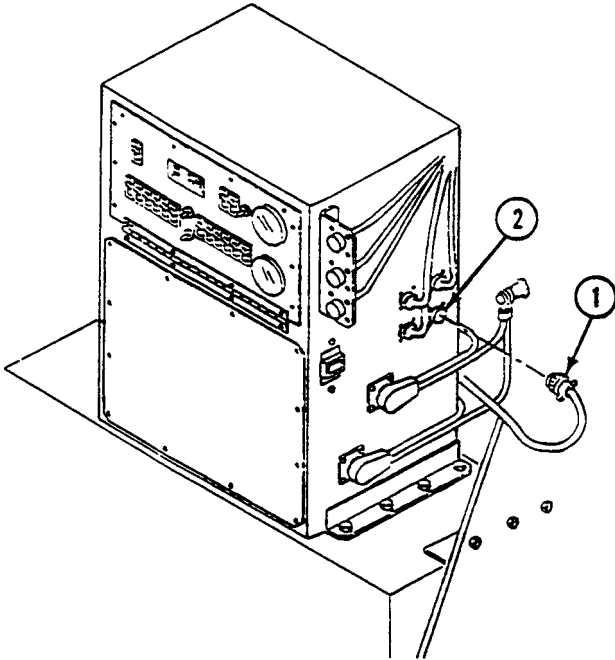
**T**

1. Remove all external power from SICPS system (see your -10) and (TM 11-7010-256-12&P).
2. Remove cable W5 plug P6 (1) from power enclosure jack J27 (2).
3. Turn MASTER POWER switch ON.
4. Turn on inverters (TM 11-7010-256-12&P).
5. Measure voltage between pins A and B of plug P6 (1). Repeat measure for pins C and D.
6. Does multimeter read 110 volts AC or more for both measurements?

**NO**

**TN**

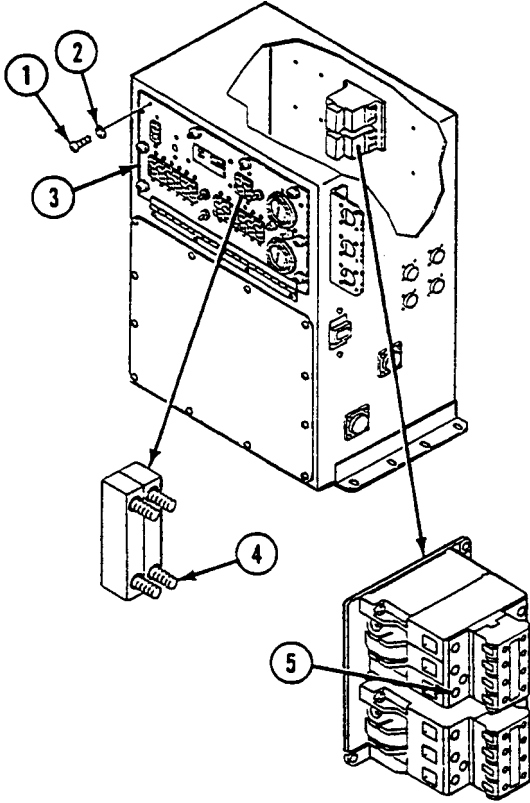
1. Go to: No AC Power From Inverters (M1068A3 Only) (WP 0109 00).



**YES**

**Y**

1. Turn MASTER POWER switch OFF.
2. Install cable W5 on power enclosure.
3. Remove ten screws (1) and lockwashers (2), and lower faceplate (3). Discard lockwashers.
4. Measure resistance between circuit breaker CB3 pin 2 (4) and reversing contactor RC1-REV terminal L1 (5).
5. Does multimeter read 0 ohms?



**NO**

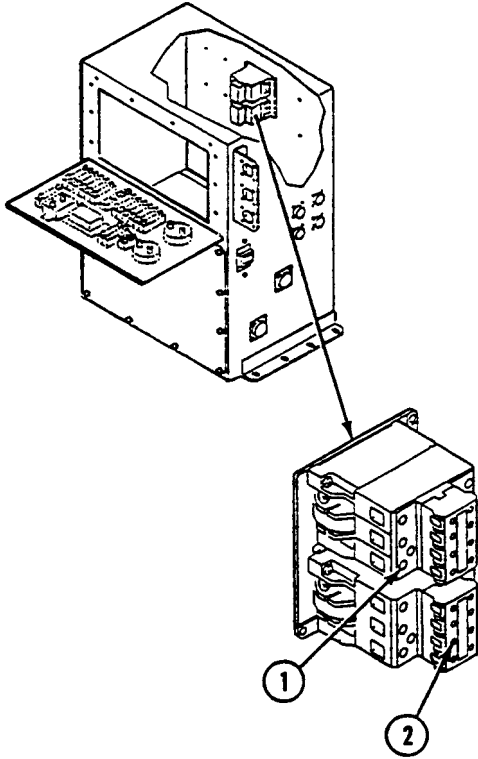
**YN**

1. Faulty lead 13A. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

2Y

1. Measure resistance between reversing contactor RC1-REV terminal L1 (1) and reversing contactor RC1-FWD terminal 51 (2).
2. Does multimeter read 0 ohms?



NO

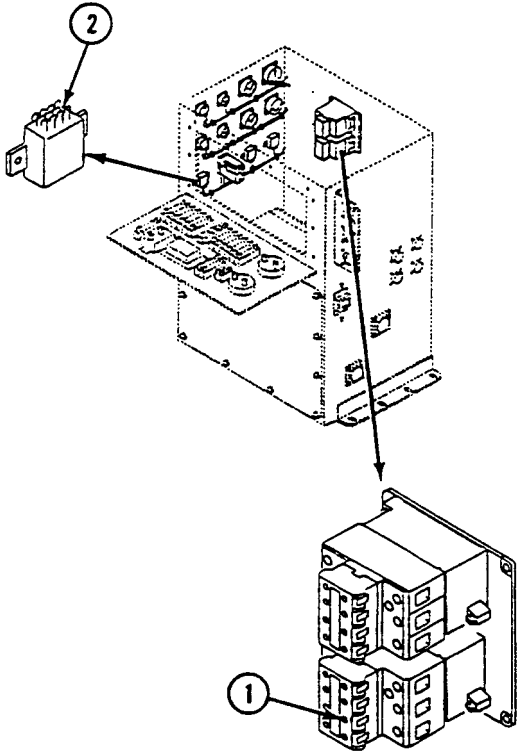
2YN

1. Faulty lead 13D. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**3Y**

1. Measure resistance between reversing contactor RC1-FWD terminal 52 (1) and relay K4 terminal A3 (2).
2. Does multimeter read 0 ohms?



YES



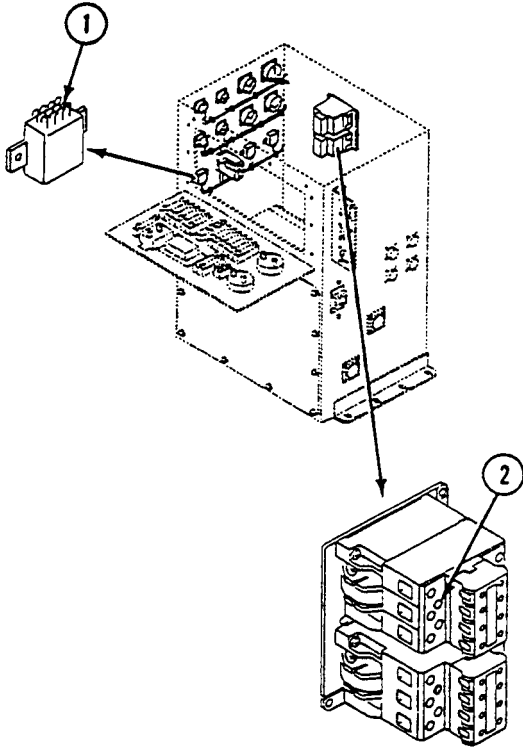
NO

**3YN**

1. Faulty lead 14A. Beyond unit maintenance repair.
2. Notify supervisor.

**4Y**

1. Measure resistance between relay K4 terminal A2 (1) and reversing contactor RC1-REV terminal A2 (2).
2. Does multimeter read 0 ohms?



**NO**

**4YN**

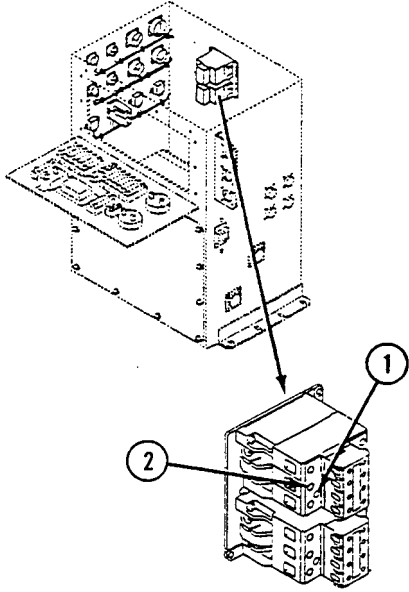
1. Faulty lead 16A. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**



**5Y**

1. Measure resistance between reversing contactor RC1-REV terminal A1 (1) and terminal L2 (2).
2. Does multimeter read 0 ohms?



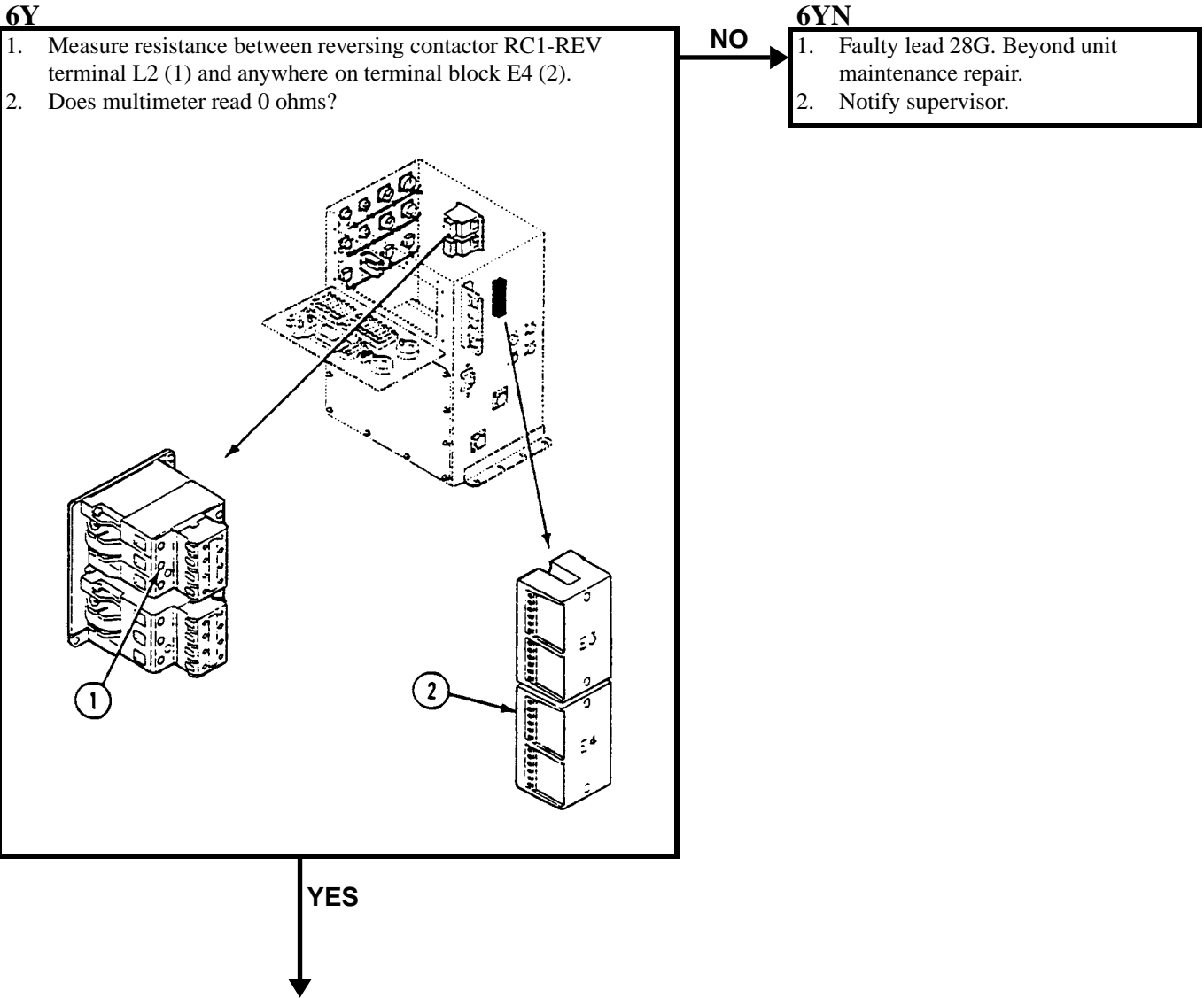
**YES**



**NO**

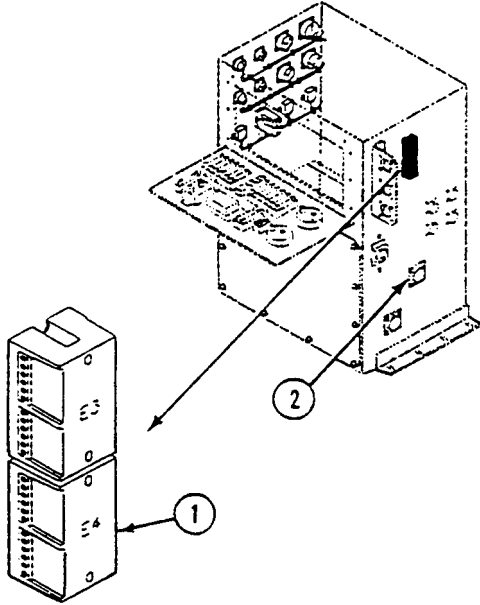
**5YN**

1. Faulty lead 28D. Beyond unit maintenance repair.
2. Notify supervisor.



**7Y**

1. Measure resistance between anywhere on terminal block E4 (1) and power enclosure jack J26 outer shell (2).
2. Does multimeter read 0 ohms?



**NO**

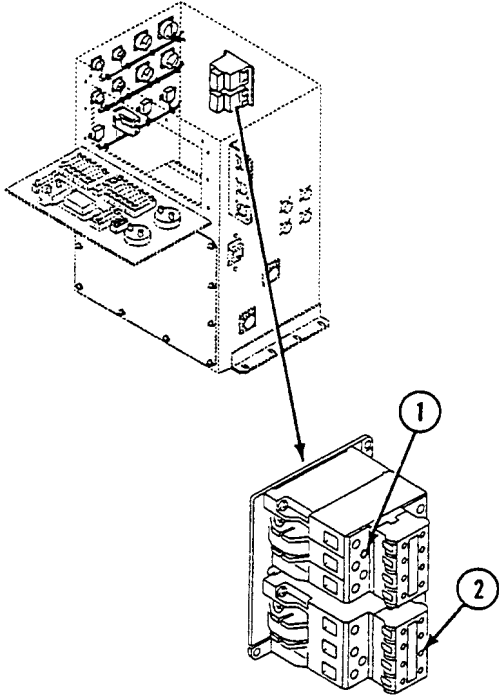
**7YN**

1. Faulty lead 32C. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**8Y**

1. Measure resistance between reversing contactor RC1-REV terminal A2 (1) and reversing contactor RC1-FWD terminal 52 (2).
2. Does multimeter read 0 ohms?



**NO**

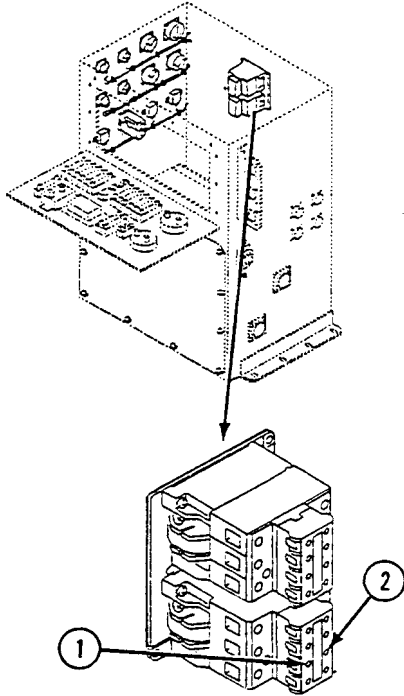
**8YN**

1. Faulty relay K4. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**9Y**

1. Measure resistance between reversing contactor RC1-FWD terminal 51 (1) and terminal 52 (2).
2. Does multimeter read 0 ohms?



**NO**

**9YN**

1. Faulty reversing contactor. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**10Y**

1. Raise faceplate and secure with ten new lockwashers and screws.
2. Verify no faults found.



---

**NO POWER TO DC CIRCUITS (M1068A3 ONLY)**

---

**0106 00****INITIAL SETUP:**Maintenance Level

Unit

ReferencesSee your -10  
TM 11-7010-256-12&PTools and Special ToolsGeneral Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital Multimeter (WP 0926 00, Item 30)Equipment ConditionEngine stopped (see your -10)  
Carrier blocked (see your -10)Materials/Parts

Lockwasher (22)

Personnel RequiredPower-Generation Equipment Repairer 52D10  
Helper (H)

---

**WARNING**

---



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

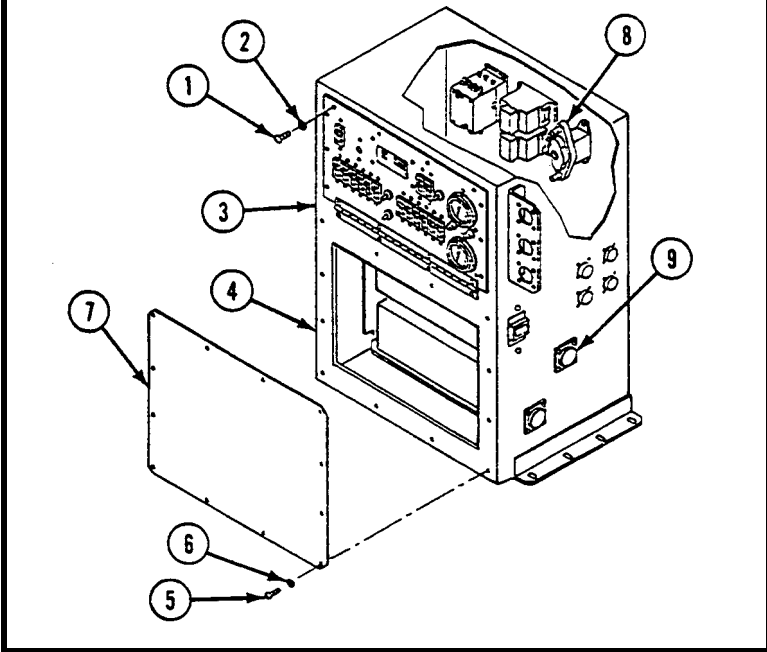
**T**

1. Remove all external power from SICPS system (see your -10 and TM 11-7010-256-12&P).
2. Remove ten screws (1) and lockwashers (2), and lower faceplate (3) of Power Control Enclosure (4). Discard lockwashers.
3. Remove twelve screws (5), lockwashers (6), and cover (7) from front of Power Control Enclosure (4). Discard lockwashers.
4. Set MASTER SWITCH to ON.
5. Measure voltage between relay K6 (8) terminal 2 and Power Control Enclosure jack J25 (9) negative terminal.
6. Does multimeter read 22 volts DC or more?

**NO**

**TN**

1. Go to: Power Enclosure A1 DC Input/Output Inoperative (M1068A3 Only) (WP 0090 00).

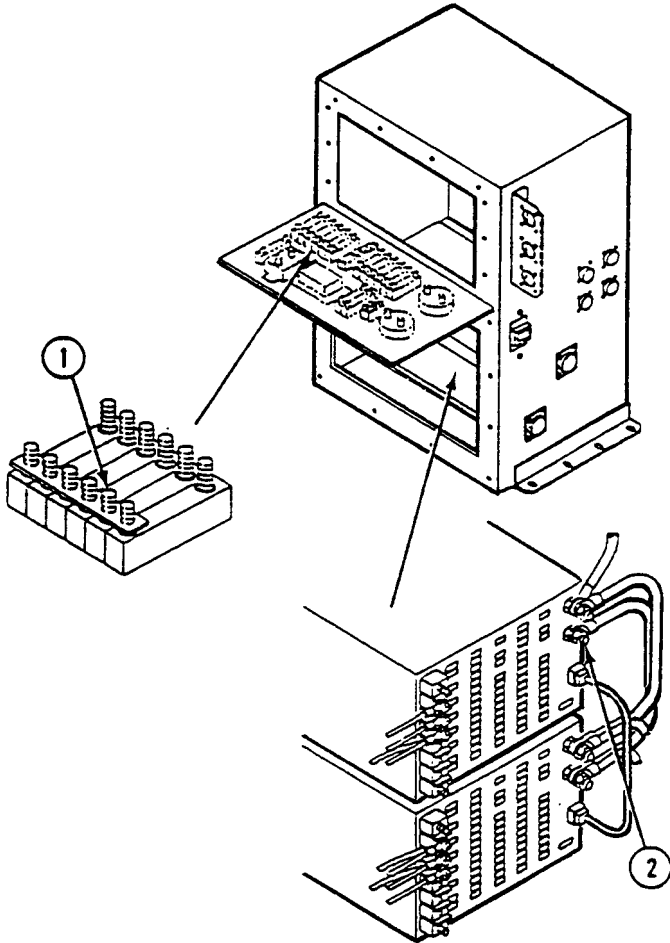


**YES**



**Y**

1. Measure voltage between circuit breaker CB15 (1) terminal 1 at DC bus bar and Power Supply PS1 output negative terminal (2).
2. Does multimeter read 22 volts DC or more?



**NO**

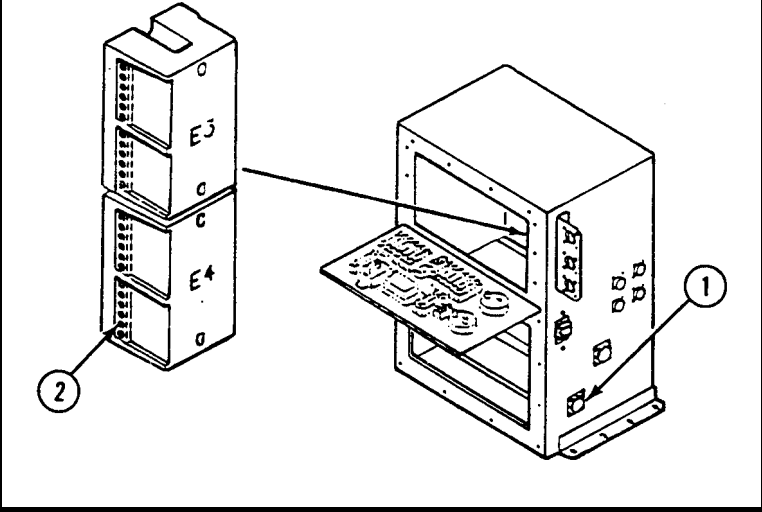
**YN**

1. Go to: Vehicle Batteries Discharge with External AC Power Applied (WP 0103 00).

**YES**

2Y

1. Set MASTER SWITCH to OFF.
2. Measure resistance of circuit 32C between Power Control Enclosure jack J26 (1) and terminal block E4 terminal 2 (2).
3. Does multimeter read 0 ohms?



YES

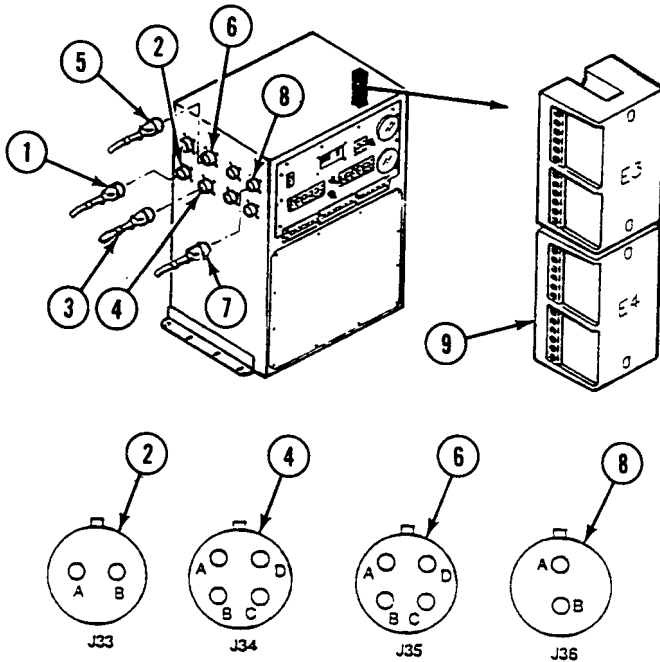
NO

2YN

1. Faulty lead 32C in Power Control Enclosure. Beyond unit maintenance repair.
2. Notify supervisor.

**3Y**

1. Remove the following cable plugs from jacks on Power Control Enclosure:
  - W45 plug P13 (1) from jack J33 (2)
  - W10 plug P14 (3) from jack J34 (4)
  - W9 plug P15 (5) from jack J35 (6)
  - W32 plug P16 (7) from jack J36 (8)
2. Measure resistance of the following leads between terminal block E4 (9) and the following jacks on Power Control Enclosure:
  - Lead 32G to J33 (2) socket B
  - Lead 32H to J34 (4) socket B
  - Lead 32J to J34 (4) socket D
  - Lead 32L to J35 (6) socket B
  - Lead 32N to J35 (6) socket D
  - Lead 32P to J36 (8) socket B
3. Does multimeter read 0 ohms for all readings?



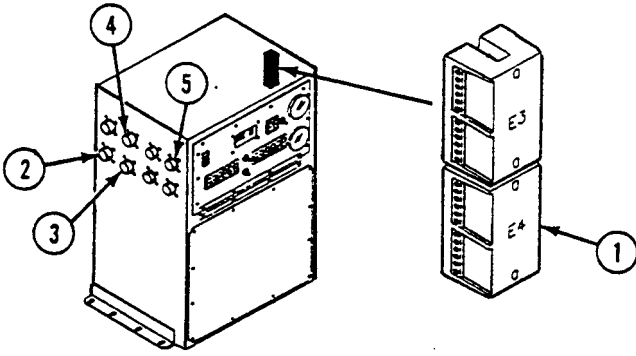
YES

**3YN**

1. Faulty leads 32G, H, J, L, N, and P in Power Control Enclosure. Beyond unit maintenance repair.
2. Notify supervisor.

**4Y**

1. Set MASTER SWITCH to ON.
2. Set all DC CIRCUITS circuit breakers on Power Control Enclosure panel to ON.
3. Measure voltage between terminal block E4 (1) and the following jacks on Power Control Enclosure:
  - J33 (2) socket A
  - J34 (3) socket A
  - J35 (4) socket A
  - J36 (5) socket A
4. Does multimeter read 22 volts DC or more for all readings?



YES



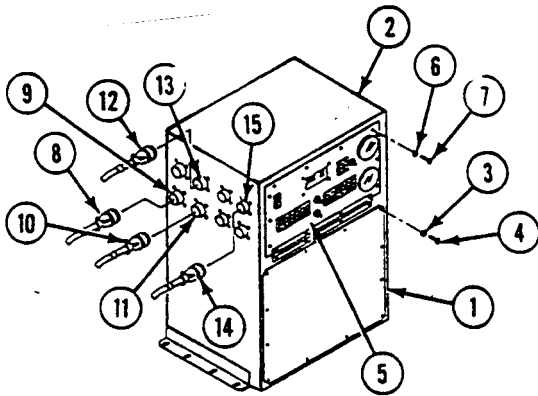
NO

**4YN**

1. Go to: Power Enclosure A1 DC Input/Output Inoperative (WP 0090 00).

**5Y**

1. Install cover (1) on Power Control Enclosure (2) and secure with twelve new lockwashers (3) and screws (4).
2. Raise faceplate (5) and secure to Power Control Enclosure (2) with ten new lockwashers (6) and screws (7).
3. Install the following cable plugs:
  - W45 plug P13 (8) on jack J33 (9)
  - W10 plug P14 (10) on jack J34 (11)
  - W9 plug P15 (12) on jack J35 (13)
  - W32 plug P16 (14) on jack J36 (15)
4. Verify no faults found.





---

**NO POWER TO AC CIRCUITS (M1068A3 ONLY)**

---

**0107 00****INITIAL SETUP:**Maintenance Level

Unit

ReferencesSee your -10  
TM 11-7010-256-12&PTools and Special ToolsGeneral Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital Multimeter (WP 0926 00, Item 30)Equipment ConditionEngine stopped (see your -10)  
Carrier blocked (see your -10)Materials/Parts

Lockwasher (10)

Personnel RequiredPower-Generation Equipment Repairer 52D10  
Helper (H)

---

**WARNING**

---



**HIGH VOLTAGE** is used in operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with operation and hazards of equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is **OFF/disconnected**.

**BE CAREFUL** not to touch high-voltage connections when installing or operating this equipment.

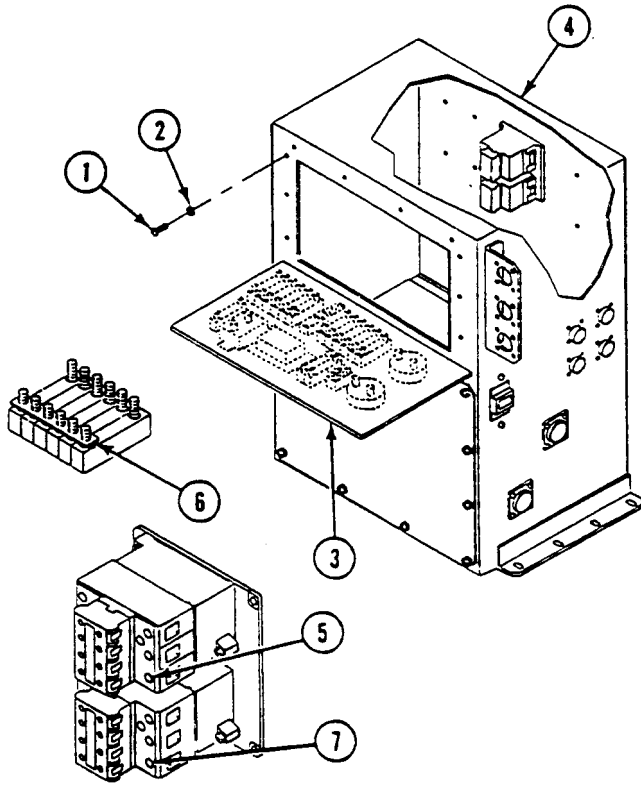
**T**

1. Turn off all power from SICPS system (see your -10 and TM 11-7010-256-12&P).
2. Remove ten screws (1), lockwashers (2), and lower faceplate (3) of power enclosure (4). Discard lockwashers.
3. Measure resistance of circuit 17B between reversing contactor reverse terminal T1 (5) and circuit breaker CB10 terminal 1 (6).
4. Measure resistance of circuit 17A between terminal T1 and forward terminal T1 (7).
5. Does multimeter read 0 ohms for both readings?

**NO**

**TN**

1. Faulty lead 17A and/or lead 17B. Beyond unit maintenance repair.
2. Notify supervisor.

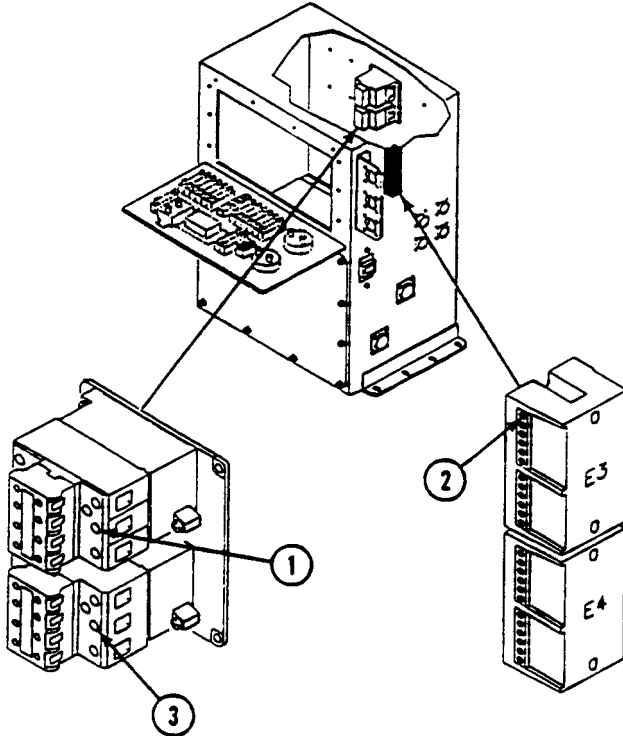


**YES**



Y

1. Measure resistance of circuit 18B between reversing contactor reverse terminal T2 (1) and terminal block E3 terminal 1 (2).
2. Measure resistance of circuit 18A between terminal T2 (1) and forward terminal T2 (3).
3. Does multimeter read 0 ohms for both readings?



NO

YN

1. Faulty lead 18A and/or lead 18B. Beyond unit maintenance repair.
2. Notify supervisor.

YES

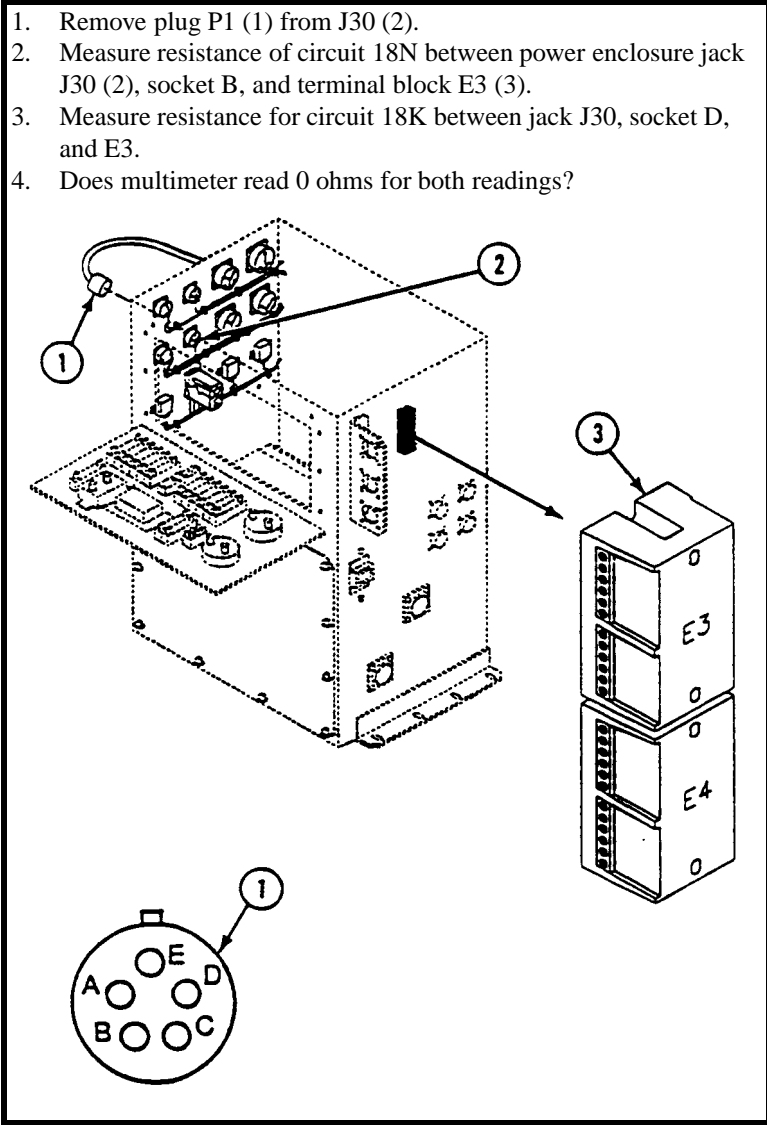
2Y

1. Remove plug P1 (1) from J30 (2).
2. Measure resistance of circuit 18N between power enclosure jack J30 (2), socket B, and terminal block E3 (3).
3. Measure resistance for circuit 18K between jack J30, socket D, and E3.
4. Does multimeter read 0 ohms for both readings?

NO

2YN

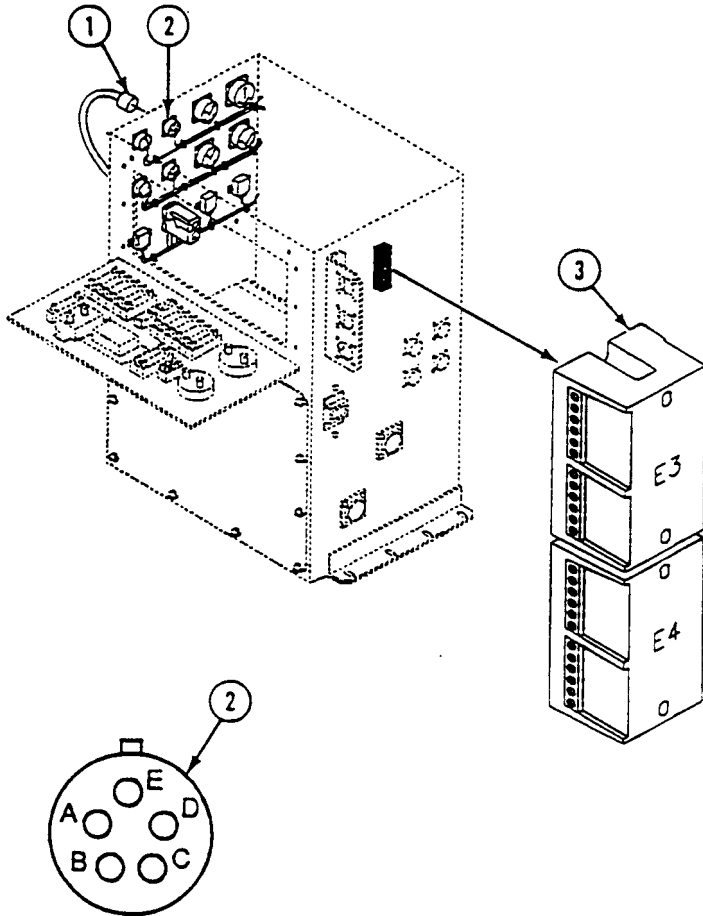
1. Faulty lead 18N and/or lead 18K.  
Beyond unit maintenance repair.
2. Notify supervisor.



YES

**3Y**

1. Remove plug P11 (1) from J31 (2).
2. Measure resistance of circuit 18H between power enclosure jack J31 (2), socket B, and terminal block E3 (3).
3. Measure resistance for circuit 18E between jack J31, socket D, and E3.
4. Does multimeter read 0 ohms for both readings?



NO

**3YN**

1. Faulty lead 18E and/or lead 18H.  
Beyond unit maintenance repair.
2. Notify supervisor.

YES

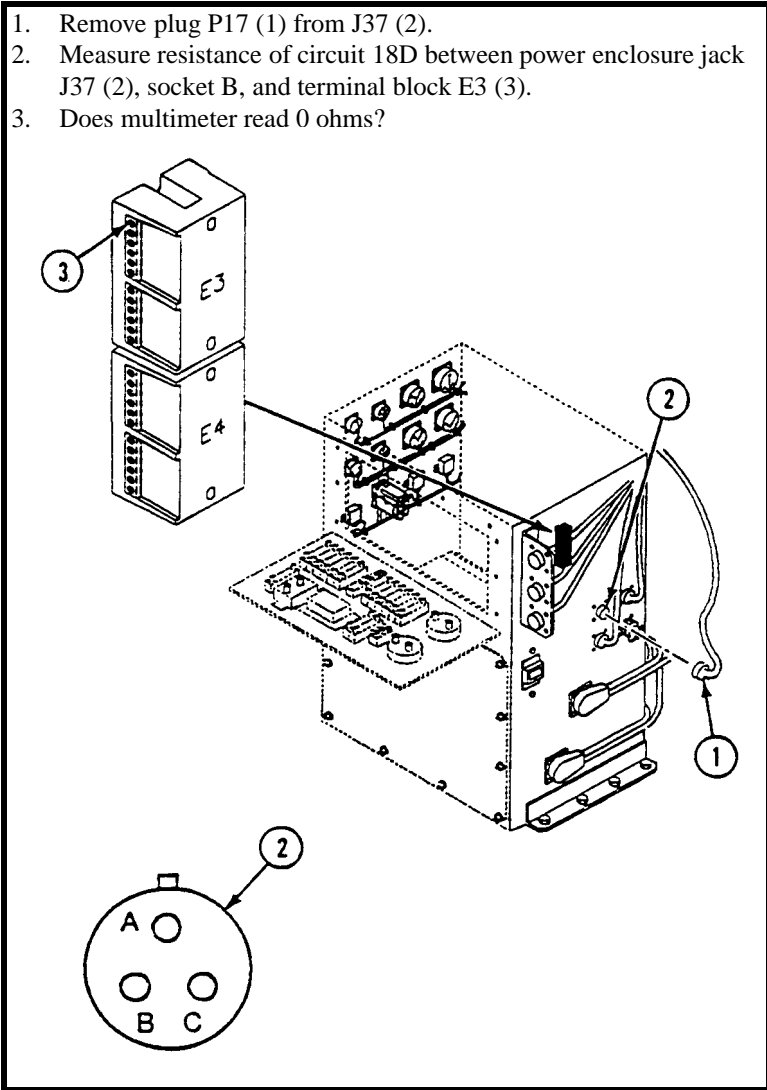
**4Y**

1. Remove plug P17 (1) from J37 (2).
2. Measure resistance of circuit 18D between power enclosure jack J37 (2), socket B, and terminal block E3 (3).
3. Does multimeter read 0 ohms?

**NO**

**4YN**

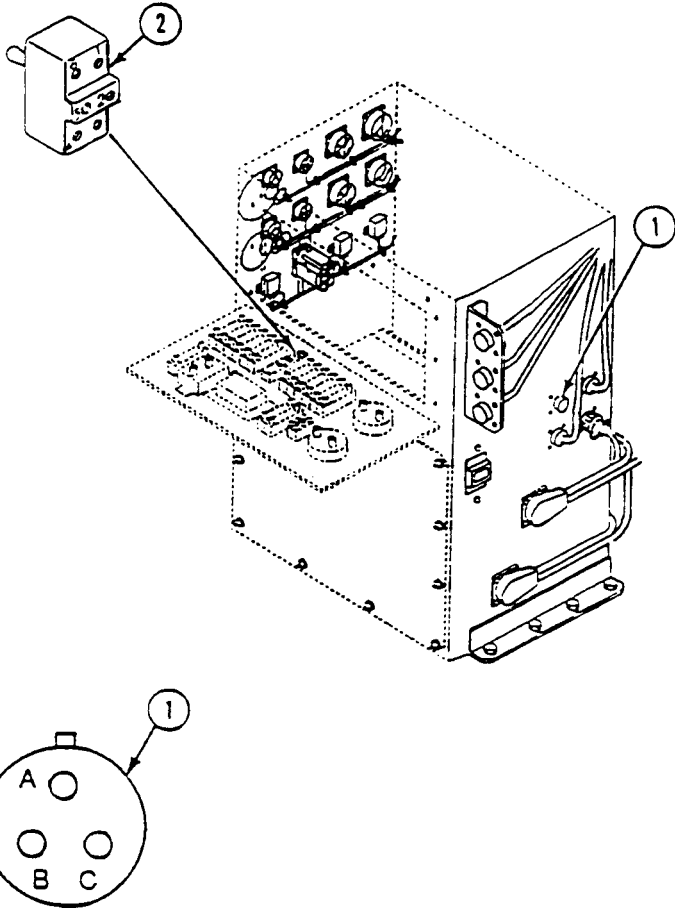
1. Faulty lead 18D. Beyond unit maintenance repair.
2. Notify supervisor.



**YES**

**5Y**

1. Set BLACKOUT ENABLE switch to upward position.
2. Measure resistance of circuit 20B between power enclosure jack J37 (1), socket A, and BLACKOUT ENABLE switch S1 (2), terminal 3.
3. Does multimeter read 0 ohms?



**NO**

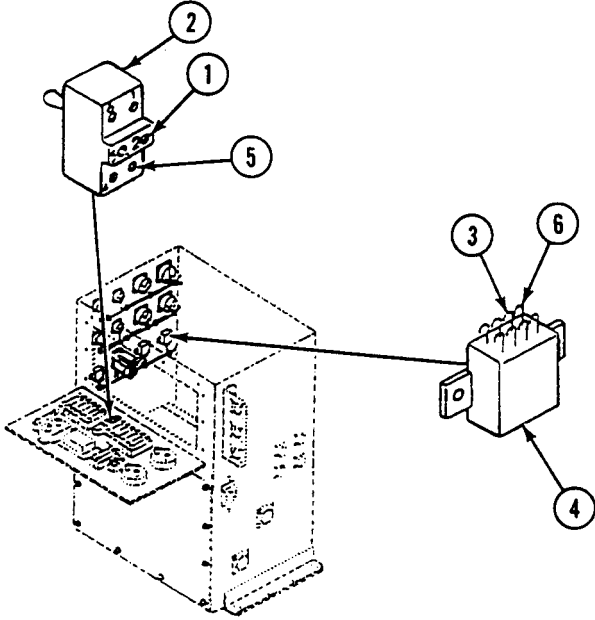
**5YN**

1. Faulty lead 20B. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**6Y**

1. Measure resistance of circuit 19B from terminal 2 (1) of switch S1 (2) and terminal A2 (3) of relay K5 (4).
2. Measure resistance of circuit 20A from terminal 3 (5) of switch S1 (2) and terminal A3 (6) of relay K5 (4).
3. Does multimeter read 0 ohms?



NO

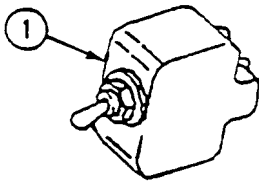
**6YN**

1. Faulty leads 19B and/or lead 20A. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**7Y**

1. Remove leads 19A and 19B from switch S1 position 2.
2. Measure resistance with switch S1 (1) in both up and down positions.
3. Does multimeter read 0 ohms when switch is down and infinite ohms when switch is up?



NO

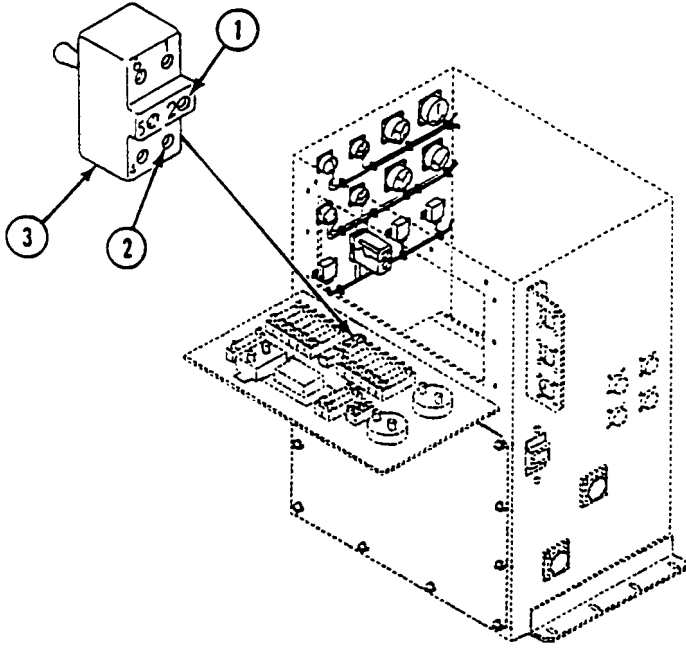
**7YN**

1. Replace switch S1 (WP 0828 00).
2. Verify no faults found.

YES

**8Y**

1. Reconnect leads 19A and 19B to S1 position 2.
2. Set BLACKOUT ENABLE switch to upward position.
3. Measure resistance between terminal 2 (1) and terminal 3 (2) of BLACKOUT ENABLE switch S1 (3).
4. Does multimeter read infinite ohms?



YES



NO

**8YN**

1. Faulty relay K5. Beyond unit maintenance repair.
2. Notify supervisor.

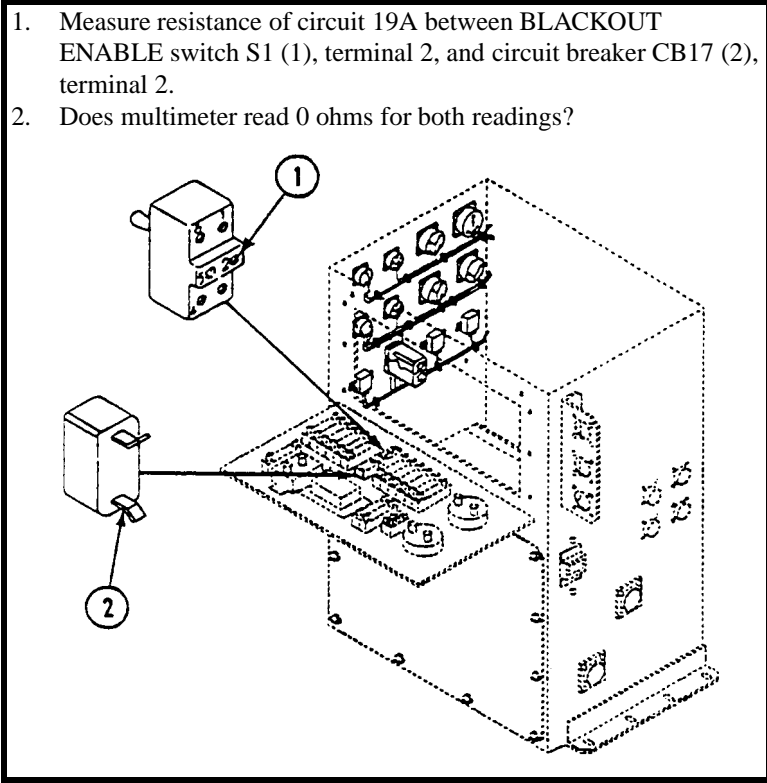
**9Y**

1. Measure resistance of circuit 19A between BLACKOUT ENABLE switch S1 (1), terminal 2, and circuit breaker CB17 (2), terminal 2.
2. Does multimeter read 0 ohms for both readings?

**NO**

**9YN**

1. Replace lead 19A (WP 0828 00).
2. Verify no faults found.

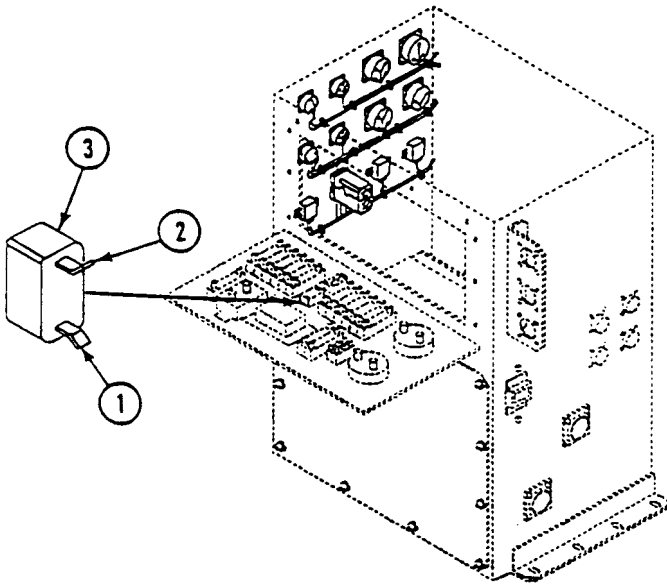


**YES**



**10Y**

1. Set BLACKOUT ENABLE switch to down position.
2. Set AC LIGHTS switch in upward position.
3. Measure resistance between terminal 2 (1) and terminal 1 (2) of circuit breaker CB17 (3).
4. Does multimeter read 0 ohms?



YES



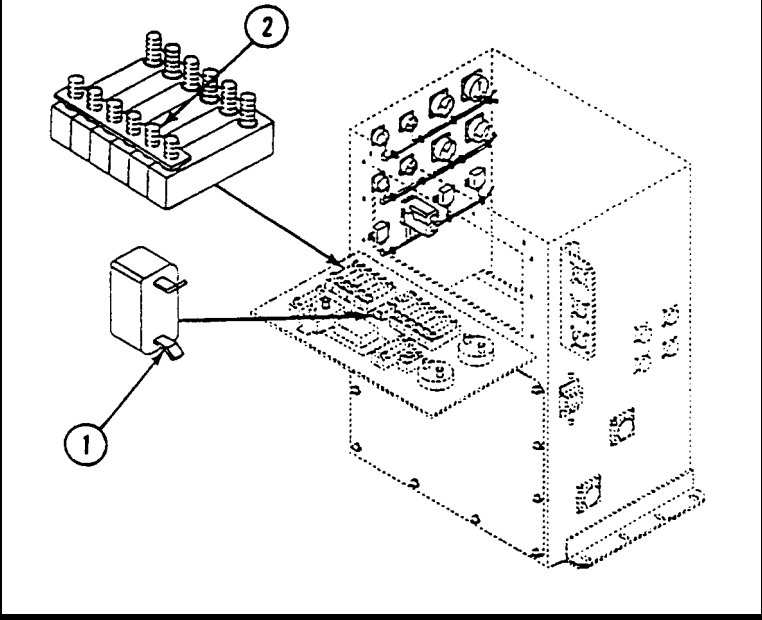
NO

**10YN**

1. Replace circuit breaker CB17 (WP 0828 00).
2. Verify no faults found.

**11Y**

1. Set AC LIGHTS switch in upward position.
2. Measure resistance of circuit 17C between circuit breaker CB17, terminal 2 (1), and AC bus bar at CB9 (2) terminal 1.
3. Does multimeter read 0 ohms?



NO

**11YN**

1. Replace lead 17C (WP 0828 00).
2. Verify no faults found.

YES

**12Y**

1. Raise faceplate and secure with 10 new lockwashers and screws.
2. Verify no faults found.

---

**NO DC OUTPUT FROM DC POWER SUPPLY (M1068A3 ONLY)**

---

**0108 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital Multimeter (WP 0926 00, Item 30)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

Materials/Parts

Lockwasher (22)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

---

**WARNING**

---



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

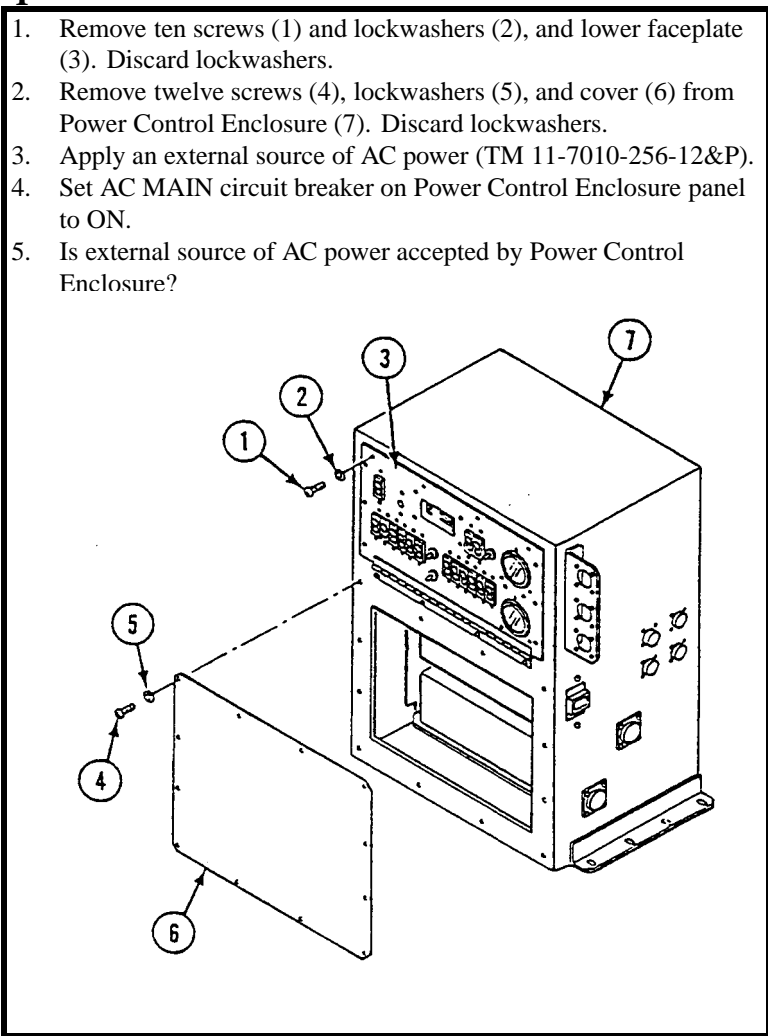
**T**

1. Remove ten screws (1) and lockwashers (2), and lower faceplate (3). Discard lockwashers.
2. Remove twelve screws (4), lockwashers (5), and cover (6) from Power Control Enclosure (7). Discard lockwashers.
3. Apply an external source of AC power (TM 11-7010-256-12&P).
4. Set AC MAIN circuit breaker on Power Control Enclosure panel to ON.
5. Is external source of AC power accepted by Power Control Enclosure?

**NO**

**TN**

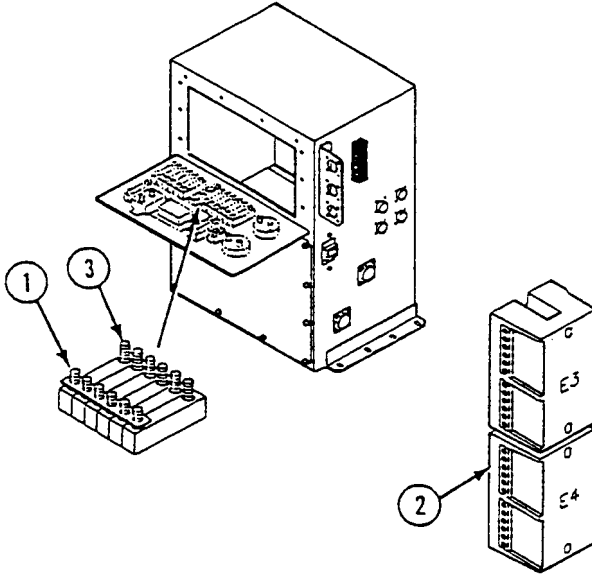
1. Go to: Vehicle Will Not Accept External AC Power (WP 0104 00).



**YES**

**Y**

1. Set DC POWER SUPPLY circuit breaker on Power Control Enclosure panel to ON.
2. Measure voltage between CB5 terminal 1 (1) and terminal block E4 (2). Also measure voltage from CB5 terminal 2 (3) to E4 (2).
3. Does multimeter read 110 volts AC or more for both measurements?



**YES**

**NO**

**YN**

1. Replace circuit breaker CB5 (WP 0828 00).
2. Verify no faults found.

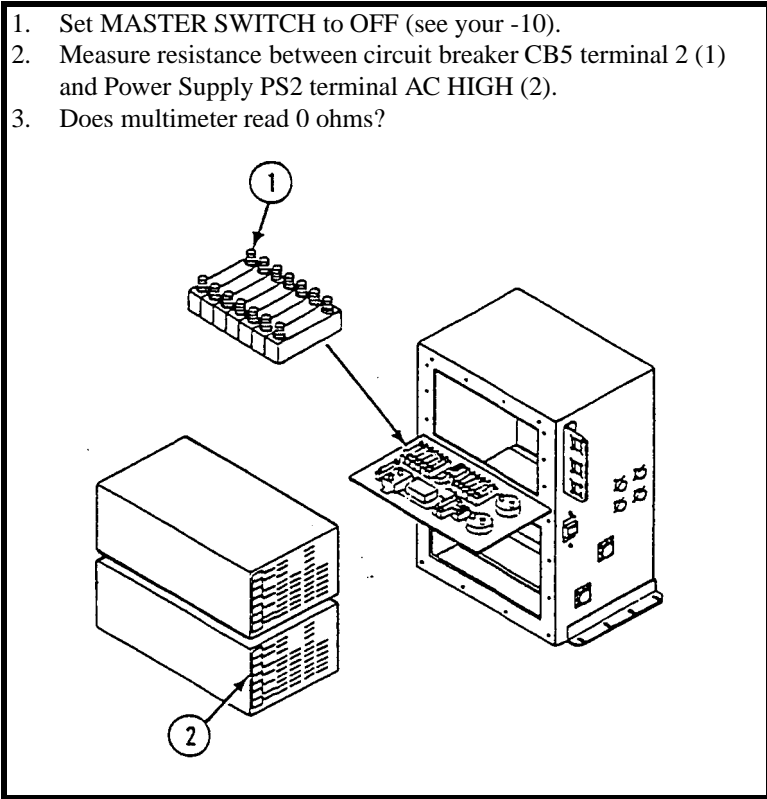
**2Y**

1. Set MASTER SWITCH to OFF (see your -10).
2. Measure resistance between circuit breaker CB5 terminal 2 (1) and Power Supply PS2 terminal AC HIGH (2).
3. Does multimeter read 0 ohms?

**NO**

**2YN**

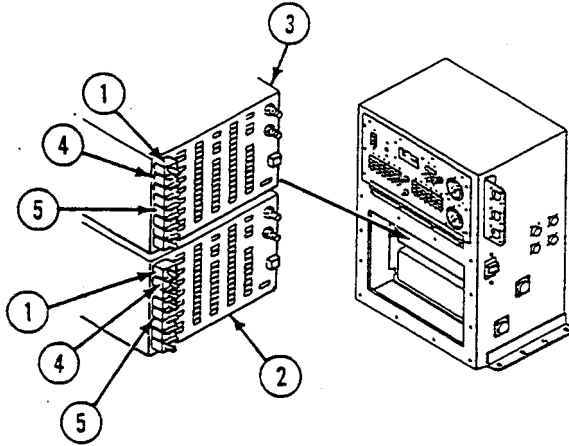
1. Faulty lead 10A in Power Control Enclosure. Beyond unit maintenance repair.
2. Notify supervisor.



**YES**

**3Y**

1. Measure resistance between circuit 10B terminals (1) on Power Supply PS2 (2) and Power Supply PS1 (3).
2. Measure resistance between circuit 8C terminals (4) on Power Supply PS2 (2) and Power Supply PS1 (3).
3. Measure resistance between circuit 3Z terminals (5) on Power Supply PS2 (2) and Power Supply PS1 (3).
4. Does multimeter read 0 ohms for each measurement?



**NO**

**3YN**

1. Faulty lead 10B, 8C, and 3Z in Power Control Enclosure. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**4Y**

1. Faulty Power Supply. Beyond unit maintenance repair.
2. Notify supervisor.





---

**NO AC POWER FROM INVERTERS (M1068A3 ONLY)**

---

**0109 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 11-7010-256-12&P

Tools and Special Tools

General Mechanic's Tool Kit (WP 0926 00, Item 65)  
Digital Multimeter (WP 0926 00, Item 30)  
Inverter Test Solo Plug (WP 0927 00, Figure 0927 00-2)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

Materials/Parts

Lockwasher (10)

Personnel Required

Power-Generation Equipment Repairer 52D10  
Helper (H)

All external power disconnected  
(TM 11-7010-256-12&P)

**WARNING**



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel do not observe safety precautions.

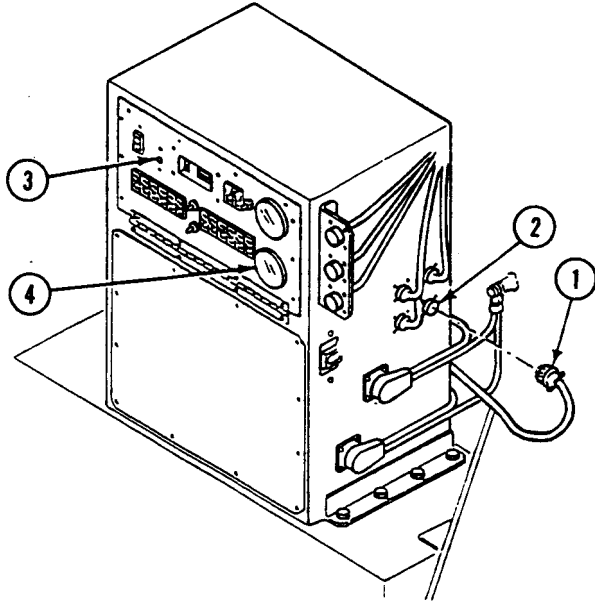
**NEVER** work on equipment unless at least one other person is nearby, familiar with the operation and hazards of the equipment and is familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

**T**

1. Remove cable W5 plug P6 (1) from Power Control Enclosure jack J27 (2).
2. Set MASTER SWITCH to ON.
3. If popped out, press DC TO INVERTERS button (3) on Power Control Enclosure panel.
4. Does DC VOLTS meter (4) on Power Control Enclosure panel read 26 volts DC or more?



YES



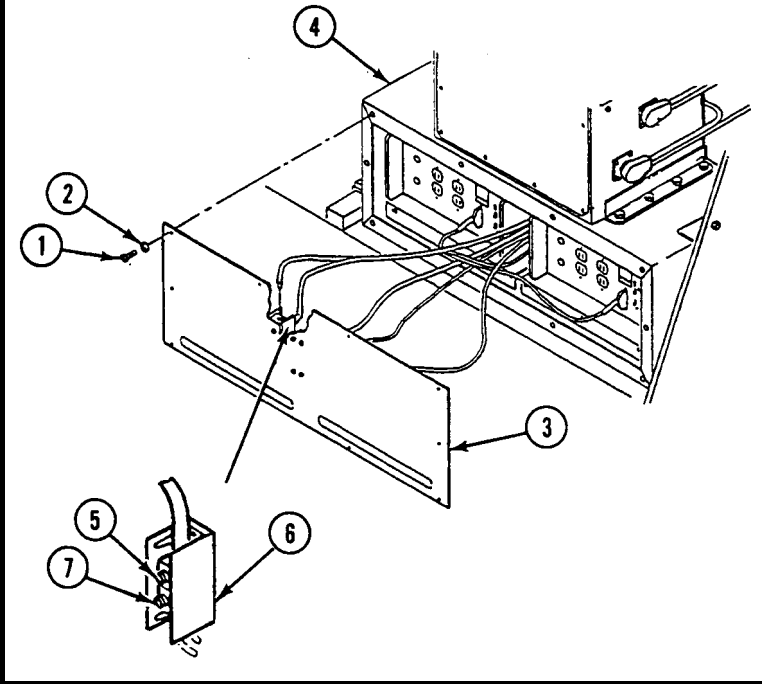
NO

**TN**

1. Go to: Power Control Enclosure A1 DC Input/Output Inoperative (WP 0090 00).

**Y**

1. Remove ten screws (1), lockwashers (2), and cover (3) from inverter housing (4). Discard lockwashers.
2. Measure voltage between terminal E2 (5) on terminal block TB1 (6) and ground.
3. Repeat measurement between terminal E4 (7) and ground.
4. Does multimeter read 22 volts DC or more for both measurements?



**YES**

**NO**

**YN**

1. Faulty terminal block TB1. Beyond unit maintenance repair.
2. Notify supervisor

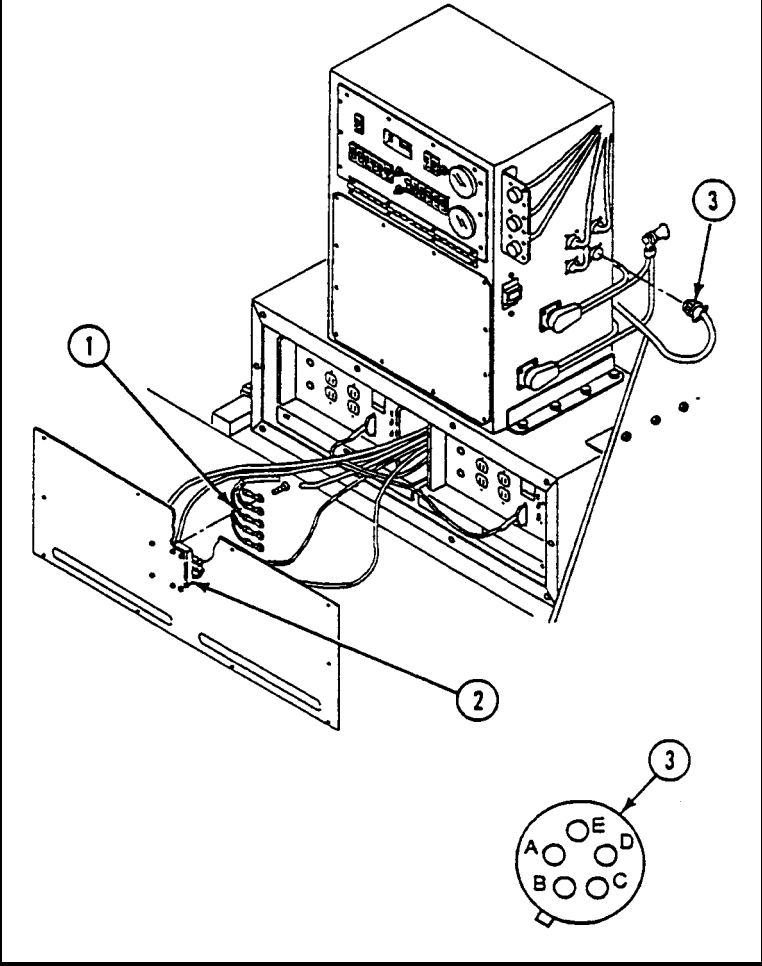
2Y

1. Set MASTER SWITCH to OFF.
2. Tag leads E1 thru E5 before removal. Remove cable W5 leads (1) from posts on terminal block TB2 (2).
3. Measure resistance between sockets of plug P6 (3) and W5 leads (1) as follows:
  - Socket A to lead E1
  - Socket B to lead E2
  - Socket C to lead E3
  - Socket D to lead E4
  - Socket E to lead E5
4. Does multimeter read 0 ohms for each measurement?

NO

2YN

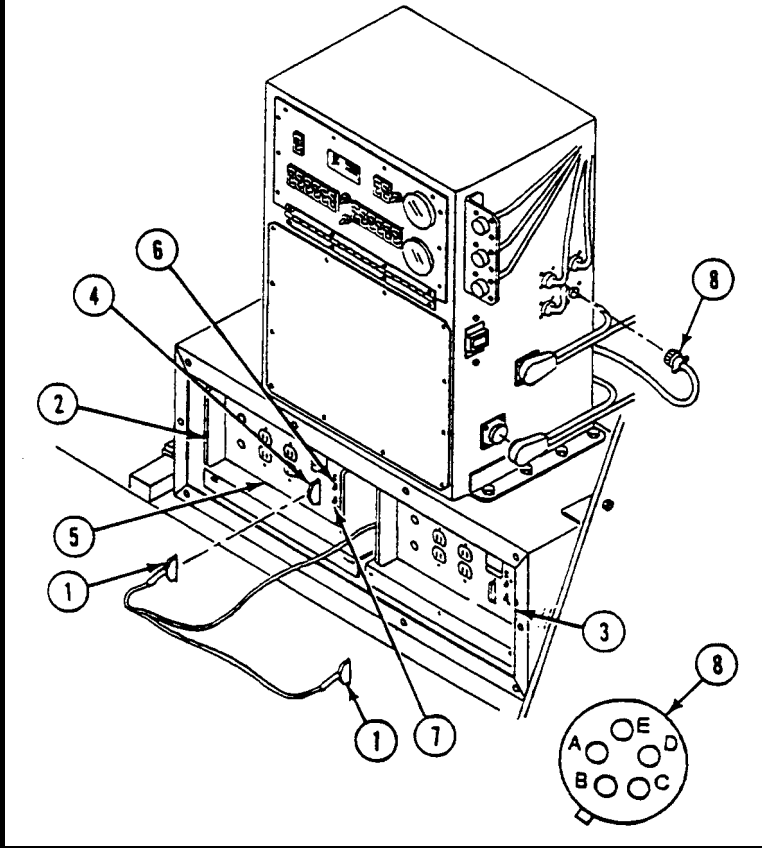
1. Replace cable W5 (WP 0839 00).
2. Verify no faults found.



YES

**3Y**

1. Install cable W5 leads on terminal block TB2.
2. Remove cable W15 plugs (1) from inverters IN1 (2) and IN2 (3).
3. Install inverter test solo plug (4) in inverter IN1 (2).
4. Set MASTER SWITCH to ON.
5. On inverter front panel (5), set POWER switch (6) to ON and momentarily move RESET switch (7) up.
6. Measure voltage between sockets A and B of cable W5 plug P6 (8).
7. Does multimeter read 110 volts AC or more?



YES  
↓

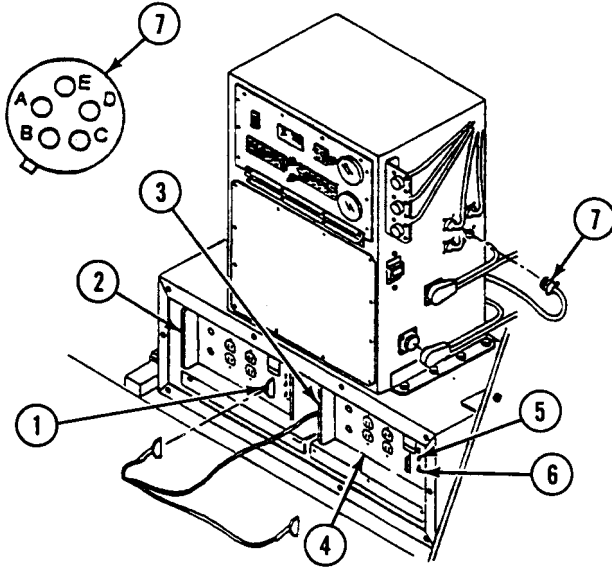
NO →

**3YN**

1. Faulty inverter IN1 (with solo plug installed). Beyond unit maintenance repair.
2. Notify supervisor.

**4Y**

1. Set MASTER SWITCH to OFF.
2. Remove solo plug (1) from tested inverter IN1 (2) and install in other inverter IN2 (3).
3. Set MASTER SWITCH to ON.
4. On inverter front panel (4), set POWER switch (5) to ON and momentarily move RESET switch (6) up.
5. Measure voltage between sockets C and D of cable W5 plug P6 (7).
6. Does multimeter read 110 volts AC or more?



NO

**4YN**

1. Faulty inverter IN2 (with solo plug installed). Beyond unit maintenance repair.
2. Notify supervisor.

YES

**5Y**

1. Install cable W5 plug P6 on Power Control Enclosure jack J27.
2. Replace cascade remote harness W15 (WP 0847 00).
3. Verify no faults found.

---

**NO DATA OUTPUT FROM DATA PANEL A12 (M1068A3 ONLY)**

---

**0110 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

Radio equipment tool kit (WP 0926 00, Item 66)

Multimeter (WP 0926 00, Item 30)

Personnel Required

Signal Support System Specialist 31U10

Helper (H)

References

See your -10

TM 11-7010-256-12&P

Equipment Condition

Engine stopped (see your -10)

Carrier blocked (see your -10)

---

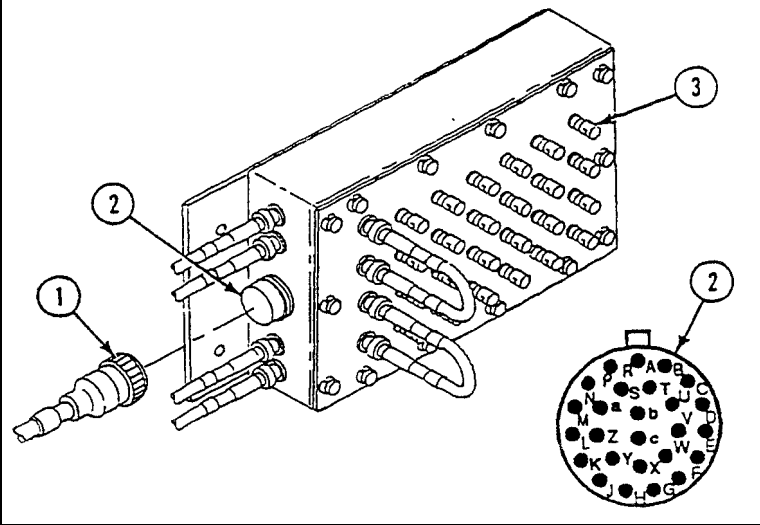
**T**

1. Remove cable W124 plug P1 (1) from Data Panel A12 jack J3 (2).
2. Measure resistance between posts (3) and pins of jack J3 (2) as follows:
  - Post 1 (Red) to pin A
  - Post 1 (Blk) to pin B
  - Post 2 (Red) to pin C
  - Post 2 (Blk) to pin D
  - Post 3 (Red) to pin E
  - Post 3 (Blk) to pin F
  - Post 4 (Red) to pin G
  - Post 4 (Blk) to pin H
  - Post 5 (Red) to pin J
  - Post 5 (Blk) to pin K
  - Post 6 (Red) to pin L
  - Post 6 (Blk) to pin M
  - Post 7 (Red) to pin N
  - Post 7 (Blk) to pin P
  - Post 8 (Red) to pin R
  - Post 8 (Blk) to pin S
  - Post 9 (Red) to pin T
  - Post 9 (Blk) to pin U
  - Post 10 (Red) to pin V
  - Post 10 (Blk) to pin W
  - Post 11 (Red) to pin X
  - Post 11 (Blk) to pin Y
  - Post 12 (Red) to pin Z
  - Post 12 (Blk) to pin a
3. Does multimeter read 0 ohms for each measurement?

**NO**

**TN**

1. Replace Data Panel A12 (WP 0819 00).
2. Verify no faults found.

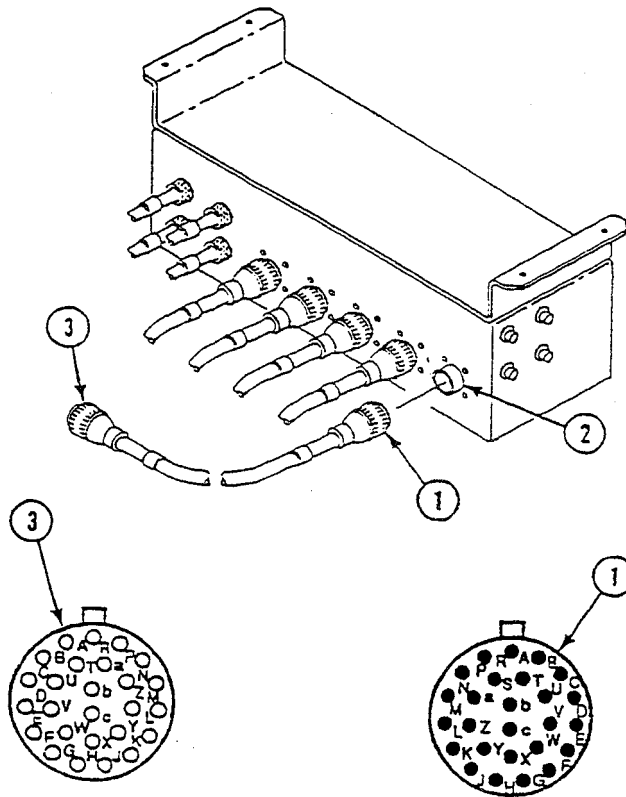


**YES**



**Y**

1. Remove cable W124 plug P109 (1) from Patch Panel Box A10 jack J140 (2).
2. Measure resistance between pin A on plug P109 (1) and socket A on plug P1 (3) of cable W124. Repeat for pins B through a.
3. Does multimeter read 0 ohms for each measurement?



**NO**

**YN**

1. Replace cable W124 (WP 0855 00).
2. Verify no faults found.

**YES**

**2Y**

1. Replace Signal Patch Panel Box A10 (WP 0816 00).
2. Verify no faults found.



---

**NO LAN OUTPUT FROM DATA PANEL A12 (M1068A3 ONLY)**

---

**0111 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

Radio equipment tool kit (WP 0926 00, Item 66)  
Multimeter (WP 0926 00, Item 30)

Personnel Required

Signal Support System Specialist 31U10  
Helper (H)

References

See your -10  
TM 11-7010-256-12&P  
See M1068A3 Wiring Diagram (FO-7 and FO-8)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

---

**WARNING**

---



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

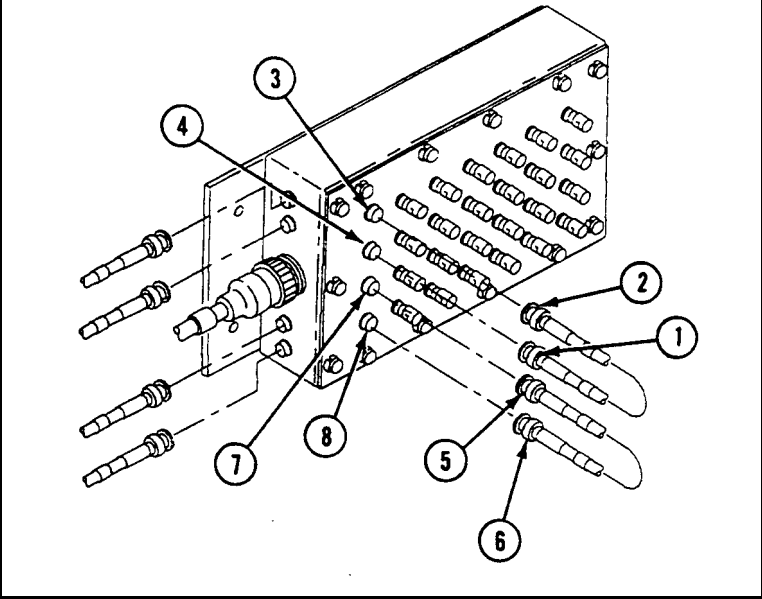
**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

**T**

1. Remove cable W108 plugs P1 (1) and P2 (2) from Data Panel A12 jacks J107 (3) and J108 (4).
2. Remove cable W107 plugs P1 (5) and P2 (6) from Data Panel A12 jacks J105 (7) and J106 (8).
3. Measure resistance between center pins of plugs P1 and P2 of each cable.
4. Does multimeter read 0 ohms for each measurement?



**NO**

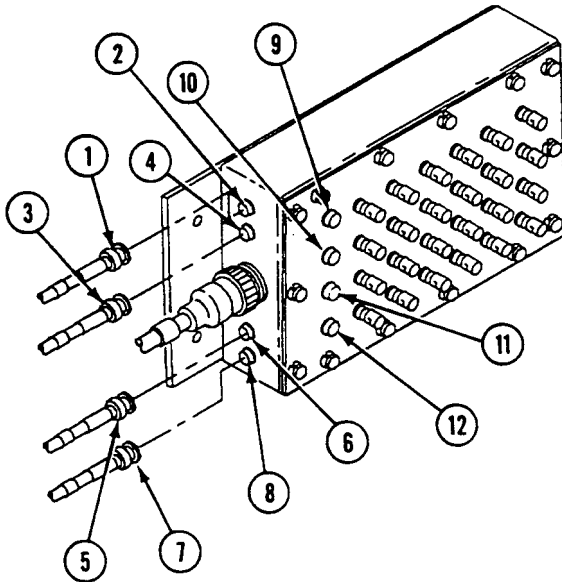
**TN**

1. Replace cable W107 and/or W108 (WP 0819 00).
2. Verify no faults found.

**YES**

**Y**

1. Remove the following cable plugs from jacks on Data Panel A12:
  - W101 plug P1 (1) from jack J1 (2)
  - W103 plug P1 (3) from jack J2 (4)
  - W102 plug P1 (5) from jack J4 (6)
  - W104 plug P1 (7) from jack J5 (8)
2. Measure resistance between pins of the following jacks on Data Panel A12:
  - J1 (2) to J105 (9)
  - J2 (4) to J106 (10)
  - J4 (6) to J107 (11)
  - J5 (8) to J108 (12)
3. Does multimeter read 0 ohms for each measurement?



**YES**



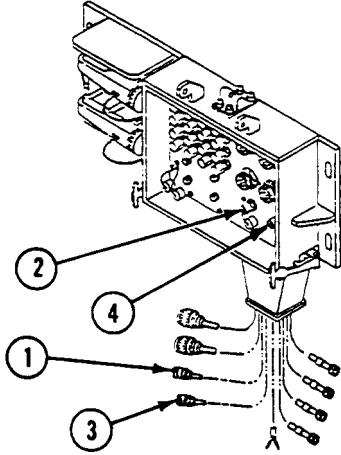
**NO**

**YN**

1. Replace Data Panel A12 (WP 0819 00).
2. Verify no faults found.

**2Y**

1. Measure resistance between cable W101 plug P1 (1) and External Communication Box A11 jack J103 (2).
2. Measure resistance between cable W102 plug P1 (3) and External Communication Box A11 jack J104 (4).
3. Does multimeter read 0 ohms for each measurement?



**YES**

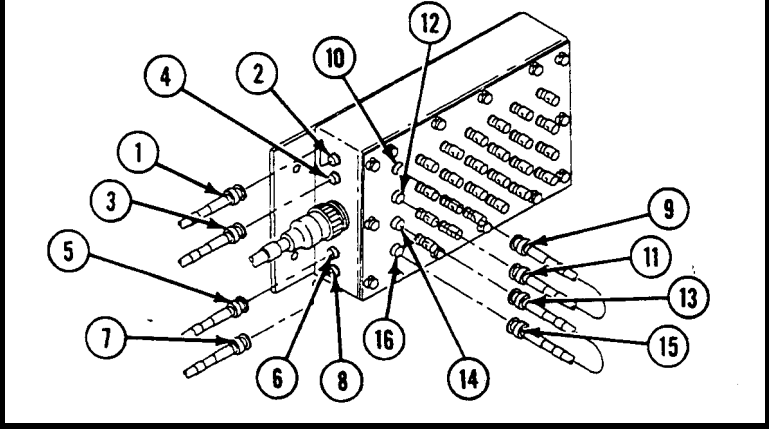
**NO**

**2YN**

1. Faulty cables W101 and/or W102. Beyond unit maintenance repair.
2. Notify supervisor.

**3Y**

1. Install the following plugs and cables on Data Panel A12 jacks:
  - W101 plug P1 (1) on jack J1 (2)
  - W103 plug P1 (3) on jack J2 (4)
  - W102 plug P1 (5) on jack J4 (6)
  - W104 plug P1 (7) on jack J5 (8)
  - W107 plug P1 (9) on jack J105 (10)
  - W107 plug P2 (11) on jack J106 (12)
  - W108 plug P1 (13) on jack J107 (14)
  - W108 plug P2 (15) on jack J108 (16)
2. Verify no faults found.







---

**NO DATA OUTPUT FROM DATA PANEL A13 (M1068A3 ONLY)**

---

**0112 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

Radio equipment tool kit (WP 0926 00, Item 66)

Multimeter (WP 0926 00, Item 30)

Personnel Required

Signal Support System Specialist 31U10

Helper (H)

References

See your -10

TM 11-7010-256-12&P

See M1068A3 Wiring Diagram (FO-7 and FO-8)

Equipment Condition

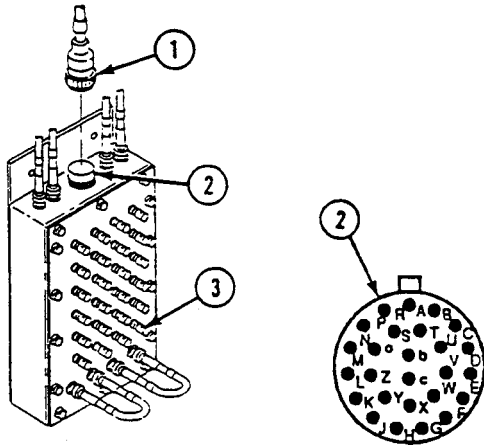
Engine stopped (see your -10)

Carrier blocked (see your -10)

---

**T**

1. Remove cable W126 plug P1 (1) from Data Panel A13 jack J3 (2).
2. Measure resistance between posts (3) and pins of jack J3 (2) as follows:
  - Post 1 (Red) to pin A
  - Post 1 (Blk) to pin B
  - Post 2 (Red) to pin C
  - Post 2 (Blk) to pin D
  - Post 3 (Red) to pin E
  - Post 3 (Blk) to pin F
  - Post 4 (Red) to pin G
  - Post 4 (Blk) to pin H
  - Post 5 (Red) to pin J
  - Post 5 (Blk) to pin K
  - Post 6 (Red) to pin L
  - Post 6 (Blk) to pin M
  - Post 7 (Red) to pin N
  - Post 7 (Blk) to pin P
  - Post 8 (Red) to pin R
  - Post 8 (Blk) to pin S
  - Post 9 (Red) to pin T
  - Post 9 (Blk) to pin U
  - Post 10 (Red) to pin V
  - Post 10 (Blk) to pin W
  - Post 11 (Red) to pin X
  - Post 11 (Blk) to pin Y
  - Post 12 (Red) to pin Z
  - Post 12 (Blk) to pin a
3. Does multimeter read 0 ohms for each measurement?



**NO**

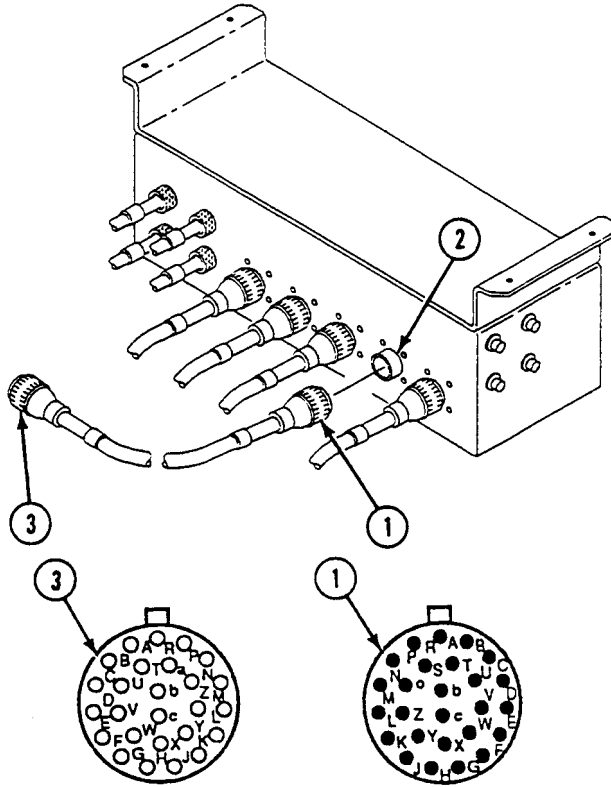
**TN**

1. Replace Data Panel A13 (WP 0835 00).
2. Verify no faults found.

**YES**

**Y**

1. Remove cable W126 plug P108 (1) from Patch Panel Box A10 jack J139 (2).
2. Measure resistance between pin A on plug P108 (1) and socket A on plug P1 (3) of cable W126. Repeat for pins B through a.
3. Does multimeter read 0 ohms for each measurement?



**NO**

**YN**

1. Replace cable W126 (WP 0856 00).
2. Verify no faults found.

**YES**

**2Y**

1. Replace Signal Patch Panel Box A10 (WP 0816 00).
2. Verify no faults found.



---

**NO LAN OUTPUT FROM DATA PANEL A13 (M1068A3 ONLY)**

---

**0113 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

Radio equipment tool kit (WP 0926 00, Item 66)  
Multimeter (WP 0926 00, Item 30)

Personnel Required

Signal Support System Specialist 31U10  
Helper (H)

References

See your -10  
TM 11-7010-256-12&P  
See M1068A3 Wiring Diagram(FO-7 and FO-8)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)

---

**WARNING**

---



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

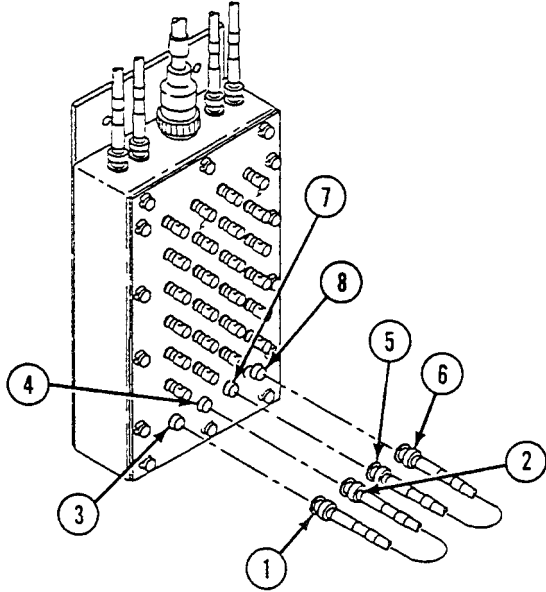
**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

**T**

1. Remove cable W109 plugs P1 (1) and P2 (2) from Data Panel A13 jacks J109 (3) and J110 (4).
2. Remove cable W110 plugs P1 (5) and P2 (6) from Data Panel A13 jacks J111 (7) and J112 (8).
3. Measure resistance between center pins of plugs P1 and P2 of each cable.
4. Does multimeter read 0 ohms for each measurement?



**YES**

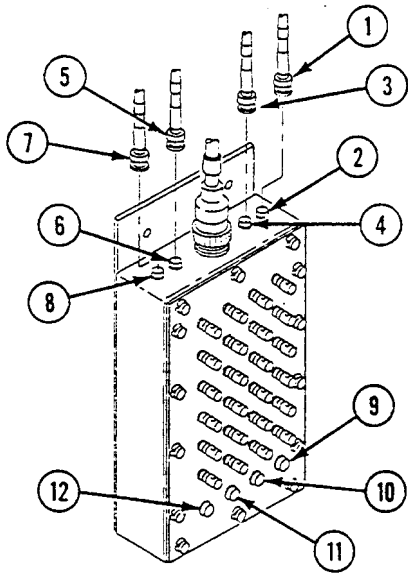
**NO**

**TN**

1. Replace cable W109 and/or W110 (WP 0835 00).
2. Verify no faults found.

**Y**

1. Remove the following cable plugs from jacks on Data Panel A13:  
 W32 plug P5 (1) from jack J1 (2)  
 W104 plug P2 (3) from jack J2 (4)  
 W32 plug P4 (5) from jack J4 (6)  
 W103 plug P2 (7) from jack J5 (8)
2. Measure resistance between pins of the following jacks on Data Panel A13:  
 J1 (2) to J112 (9)  
 J2 (4) to J111 (10)  
 J4 (6) to J110 (11)  
 J5 (8) to J109 (12)
3. Does multimeter read 0 ohms for each measurement?



**YES**

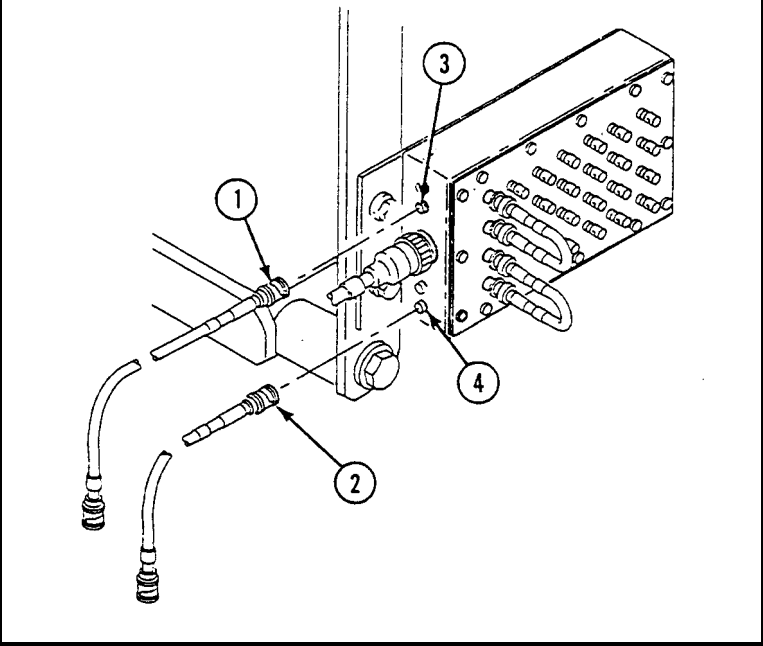
**NO**

**YN**

1. Replace Data Panel A13 (WP 0835 00).
2. Verify no faults found.

**2Y**

1. Remove cables W103 plug P1 (1) and W104 plug P2 (2) from jacks J2 (3) and J5 (4) on Data Panel A12.
2. Measure resistance between center pins of plugs P1 and P2 of cables W103 and W104.
3. Does multimeter read 0 ohms for each measurement?



**NO**

**2YN**

1. Replace cable W103 and/or W104 (WP 0854 00).
2. Verify no faults found.

**YES**

**3Y**

1. Go to: No LAN Output from Data Panel A12 (WP 0111 00).



---

**PHONE EXTENSION BOX A14 POST(S) INOPERATIVE (M1068A3 ONLY)**

---

**0114 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

Radio Equipment Tool Kit (WP 0926 00, Item 66)  
 Digital Multimeter (WP 0926 00, Item 30)

Personnel Required

Signal Support System Specialist 31U10  
 Helper (H)

References

See your -10  
 TM 11-7010-256-12&P  
 See M1068A3 Wiring Diagram (FO-7 and FO-8)

Equipment Condition

Engine stopped (see your -10)  
 Carrier blocked (see your -10)

---

**WARNING**

---



**HIGH VOLTAGE** is used in the operation of this equipment.

**DEATH ON CONTACT** may result if personnel fail to observe safety precautions.

**NEVER** work on equipment unless at least one other person familiar with the operation and hazards of the equipment is nearby. That person should also be familiar with giving first aid. When an operator helps a mechanic, that operator must be warned about dangerous areas.

**SHUT OFF POWER** supply to equipment before beginning work. Make sure all external power is off/disconnected.

**BE CAREFUL** not to contact high-voltage connections when installing or operating this equipment.

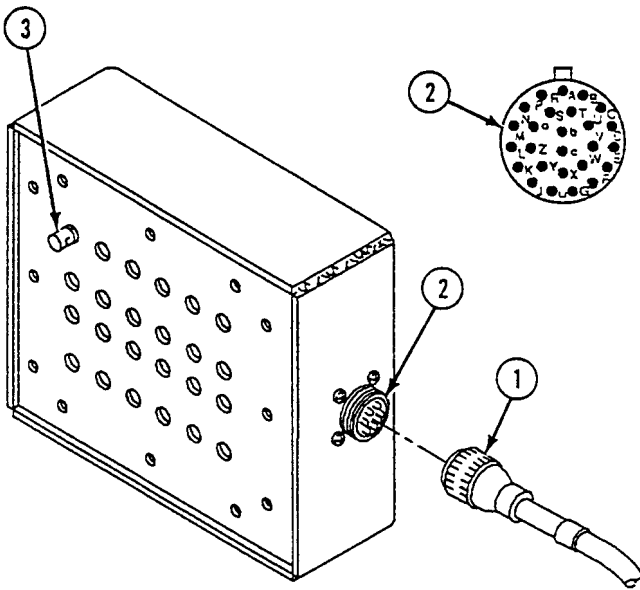
**T**

1. Remove cable W129 plug P2 (1) from Phone Extension Box A14 jack J1 (2).
2. Measure resistance between posts (3) and pins of jack J1 (2) as follows:
  - Post 1 (Blk) to pin A
  - Post 1 (Red) to pin B
  - Post 2 (Blk) to pin C
  - Post 2 (Red) to pin D
  - Post 3 (Blk) to pin E
  - Post 3 (Red) to pin F
  - Post 4 (Blk) to pin G
  - Post 4 (Red) to pin H
  - Post 5 (Blk) to pin J
  - Post 5 (Red) to pin K
  - Post 6 (Blk) to pin L
  - Post 6 (Red) to pin M
  - Post 7 (Blk) to pin N
  - Post 7 (Red) to pin P
  - Post 8 (Blk) to pin R
  - Post 8 (Red) to pin S
  - Post 9 (Blk) to pin T
  - Post 9 (Red) to pin U
  - Post 10 (Blk) to pin V
  - Post 10 (Red) to pin W
  - Post 11 (Blk) to pin X
  - Post 11 (Red) to pin Y
  - Post 12 (Blk) to pin Z
  - Post 12 (Red) to pin a
3. Does multimeter read 0 ohms for each measurement?

**NO**

**TN**

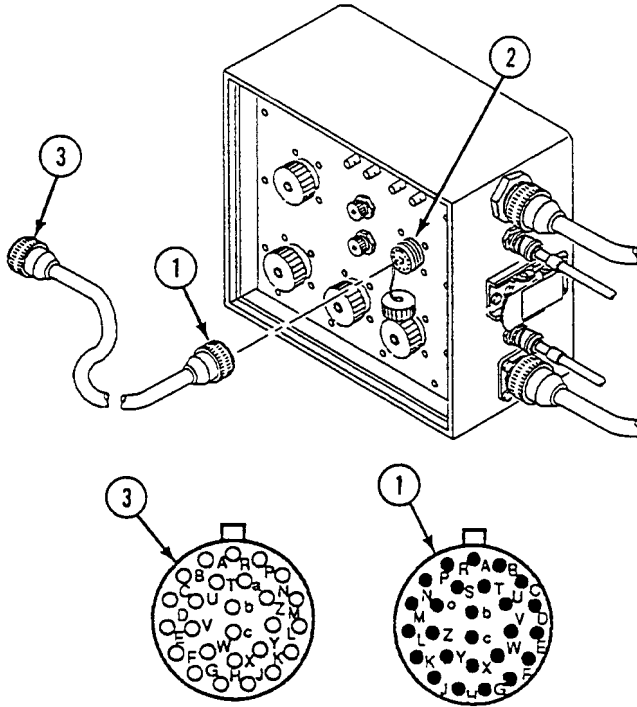
1. Replace Phone Extension Box A14. See TM 11-7010-256-12&P.
2. Verify no faults found.



**YES**

**Y**

1. Remove cable W129 plug P1 (1) from Tent Interface Panel jack J137 (2).
2. Measure resistance between pin A on plug P1 (1) and socket A on plug P2 (3) of cable W129. Repeat for pins B through a
3. Does multimeter read 0 ohms for each measurement?



**NO**

**YN**

1. Replace cable W129.
2. Verify no faults found.

**YES**

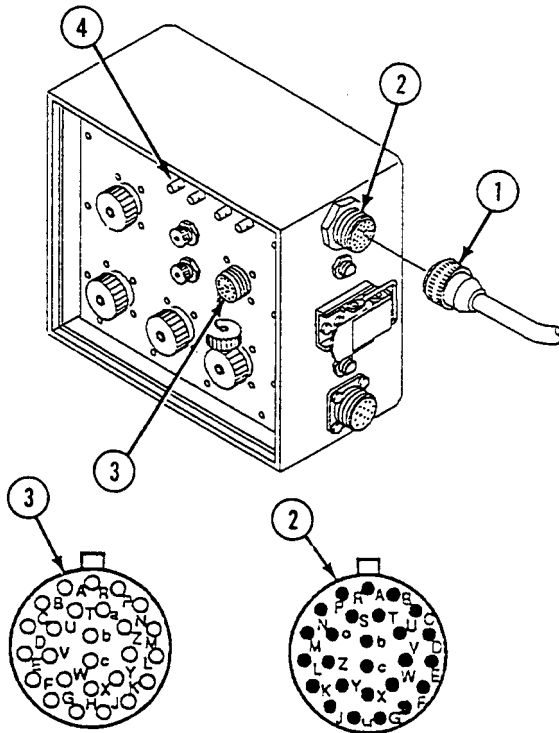
2Y

1. Remove cable W32 plug P7 (1) from Tent Interface Panel jack J8 (2).
2. Measure resistance between socket A of jack J137 (3) and pin A of jack J8 (2). Repeat for sockets/pins B through a.
3. Measure resistance between sockets of J137 (3) and posts (4) as follows:
  - Socket A to E117
  - Socket B to E118
  - Socket C to E119
  - Socket D to E120
4. Does multimeter read 0 ohms for each measurement?

NO

2YN

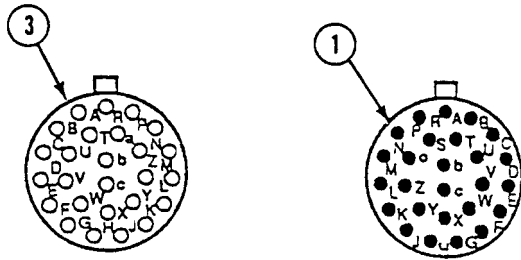
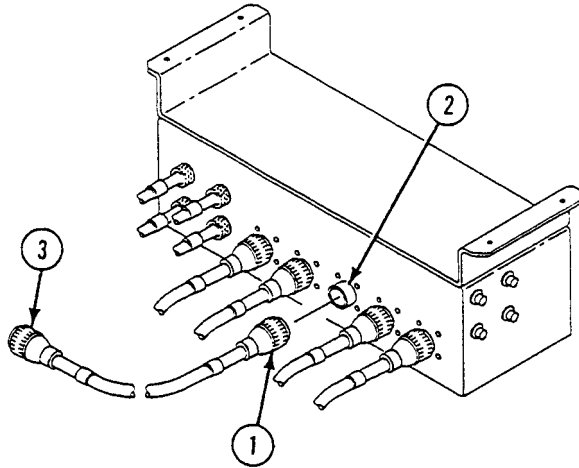
1. Replace Tent Interface Panel Box A5 (WP 0833 00).
2. Verify no faults found.



YES

**3Y**

1. Remove cable W32 plug P107 (1) from jack J138 (2) on Patch Panel Box A10.
2. Measure resistance between socket A of plug P7 (3) and pin A of plug P107 (1). Repeat for socket/pins B through a.
3. Does multimeter read 0 ohms for each measurement?



**NO**

**3YN**

1. Replace cable W32 (WP 0848 00).
2. Verify no faults found.

**YES**

**4Y**

1. Replace Signal Patch Panel Box A10 (WP 0816 00).
2. Verify no faults found.



**SPEEDOMETER MALFUNCTIONS**

**0115 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Trim vane lowered (see your -10)  
Power plant access door opened (see your -10)  
Power plant access cover removed (WP 0441 00)  
Driver's power plant access panel removed (see your -10)

Personnel Required

Unit Mech  
Helper (H)

**T**

1. Does speedometer fail to give any reading?

**NO**

**GO TO AY (PAGE 0115 00-2)**

**YES**

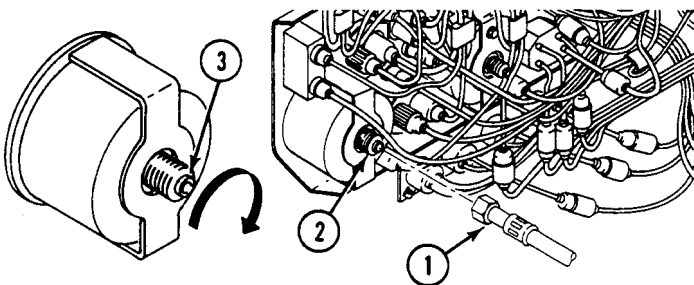
**Y**

1. Remove speedometer cable (1) from speedometer (2).
2. Check speedometer drive (3).
3. Does speedometer drive spin freely?

**NO**

**YN**

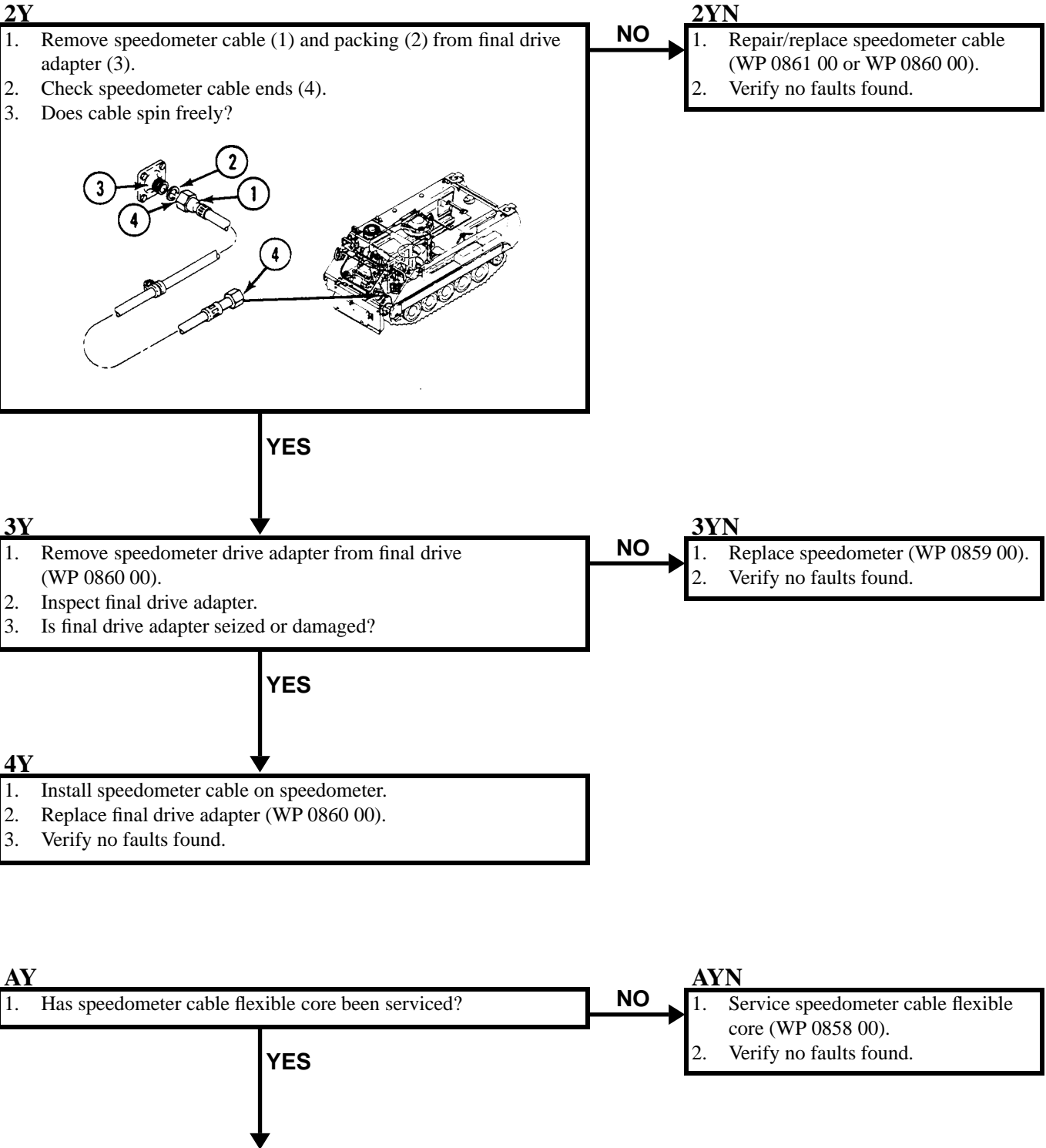
1. Replace speedometer (WP 0859 00).
2. Verify no faults found.



**YES**

**SPEEDOMETER MALFUNCTIONS—Continued**

**0115 00**



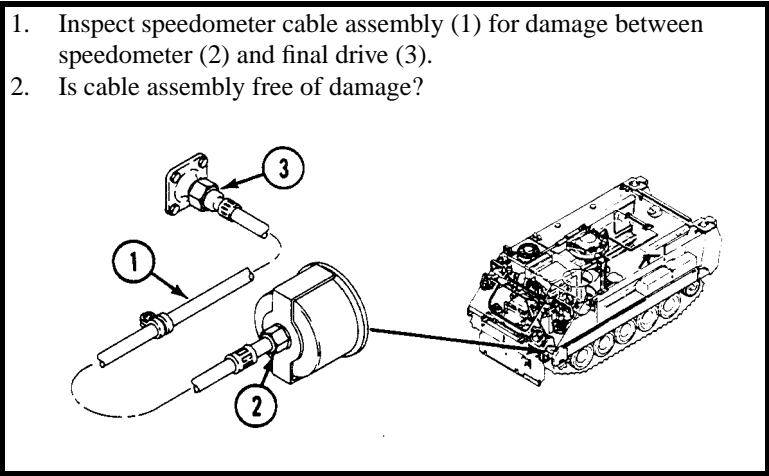


**SPEEDOMETER MALFUNCTIONS—Continued**

**0115 00**

**A2Y**

1. Inspect speedometer cable assembly (1) for damage between speedometer (2) and final drive (3).
2. Is cable assembly free of damage?



**NO**

**A2YN**

1. Replace speedometer cable assembly (WP 0860 00).
2. Verify no faults found.

**YES**

**A3Y**

1. Replace speedometer (WP 0859 00).
2. Verify no faults found.



**TACHOMETER MALFUNCTIONS**

**0116 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10

Tools and Special Tools

General mechanic's tool kit: automotive  
(WP 0926 00, Item 65)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Trim vane lowered (see your -10)  
Power plant access door opened (see your -10)  
Power plant access cover removed (WP 0441 00)  
Driver's power plant access panel removed (see your -10)

Personnel Required

Unit Mech  
Helper (H)

**T**

1. Start engine (see your -10).
2. Does tachometer fail to show any reading?

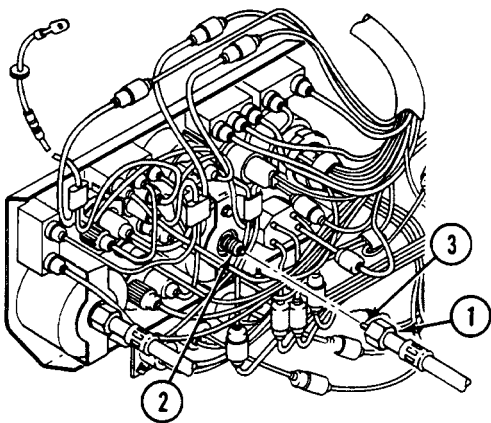
**NO**

**GO TO AY (PAGE 0116 00-2)**

**YES**

**Y**

1. Stop engine (see your -10)
2. Remove tachometer cable (1) from tachometer (2).
3. Start engine (see your -10).
4. Observe tachometer cable drive tip (3).
5. Does tachometer cable drive tip fail to rotate?

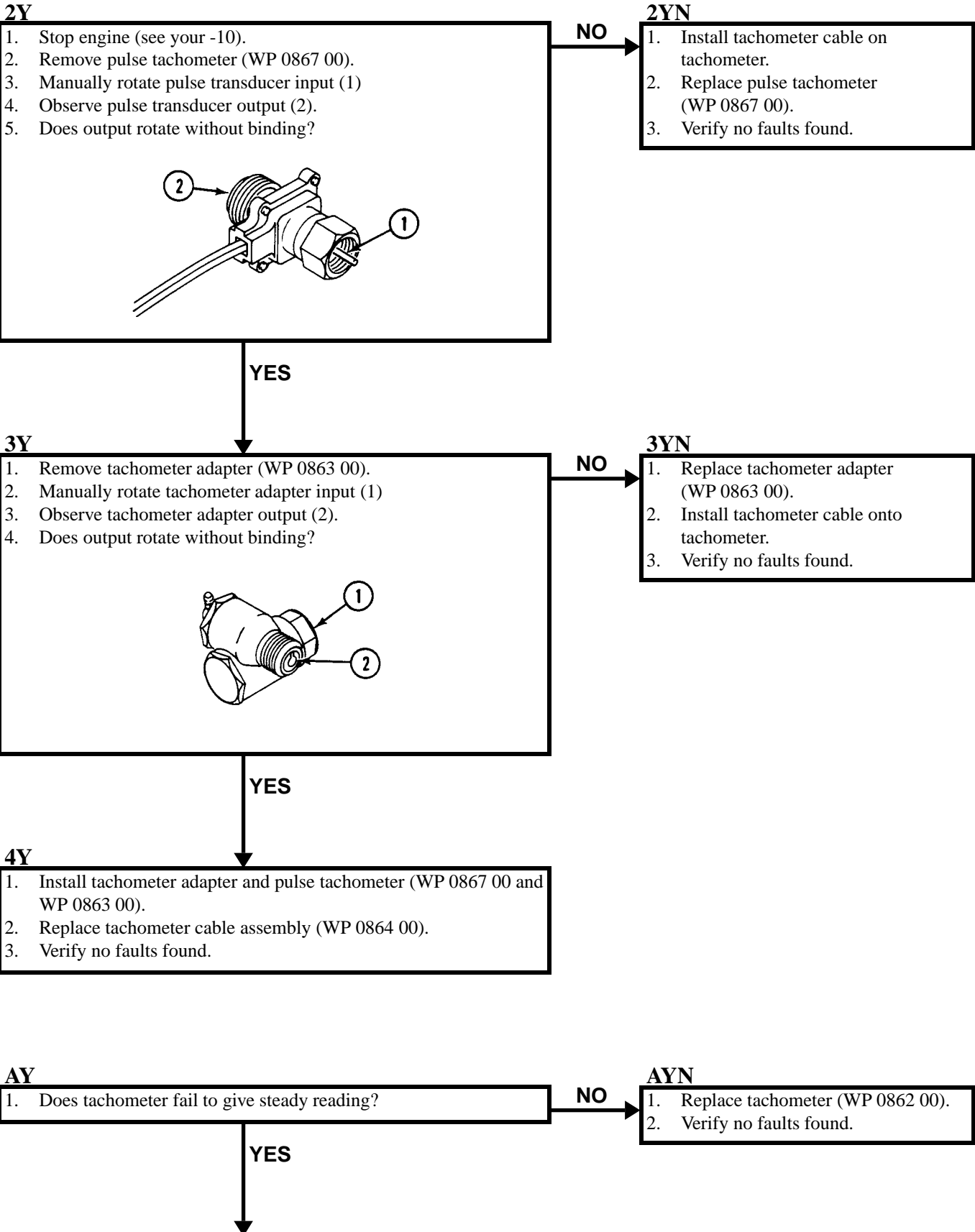


**NO**

**YN**

1. Stop engine (see your -10).
2. Replace tachometer (WP 0862 00).
3. Verify no faults found.

**YES**



**A2Y**

1. Has tachometer cable flexible core been serviced?

**NO**

**A2YN**

1. Service flexible core (WP 0858 00).
2. Verify no faults found.

**YES**

**A3Y**

1. Repair/replace tachometer cable assembly (WP 0865 00 or WP 0864 00).
2. Verify no faults found.



**HOOK UP/REMOVE STE/ICE TEST SET TO DCA 6**

**0117 00**

**THIS WORK PACKAGE COVERS:**

- Hook up (page 0117 00-1).
- Removal (page 0117 00-2).

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

- STE/ICE Test Set (WP 0926 00, Item 61)
- Electrical connector pliers (WP 0926 00, Item 31)

Equipment Condition

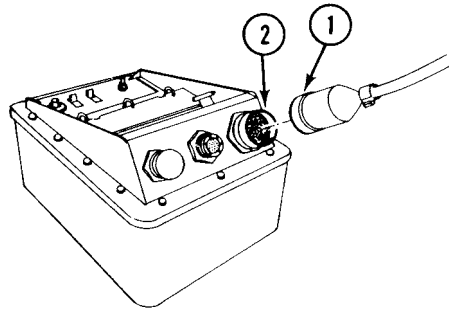
- Engine stopped (see your -10)
- Vehicle blocked (see your -10)

Personnel Required

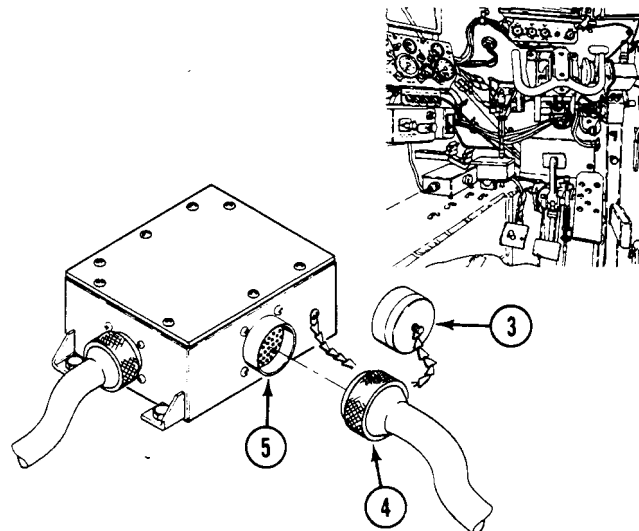
Unit Mech 63T10

**HOOK-UP**

1. Remove VTM and cable W1 from transit case.
2. Pull VTM circuit breaker to OFF.
3. Install plug W1 P1 (1) on VTM jack J1 (2).



4. Remove cap (3) from DCA 6 J2 (5).
5. Install plug W1 P2 (4) on DCA 6 J2 (5).



6. Push VTM circuit breaker to ON.
  - a. If display reads **(8888)** and (- - - -), go to Step 7.
  - b. If display is not blank, but does not read **(8888)** and (- - - -), write up DA form 2404 on faulty VTM display. Notify supervisor.
  - c. If display is blank, go to VTM blank display diagnostic troubleshooting (WP 0138 00).
7. Perform VTM confidence check TM 9-4910-571-12&P. If VTM confidence check does not pass, go to STE/ICE confidence test diagnostic troubleshooting (WP 0139 00).
8. Select test 60, then press and release TEST button.
9. Enter vehicle I.D. **(26)** into VTM, then press and release TEST button.
10. Select test 61, then press and release TEST button. If vehicle I.D. **(26)** does not appear on VTM display, see TM 9-4910-571-12&P.
11. Select test 62, then press and release TEST button. If DCA to which VTM is connected does not appear on VTM display, see TM 9-4910-571-12&P.
12. Return to troubleshooting.

**REMOVAL**

1. Pull VTM circuit breaker to OFF.
2. Turn master switch to OFF.
3. Remove W1 cable from DCA 6 J2 and VTM jack J1.
4. Install cap on DCA 6 J2.
5. Stow VTM and cable W1 in transit case.



---

**STE/ICE TEST 10 ENGINE RPM**

**0118 00**

---

**THIS WORK PACKAGE COVERS:**

Test (page 0118 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

1. SELECT TEST 10.
2. PRESS AND RELEASE TEST BUTTON.
3. VTM WILL DISPLAY ENGINE RPM:

**Table 1.**

<b>CONDITION</b>	<b>ENGINE RPM</b>
<b>Cranking</b>	<b>100 Minimum</b>
<b>Idle</b>	<b>600-700</b>
<b>Governed speed (no load)</b>	<b>2900-3050</b>

- a. If error message appears, see TM 9-4910-571-12&P.
  - b. If display is erratic or reads 0 with engine turning, go to: STE/ICE Test 10 Diagnostic Troubleshooting (WP 0140 00).
4. RETURN TO TROUBLESHOOTING.



---

**STE/ICE TEST 24 FUEL SUPPLY PRESSURE**

**0119 00**

---

**THIS WORK PACKAGE COVERS:**

Test (page 0119 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

1. SELECT TEST 24.
2. PERFORM OFFSET TEST.
  - a. Push and hold TEST button until **CAL** appears. Release TEST button.
  - b. If VTM reads between **-10** and **+10**, offset test passes.
  - c. If offset test fails, go to: STE/ICE Test 24 Diagnostic Troubleshooting (WP 0143 00).
3. PRESS AND RELEASE TEST BUTTON.
4. START ENGINE AND RUN AT GOVERNED NO LOAD SPEED (WP 0155 00).
  - a. If VTM reads 55 (psi) or more, test passes.
  - b. If error message appears, see TM 9-4910-571-12&P.
  - c. If readings are erratic or cannot be obtained, go to: STE/ICE Test 24 Diagnostic Troubleshooting (WP 0143 00).
5. STOP ENGINE (see your -10).
6. RETURN TO TROUBLESHOOTING.



---

**STE/ICE TEST 25 FUEL RETURN PRESSURE**

---

**0120 00**

**THIS WORK PACKAGE COVERS:**

Test (page 0120 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech 63t10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

1. SELECT TEST 25.
2. PERFORM OFFSET TEST.
  - a. Push and hold TEST button until **CAL** appears. Release TEST button.
  - b. If VTM reads between **-10** and **+10**, offset test passes.
  - c. If offset test fails, go to: STE/ICE Test 25 Diagnostic Troubleshooting (WP 0144 00).
3. PRESS AND RELEASE TEST BUTTON.
4. START ENGINE AND RUN AT GOVERNED NO LOAD SPEED (WP 0155 00).
  - a. If VTM reads 18 (psi) or more, test passes.
  - b. If error message appears, see TM 9-4910-571-12&P.
  - c. If readings are erratic or cannot be obtained, go to: STE/ICE Test 25 Diagnostic Troubleshooting (WP 0144 00).
5. STOP ENGINE (see your -10).
6. RETURN TO TROUBLESHOOTING.



---

**STE/ICE TEST 26 FUEL FILTER PRESSURE DROP**

**0121 00**

---

**THIS WORK PACKAGE COVERS:**

Test (page 0121 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

1. SELECT TEST 26.
2. PRESS AND RELEASE TEST BUTTON. VTM SHOULD DISPLAY **PASS**.
  - a. If error message appears, see TM 9-4910-571-12&P.
  - b. If readings are erratic or cannot be obtained or reads **FAIL**, go to: STE/ICE Test 26 Diagnostic Troubleshooting (WP 0145 00).
3. START ENGINE (see your -10).
4. PERFORM STALL TEST (WP 0155 00).
5. WHEN ENGINE RPM REACHES 2400 DURING STALL TEST, PRESS AND RELEASE TEST BUTTON.
6. VTM SHOULD DISPLAY **PASS OR FAIL**.
  - a. If error message appears, see TM 9-4910-571-12&P.
  - b. If readings are erratic or cannot be obtained, go to: STE/ICE Test 26 Diagnostic Troubleshooting (WP 0145 00).
7. STOP ENGINE (see your -10).
8. RETURN TO TROUBLESHOOTING.





---

**STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE**

---

**0122 00**

**THIS WORK PACKAGE COVERS:**

Test (page 0122 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

1. SELECT TEST 30.
2. PERFORM OFFSET TEST.
  - a. Press and hold TEST button until **CAL** appears. Release TEST button.
  - b. If VTM reads between **-3 to+3**, offset test passes.
  - c. If offset test fails, go to: STE/ICE Test 30 Diagnostic Troubleshooting (WP 0146 00).
3. PRESS AND RELEASE TEST BUTTON.
4. START ENGINE (see your -10).
5. PERFORM STALL TEST (WP 0155 00).
  - a. If VTM reads **20** or more, test passes.
  - b. If error message appears, see TM 9-4910-571-12&P.
  - c. If readings are erratic or cannot be obtained, go to: STE/ICE Test 30 Diagnostic Troubleshooting (WP 0146 00).
6. STOP ENGINE (see your -10).
7. RETURN TO TROUBLESHOOTING.



---

**STE/ICE TEST 32 AIR BOX PRESSURE**

**0123 00**

---

**THIS WORK PACKAGE COVERS:**

Test (page 0123 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

1. SELECT TEST 32.
2. PERFORM OFFSET TEST.
  - a. Press and hold TEST button until **CAL** appears. Release TEST button.
  - b. If VTM reads between **-3 to+3**, offset test passes.
  - c. If offset test fails, go to: STE/ICE Test 32 Diagnostic Troubleshooting (WP 0147 00).
3. PRESS AND RELEASE TEST BUTTON.
4. START ENGINE (see your -10).
5. ACCELERATE ENGINE TO GOVERNED NO LOAD SPEED (WP 0155 00). RECORD READING.
  - a. If VTM reads **6.0** or more at no load governed RPM, test passes.
  - b. If error message appears, see TM 9-4910-571-12&P.
  - c. If readings are erratic or cannot be obtained, go to: STE/ICE Test 32 Diagnostic Troubleshooting (WP 0147 00).
6. STOP ENGINE (see your -10).
7. RETURN TO TROUBLESHOOTING.



---

**STE/ICE TEST 67 BATTERY VOLTAGE**

**0124 00**

---

**THIS WORK PACKAGE COVERS:**

Test (page 0124 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

1. Select TEST 67.
2. Press and release TEST button.

**CONDITIONS**

**VOLTS**

**Engine off/MASTER SWITCH OFF.**

**21 or more**

**Cranking engine fuel off.**

**17 or more**

**Charging 1100-1300 RPM/service lights on.**

**26 to 29.5**

- a. If display is erratic or shows **0** (volts), go to: STE/ICE DCA Battery Voltage Diagnostic Troubleshooting (WP 0142 00).
  - b. If error message appears, see TM 9-4910-571-12&P.
3. Return to troubleshooting.



---

**STE/ICE TEST 68 STARTER MOTOR VOLTAGE**

**0125 00**

---

**THIS WORK PACKAGE COVERS:**

Test (page 0125 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

1. Select TEST 68.
2. Press and release TEST button.
3. Turn MASTER SWITCH to ON.
4. Press START switch for 3 seconds and observe VTM reading.
  - a. If display reads 16 (volts) or more, test passes.
  - b. If error message appears, see TM 9-4910-571-12&P.
  - c. If starter cranks normally, but no reading appears, go to: STE/ICE Test 68 Diagnostic Troubleshooting (WP 0148 00).
5. Turn MASTER SWITCH to OFF.
6. Return to troubleshooting.





---

**STE/ICE TEST 69 STARTER NEGATIVE CABLE VOLTAGE DROP**

**0126 00**

---

**THIS WORK PACKAGE COVERS:**

Test (page 0126 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

1. Select TEST 69.
2. Press and release TEST button.
3. Turn MASTER SWITCH to ON.
4. Press START switch for 3 seconds and observe VTM reading.
  - a. If display reads .60 (volts) or less, test passes.
  - b. If error message appears, see TM 9-4910-571-12&P.
  - c. If engine cranks normally, but reading is erratic or cannot be obtained, go to: STE/ICE Test 69 Diagnostic Troubleshooting (WP 0149 00).
5. Turn MASTER SWITCH to OFF.
6. Return to troubleshooting.



---

**STE/ICE TEST 70 STARTER SOLENOID VOLTAGE**

**0127 00**

---

**THIS WORK PACKAGE COVERS:**

Test (page 0127 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

1. Select TEST 70.
2. Press and release TEST BUTTON.
3. Turn MASTER SWITCH to ON.
4. Press START switch for 3 seconds and observe VTM reading.
  - a. If display reads **16** (volts) or more, test passes.
  - b. If error message appears, see TM 9-4910-571-12&P.
  - c. If engine cranks normally, but reading is erratic or cannot be obtained, go to: STE/ICE Test 70 Diagnostic Troubleshooting (WP 0150 00).
5. Turn MASTER SWITCH to OFF.
6. Return to troubleshooting.



---

**STE/ICE TEST 71 STARTER CURRENT (AVERAGE)**

---

**0128 00****THIS WORK PACKAGE COVERS:**

Test (page 0128 00-1).

---

**INITIAL SETUP:**Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&amp;P

- 
1. Select TEST 71.
  2. Perform offset test.
    - a. Press TEST button until display reads **CAL**. Release TEST button.
    - b. If VTM reads between **-250** and **+250**, offset test passes.
    - c. If offset test fails, go to STE/ICE DCA current shunt diagnostic troubleshooting (WP 0142 00).
  3. Press and release TEST button.
  4. Crank engine for five seconds and note steady reading.
    - a. If VTM reads between **200** and **490**, test passes.
    - b. If error message appears, see TM 9-4910-571-12&P.
    - c. If no reading appears and engine cranks normally, go to STE/ICE DCA current shunt diagnostic troubleshooting (WP 0142 00).
  5. Return to troubleshooting.



---

**STE/ICE TEST 72 STARTER CURRENT (FIRST PEAK)**

---

**0129 00****THIS WORK PACKAGE COVERS:**

Test (page 0129 00-1).

---

**INITIAL SETUP:**Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

Fuel shut off (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&amp;P

- 
1. Select TEST 72.
  2. Perform offset test.
    - a. Press and hold TEST button until **CAL** appears. Release TEST button.
    - b. If VTM reads between **-250** and **+250**, offset test passes.
    - c. If offset test fails, go to STE/ICE DCA current shunt diagnostic troubleshooting (WP 0142 00).
  3. Press and release TEST button.
  4. Crank engine for one second and note reading displayed on VTM.
    - a. If VTM reads between **900 - 1540**, test passes.
    - b. If error message appears, see TM 9-4910-571-12&P.
    - c. If no reading appears and engine cranks normally, go to STE/ICE DCA current shunt diagnostic troubleshooting (WP 0142 00).
  5. Return to troubleshooting.





---

**STE/ICE TEST 73 BATTERY RESISTANCE AND STE/ICE TEST 75 BATTERY RESISTANCE CHANGE (PACK)**

---

**0130 00**

**THIS WORK PACKAGE COVERS:**

Test (page 0130 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

Personnel Required

Unit Mech 63T10

All electrical accessories turned off (see your -10)

Fuel OFF, engine must not start (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

**NOTE**

**Both TEST 73 and TEST 75 must be performed to determine battery pack condition.**

1. Select TEST 73.
2. Perform offset test.
  - a. Press and hold TEST button until **CAL** appears. Release TEST button.
  - b. If VTM reads between **-250** and **+250**, offset test passes.
  - c. If offset test fails, go to STE/ICE DCA current shunt diagnostic troubleshooting (WP 0142 00).
3. Press and release TEST button.
  - a. If VTM display is erratic or cannot be obtained, go to STE/ICE DCA battery voltage diagnostic troubleshooting (WP 0141 00).
  - b. If fault cannot be corrected in (WP 0141 00), go to STE/ICE DCA current shunt diagnostic troubleshooting (WP 0142 00).
4. When **GO** appears, crank engine over for two seconds or until one of the following appears on display:

**DISPLAY**

**PERFORM/RESULT**

**OFF**

**Stop cranking and wait for message to appear.**

**A number**

**BATTERY RESISTANCE (go to Step 5)**

**.9.9.9**

**Beyond range of VTM, cannot be measured**

**Error message**

**See TM 9-4910-571-12&P**

**(—)**

**VTM lost power during test. Batteries may be too weak. Try powering VTM using external source.**

5. Observe VTM reading.
  - a. If VTM reading is **30** (milliohms) or less, test passes.

**STE/ICE TEST 73 BATTERY RESISTANCE AND STE/ICE TEST 75 BATTERY RESISTANCE CHANGE (PACK)—Continued**

**0130 00**

- b. If VTM reading is more than **30** (milliohms), test fails.
- 6. Select TEST 75.
- 7. Repeat Steps 2 thru 5.
- 8. Determine condition of battery pack using table.

<b>TEST 73 BATTERY INTERNAL RESISTANCE TEST RESULT</b>	<b>TEST 75 BATTERY RESISTANCE CHARGE TEST RESULT</b>	<b>BATTERY PACK CONDITION</b>
<b>PASS</b>	<b>PASS</b>	<b>The batteries tested are OK and in good state of charge.</b>
<b>PASS</b>	<b>FAIL</b>	<b>The batteries tested are in poor condition, but have a fresh charge.</b>
<b>FAIL</b>	<b>PASS</b>	<b>The batteries tested are OK but need to be recharged.</b>
<b>FAIL</b>	<b>FAIL</b>	<b>The batteries tested are in poor condition and in a state of discharge.</b>

- a. If batteries are in poor condition, go to individual battery tests 77 and 79. See TM 9-4910-571-12&P.

---

**STE/ICE TEST 74 STARTER CIRCUIT RESISTANCE**

---

**0131 00**

**THIS WORK PACKAGE COVERS:**

Test (page 0131 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

References

See your -10  
TM 9-4910-571-12&P

Equipment Condition

Engine stopped (see your -10)  
Vehicle blocked (see your -10)  
All electrical accessories turned off (see your -10)  
Fuel OFF, engine must not start (see your -10)  
STE/ICE hooked up to DCA 6 (WP 0117 00)

---

1. Select TEST 74.
2. Perform offset test.
  - a. Press an hold TEST button until **CAL** appears. Release TEST button.
  - b. If VTM reads between **-250** and **+250**, offset test passes.
  - c. If offset test fails, go to STE/ICE DCA current shunt diagnostic troubleshooting (WP 0142 00).
3. Press and release TEST button.
4. When **GO** appears, turn MASTER SWITCH to ON and crank engine for five seconds or until one of the following appears on the VTM:

<b>DISPLAY</b>	<b>PERFORM/RESULT</b>
<b>OFF</b>	<b>Stop cranking and wait for message to appear.</b>
<b>A number</b>	<b>CIRCUIT RESISTANCE (in milliohm)</b>
<b>.9.9.9.9</b>	<b>Beyond range of VTM, cannot be measured</b>
<b>Error message</b>	<b>See TM 9-4910-571-12&amp;P</b>

5. Turn MASTER SWITCH to OFF.
6. Observe VTM reading.
  - a. If VTM reads 30 (milliohms) or less, test passes.
  - b. If reading is erratic or cannot be obtained, go to STE/ICE DCA battery voltage diagnostic troubleshooting (WP 0141 00) and STE/ICE DCA current shunt diagnostic troubleshooting (WP 0142 00).
7. Return to troubleshooting.



---

**STE/ICE TEST 80 BATTERY CURRENT**

**0132 00**

---

**THIS WORK PACKAGE COVERS:**

Test (page 0132 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Electrical connector pliers (WP 0926 00, Item 31)

Equipment Condition

Engine stopped (see your -10)  
Vehicle blocked (see your -10)  
All electrical accessories turned off (see your -10)  
STE/ICE hooked up to DCA 6 (WP 0117 00)

Personnel Required

Unit Mech 63T10

---

1. Select TEST 80.
2. Perform offset test.
  - a. Press TEST button until **CAL** appears. Release TEST button.
  - b. If VTM reads between **-250** and **+250**, offset test passes.
  - c. If offset test fails, go to STE/ICE DCA current shunt diagnostic troubleshooting (WP 0142 00).
3. Press and release TEST button.
4. Turn MASTER SWITCH to ON.
5. Depress START button for five seconds.
  - a. If VTM reads **0.0** or less (a larger negative number), test passes.
  - b. If error message appears, see TM 9-4910-571-12&P.
  - c. If engine cranks normally, but reading is erratic or cannot be obtained, go to STE/ICE DCA current shunt diagnostic troubleshooting (WP 0142 00).
6. Turn MASTER SWITCH to OFF.
7. Return to troubleshooting.



---

**STE/ICE TEST 82 GENERATOR OUTPUT VOLTAGE**

**0133 00**

---

**THIS WORK PACKAGE COVERS:**

Test (page 0133 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

1. Select TEST 82
2. Start engine and run at 1400-1600 RPM (see your -10).
3. Turn MASTER LIGHT switch to SERV DRIVE.
4. Press and release TEST button on VTM
5. Observe VTM reading.
  - a. If VTM reads between **26** to **29.5** (volts), test passes.
  - b. If error message appears, see TM 9-4910-571-12&P.
  - c. If reading is erratic or cannot be obtained, go to STE/ICE test 82 diagnostic troubleshooting (WP 0151 00).
6. Stop engine (see your -10).
7. Turn MASTER LIGHT switch to OFF.
8. Return to troubleshooting.





---

**STE/ICE TEST 83 GENERATOR FIELD VOLTAGE**

---

**0134 00****THIS WORK PACKAGE COVERS:**

Test (page 0134 00-1).

---

**INITIAL SETUP:**Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&amp;P

- 
1. Select TEST 83.
  2. Press and release TEST button.
  3. Start engine and run at 1400-1600 RPM (see your -10).
  4. OBSERVE VTM DISPLAY.
    - a. If VTM reads **26** to **29.5** (volts), test passes.
    - b. If error message appears, see TM 9-4910-571-12&P.
    - c. If reading is erratic or cannot be obtained, go to STE/ICE test 83 diagnostic troubleshooting (WP 0152 00).
  5. Stop engine (see your -10).
  6. Return to troubleshooting.



---

**STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP**

**0135 00**

---

**THIS WORK PACKAGE COVERS:**

Test (page 0135 00-1).

---

**INITIAL SETUP:**

Maintenance Level

Unit

Personnel Required

Unit Mech 63T10

Equipment Condition

Engine stopped (see your -10)

Vehicle blocked (see your -10)

STE/ICE hooked up to DCA 6 (WP 0117 00)

References

See your -10

TM 9-4910-571-12&P

---

1. Select TEST 84.
2. Start engine and run at 1400-1600 RPM (see your -10).
3. Turn MASTER LIGHT switch to SER DRIVE.
4. Press and release TEST button on VTM.
5. Observe VTM display.
  - a. If VTM reads **0.60** (volts) or less, test passes.
  - b. If error message appears, see TM 9-4910-571-12&P.
  - c. If reading is erratic or cannot be obtained, go to STE/ICE test 84 diagnostic troubleshooting (WP 0153 00).
6. Stop engine (see your -10).
7. Turn MASTER LIGHT switch to OFF.
8. Return to troubleshooting.

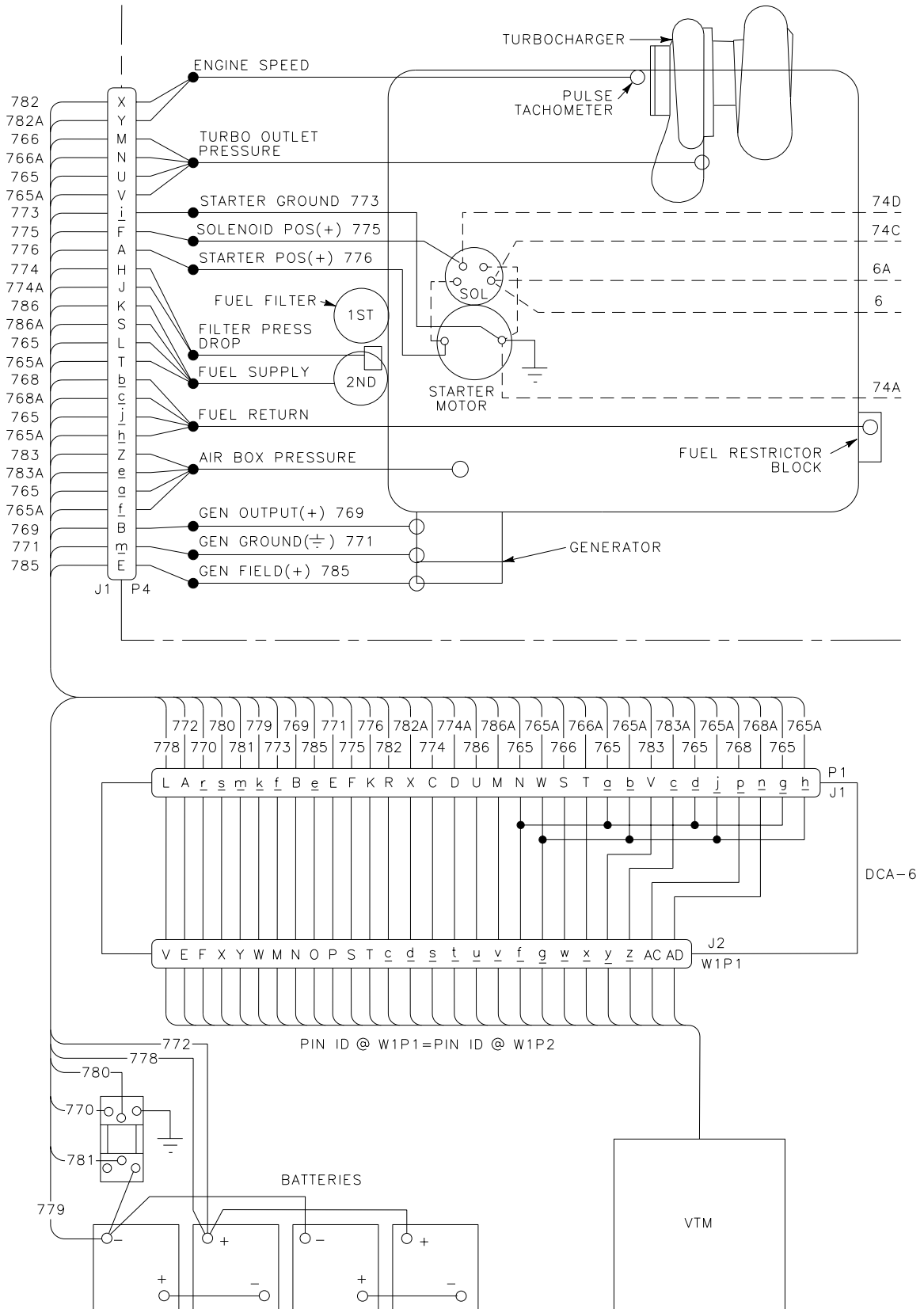






STE/ICE SCHEMATIC (M981A3 ONLY)

0137 00







**STE/ICE BLANK DISPLAY DIAGNOSTIC TROUBLESHOOTING**

**0138 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Electrical connector pliers (WP 0926 00, Item 31)  
STE/ICE test set (WP 0926 00, Item 61)

Equipment Condition

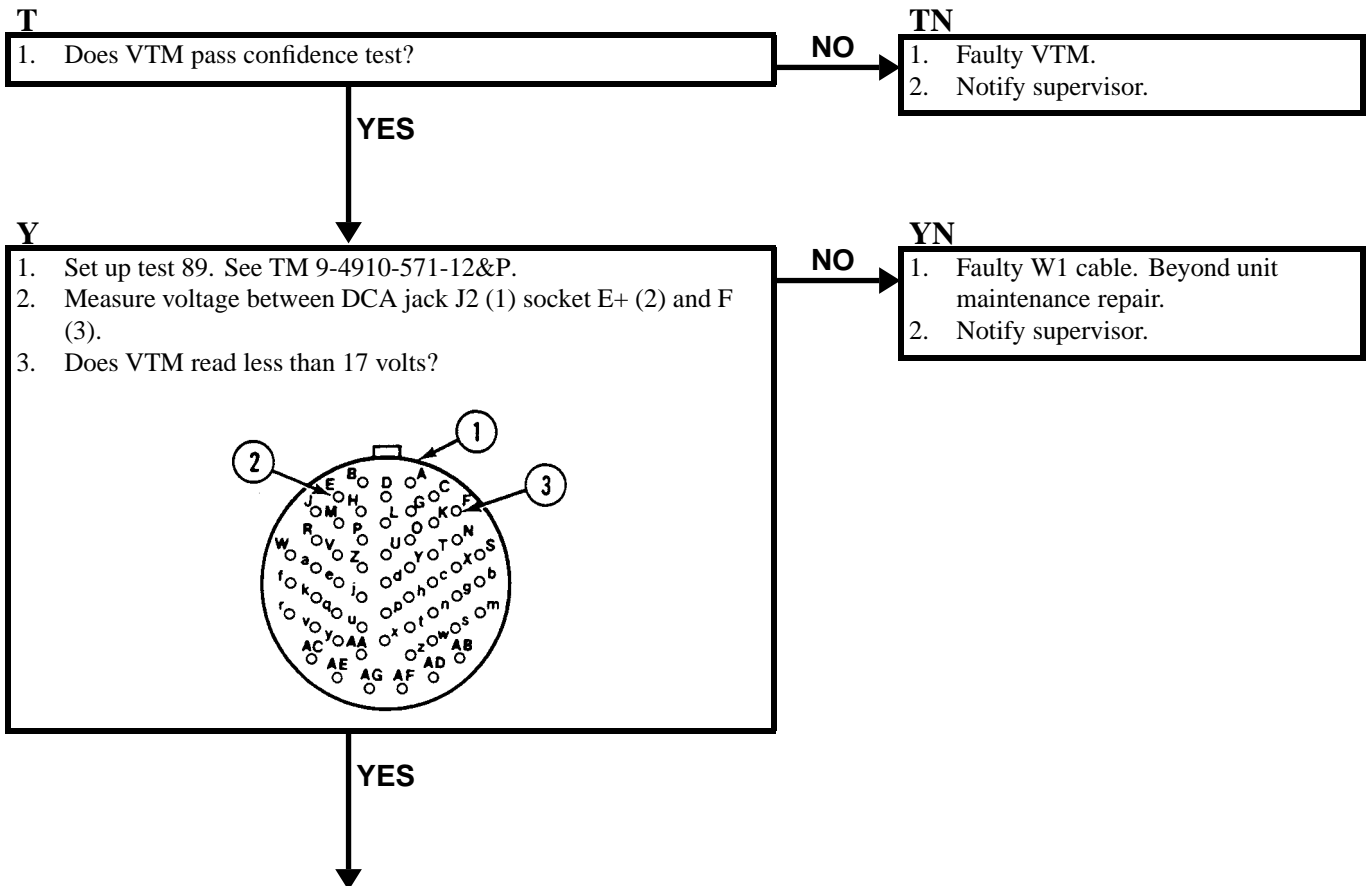
Engine stopped (see your -10)  
Vehicle blocked (see your -10)  
STE/ICE hooked up to vehicle batteries  
(see TM 9-4910-571-12&P)  
Driver's power plant access panel removed  
(WP 0441 00)  
Trim vane lowered (see your -10)  
Power plant access door open (see your -10)

Materials/Parts

Electrical tape

Personnel Required

Unit Mech 63T10



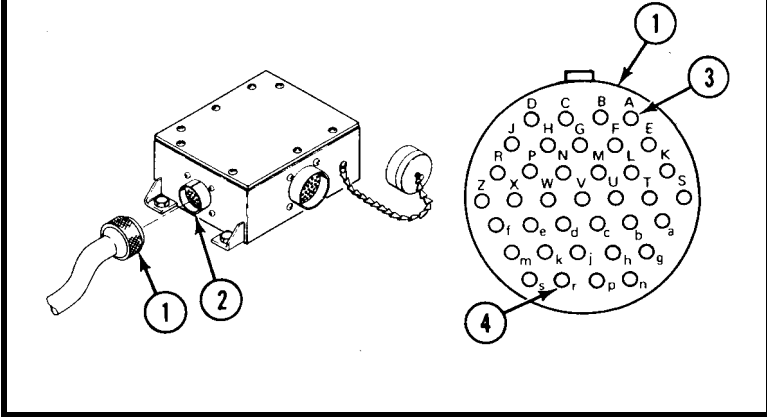
**2Y**

1. Remove harness 12354593 plug P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure voltage between harness 12354593 plug P1 (1) socket A(+) (3) and r (4).
3. Does VTM read less than 17 volts?

NO

**2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.



YES

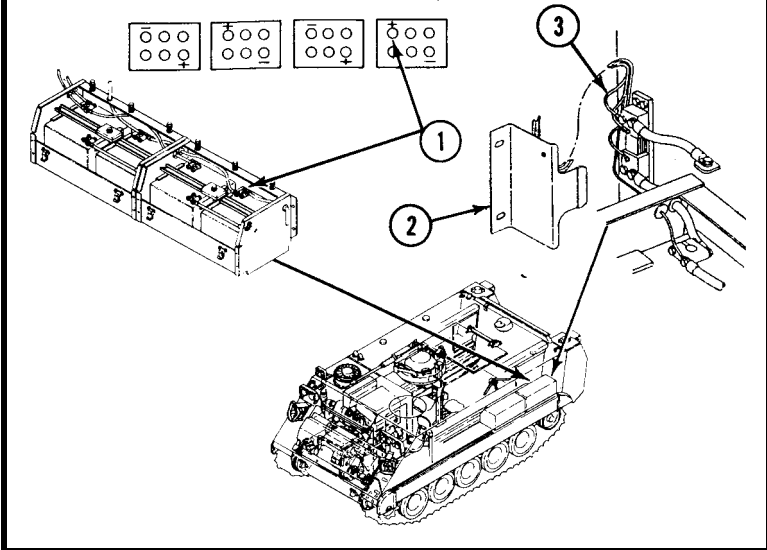
**3Y**

1. Inspect harness 12354593 circuit 772 terminal (1) on battery positive.
2. Remove shunt guard (2) and inspect harness 12354593 circuit 770 terminal (3) on current shunt.
3. Are all connections tight, clean and free from damage?

NO

**3YN**

1. Clean, tighten, or replace parts as necessary. Service vehicle batteries (see your -10).
2. Verify no faults found.



YES

**4Y**

1. Replace STE/ICE crew harness (WP 0878 00, WP 0879 00, WP 0880 00 or WP 0881 00).
2. Verify no faults found.



**STE/ICE CONFIDENCE TEST DIAGNOSTIC TROUBLESHOOTING**

**0139 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

- General mechanic's tool kit: automotive (WP 0926 00, Item 65)
- Electrical connector pliers (WP 0926 00, Item 31)
- Jumper wire (WP 0927 00)
- STE/ICE Test Set (WP 0926 00, Item 61)

Materials/Parts

Electrical tape

Personnel Required

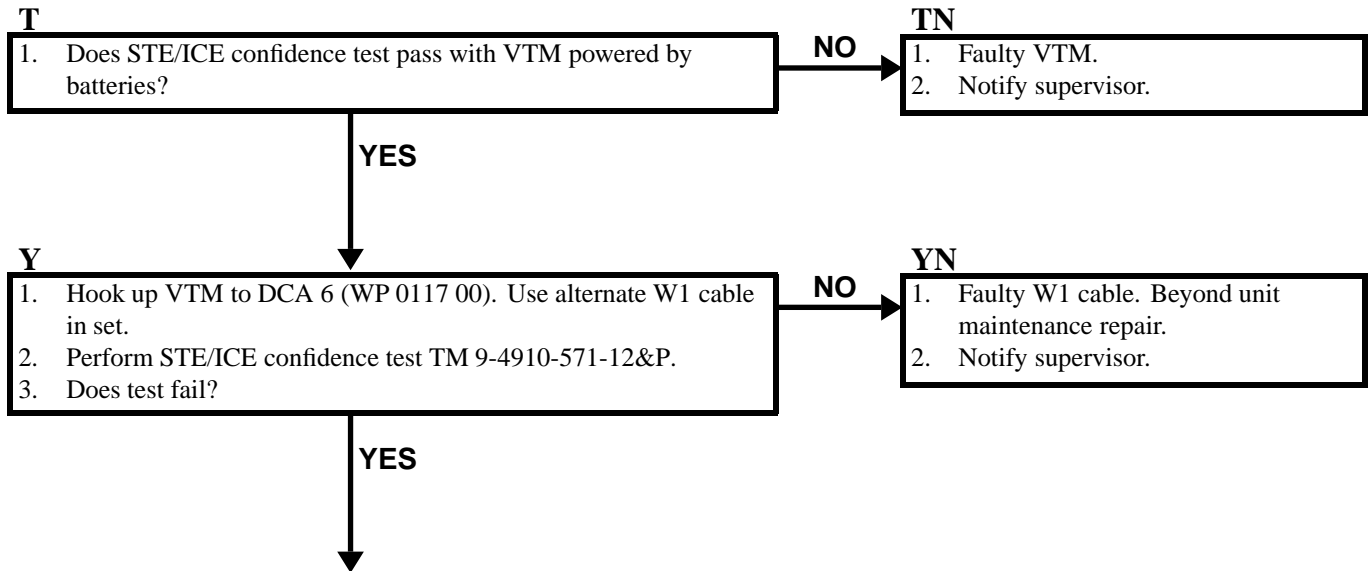
Unit Mech 63T10

References

See your-10  
TM 9-4910-571-12&P

Equipment Condition

- Engine stopped (see your -10)
- Vehicle blocked (see your -10)
- Driver's power plant access panel removed (WP 0441 00)
- Power plant access panel removed (WP 0439 00)
- STE/ICE hooked up to vehicle batteries (see TM 9-4910-571-12&P)
- Trim vane lowered (see your -10)



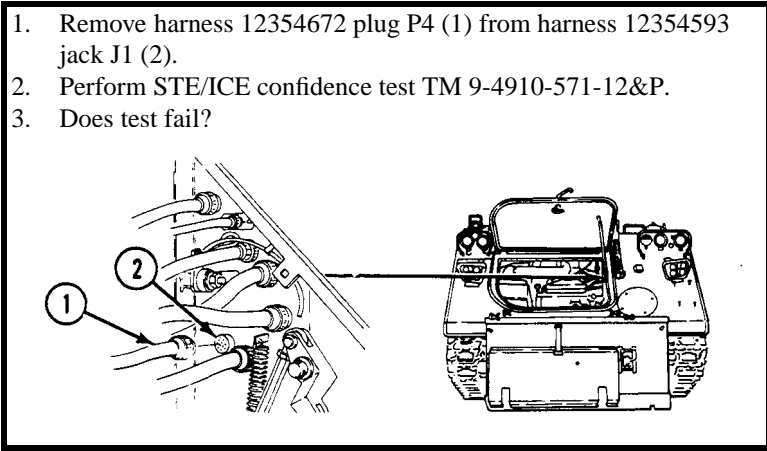
2Y

1. Remove harness 12354672 plug P4 (1) from harness 12354593 jack J1 (2).
2. Perform STE/ICE confidence test TM 9-4910-571-12&P.
3. Does test fail?

NO

2YN

GO TO BY (PAGE 0139 00-3)



YES

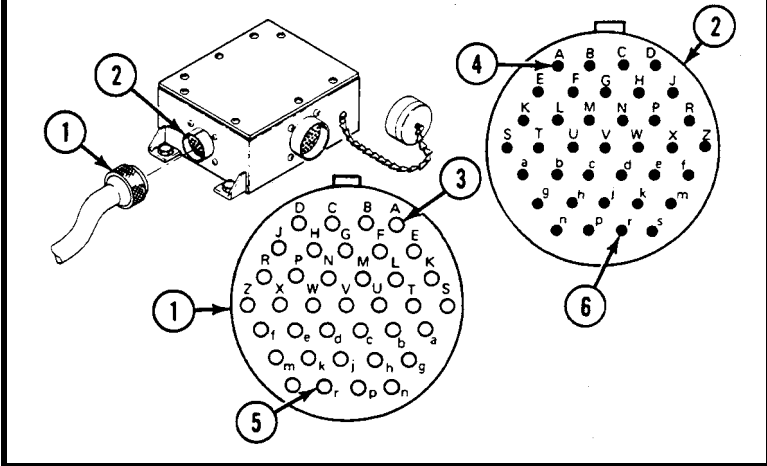
3Y

1. Remove harness 12354593 plug P1 (1) from STE/ICE distribution box jack J1 (2).
2. Install jumper wire between harness 12354593 plug P1 (1), pin A (3), and STE/ICE distribution box jack J1 (2), pin A (4).
3. Install jumper wire between harness 12354593 plug P1 (1), pin r (5), and STE/ICE distribution box jack J1 (2), pin r (6).
4. Perform STE/ICE confidence test TM 9-4910-571-12&P.
5. Does test fail?

NO

3YN

1. Faulty harness 12354593. Beyond unit maintenance repair.
2. Notify supervisor.



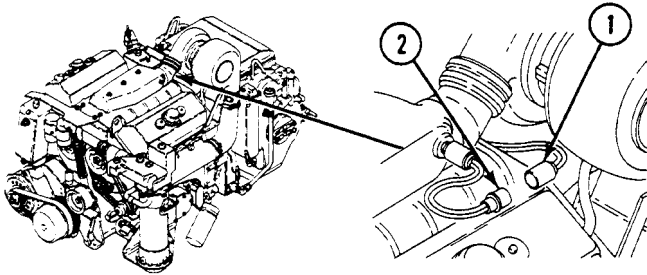
YES

**4Y**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**BY**

1. Install harness 12354672 plug P4 on harness 12354593 jack J1.
2. Remove harness 12354672 plug P3 (1) from turbo outlet tachometer jack (2).
3. Perform STE/ICE confidence test (TM 9-4910-571-12&P).
4. Does test fail?



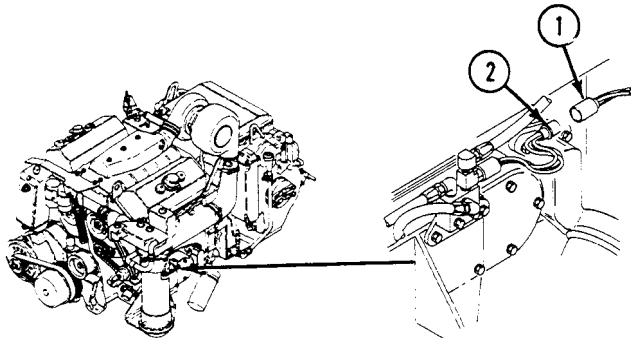
**BYN**

1. Replace turbo outlet tachometer (WP 0326 00).
2. Verify no faults found.

YES

**B2Y**

1. Pull VTM circuit breaker to OFF.
2. Install harness 12354672 plug P3 on turbo outlet pressure tachometer.
3. Remove harness 12354672 plug P1 (1) from fuel return pressure tachometer jack (2).
4. Perform STE/ICE confidence test TM 9-4910-571-12&P.
5. Does test fail?



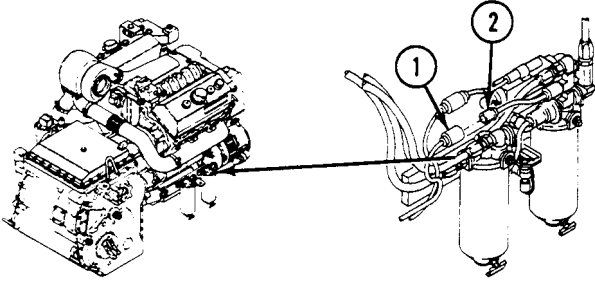
**B2YN**

1. Replace fuel return pressure tachometer (WP 0325 00).
2. Verify no faults found.

YES

**B3Y**

1. Pull VTM circuit breaker to OFF.
2. Install harness 12354672 plug P1 on fuel return pressure tachometer.
3. Remove harness 12354672 plug P8 (1) on fuel supply pressure tachometer jack (2).
4. Perform STE/ICE confidence test TM 9-4910-571-12&P.
5. Did test fail?



NO

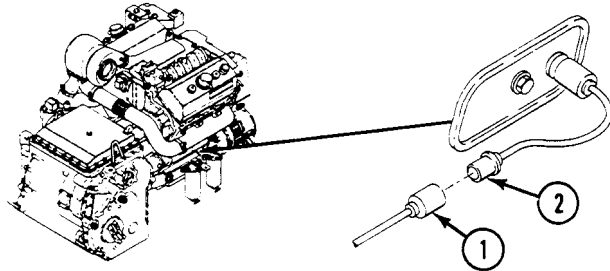
**B3YN**

1. Replace fuel supply pressure tachometer (WP 0324 00).
2. Verify no faults found.

YES

**B4Y**

1. Pull VTM circuit breaker to OFF.
2. Install harness 12354672 plug P8 on fuel supply pressure tachometer.
3. Remove harness 12354672 plug P9 (1) from air box pressure tachometer (2).
4. Perform STE/ICE confidence test TM 9-4910-571-12&P.
5. Did test fail?



NO

**B4YN**

1. Replace air box pressure tachometer (WP 0327 00).
2. Verify no faults found.

YES

**B5Y**

1. Repair/replace harness 12354672 (WP 0882 00).
2. Verify no faults found.



**STE/ICE TEST 10, 11, 12 AND 13 DIAGNOSTIC TROUBLESHOOTING**

**0140 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

- Electrical connector pliers (WP 0926 00, Item 31)
- Jumper wire (WP 0927 00)
- STE/ICE Test set (WP 0926 00, Item 61)

Materials/Parts

Electrical tape

Personnel Required

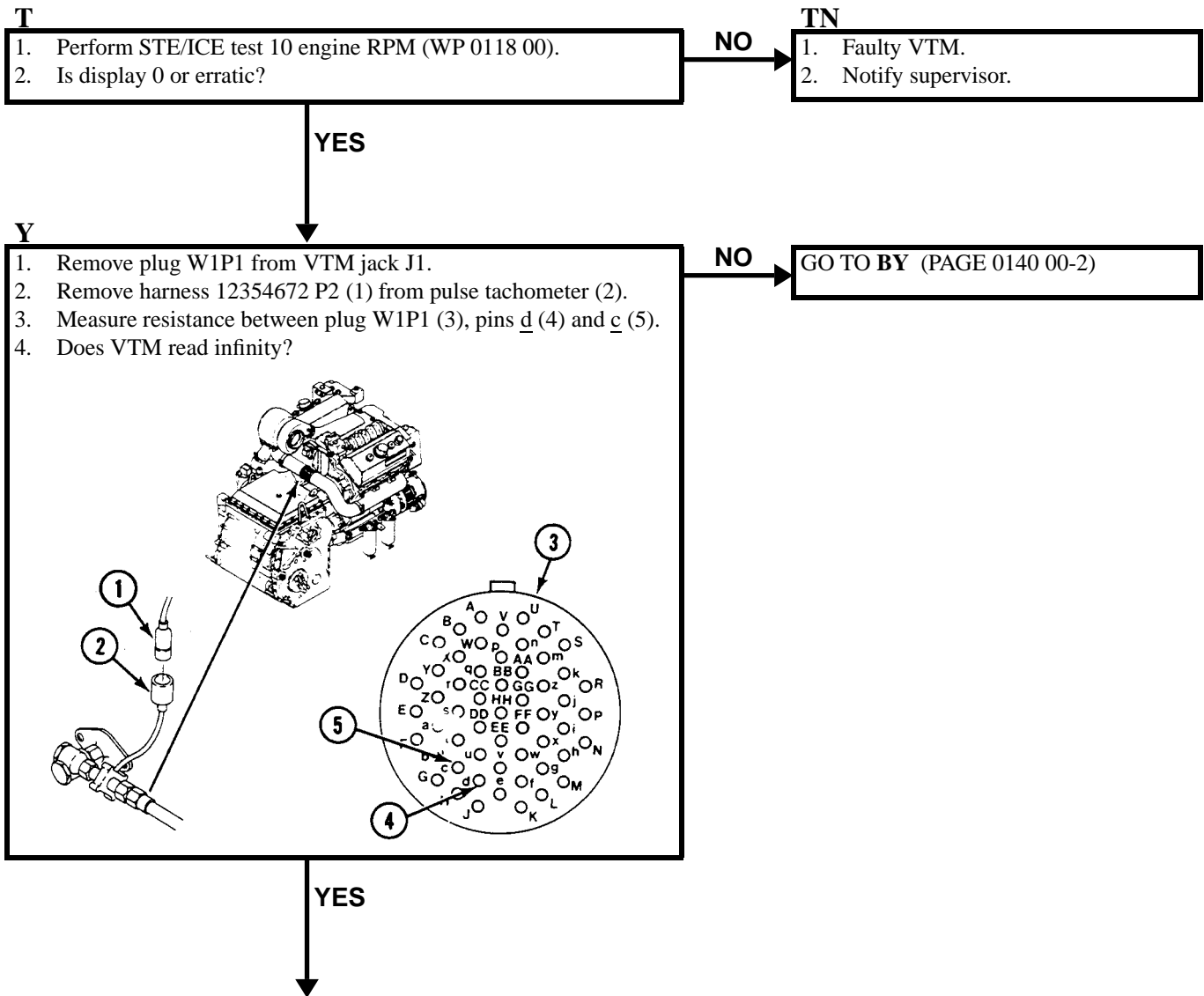
Unit Mech 63T10

References

See your -10  
TM 9-4910-571-12&P

Equipment Condition

- Engine stopped (see your -10)
- Vehicle blocked (see your -10)
- STE/ICE VTM hooked up to DCA 6 (WP 0117 00)
- Transmission controller in "SL"(see your -10)
- Trim vane lowered (see your -10)
- Power plant access door open (see your -10)

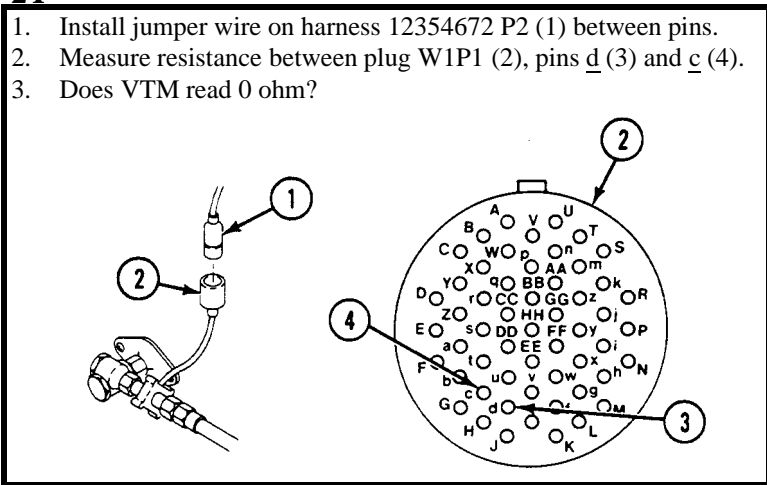


**2Y**

1. Install jumper wire on harness 12354672 P2 (1) between pins.
2. Measure resistance between plug W1P1 (2), pins d (3) and c (4).
3. Does VTM read 0 ohm?

NO

GO TO CY (PAGE 0140 00-4)



YES

**3Y**

1. Replace pulse tachometer (WP 0867 00).
2. Verify no faults found.

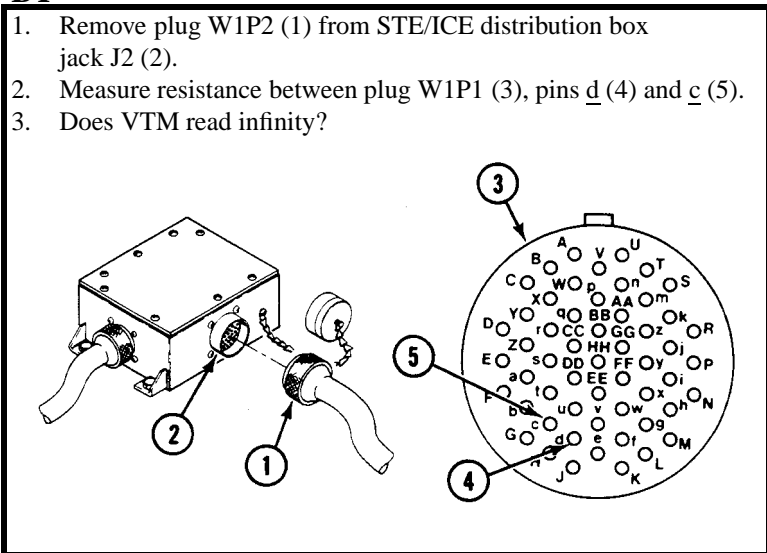
**BY**

1. Remove plug W1P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between plug W1P1 (3), pins d (4) and c (5).
3. Does VTM read infinity?

NO

**BYN**

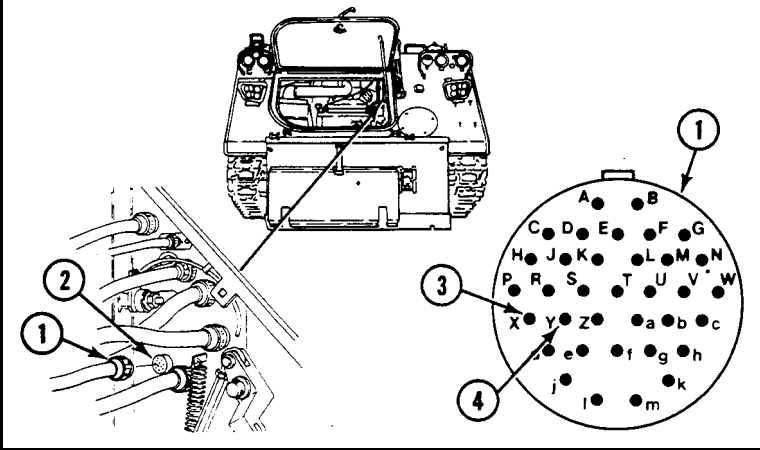
1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.



YES

**B2Y**

1. Remove harness 12354672 P4 (1) from jack 12354593 J1 (2) at bulkhead.
2. Measure resistance between harness 12354672 P4 (1), pins X (3) and Y (4).
3. Does VTM read infinity?



NO

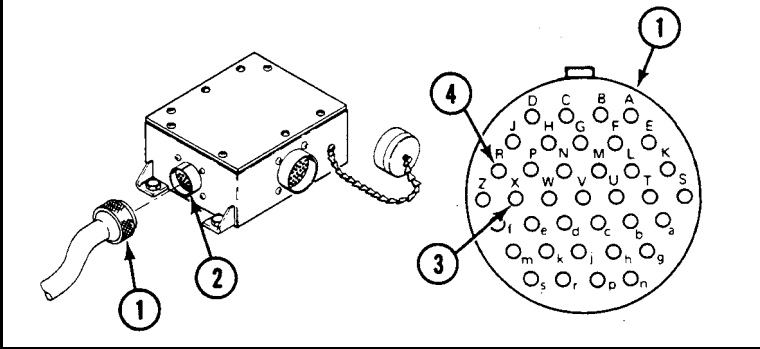
**B2YN**

1. Replace harness 12354672 (WP 0882 00).
2. Verify no faults found.

YES

**B3Y**

1. Remove harness 12354593 P1 (1) STE/ICE distribution box jack J1 (2).
2. Measure resistance between harness 12354593 P1 (1), pins X (3) and R (4).
3. Does VTM read infinity?



NO

**B3YN**

1. Replace harness 12354593 (WP 0882 00).
2. Verify no faults found.

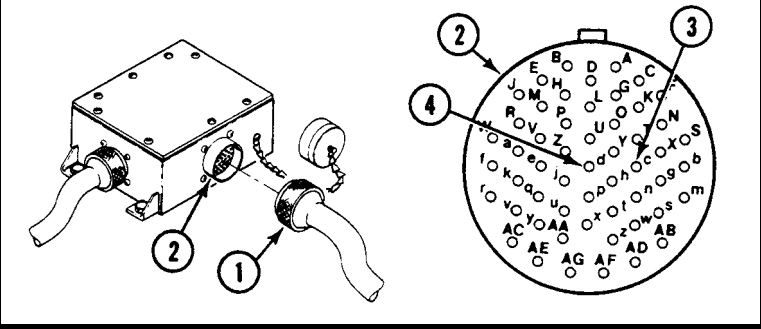
YES

**B4Y**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**CY**

1. Remove plug W1P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins c (3) and d(4).
3. Does VTM read more than 0 ohm?



NO

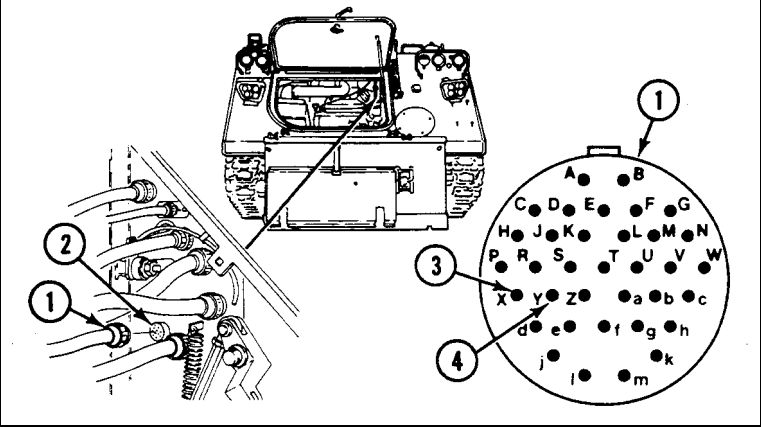
**CYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**C2Y**

1. Remove harness 12354672 P4 (1) from harness 12354593 J1 (2) at bulkhead.
2. Measure continuity between harness 12354672 P4 (1), pins X (3) and Y (4).
3. Does VTM read 0 ohm?



NO

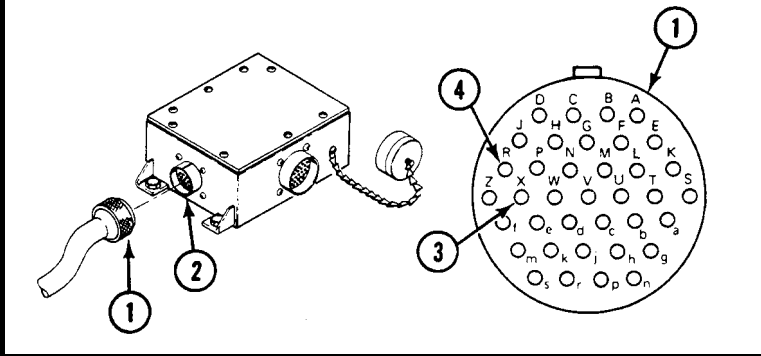
**C2YN**

1. Repair/replace wiring harness 12354672 (WP 0382 00) or (WP 0882 00) .
2. Verify no faults found.

YES

**C3Y**

1. Install harness 12354672 P4 on jack 12354593 J1 at bulkhead.
2. Remove harness 12354593 P1 (1) from STE/ICE distribution box jack J1 (2).
3. Measure resistance between harness 12354593 P1 (1), pins X (3) and R (4).
4. Does VTM read 0 ohm?



NO

**C3YN**

1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

YES

**C4Y**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.



**DCA BATTERY VOLTAGE DIAGNOSTIC TROUBLESHOOTING**

**0141 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

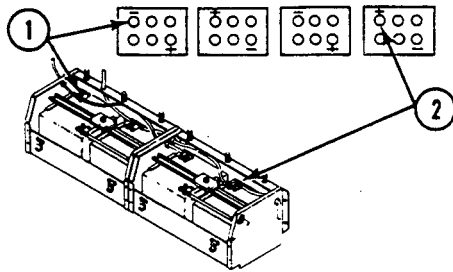
Engine stopped (see your -10)  
Vehicle blocked (see your -10)  
Battery compartment cover opened (see your -10)

Personnel Required

Unit Mech 63T10  
Helper (H)

**T**

1. Remove plug W1 P1 from VTM jack J1.
2. Hook up VTM to vehicle batteries TM 9-4910-571-12&P.
3. Set up Test 89 TM 9-4910-571-12&P.
4. Measure voltage between battery terminals (1) and (2) with engine cranking for 3 seconds.
5. Does VTM read 17 volts or more?



**YES**



**NO**

**TN**

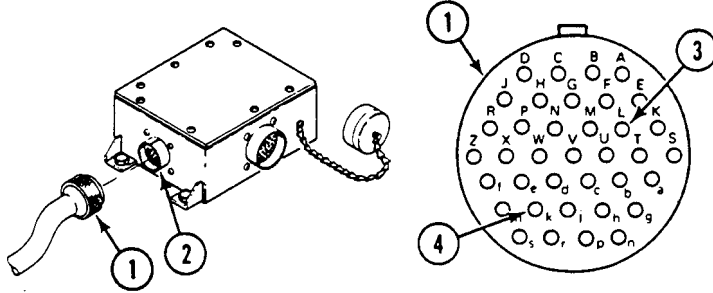
1. Service vehicle batteries (WP 0337 00) thru (WP 0358 00).
2. Verify no faults found.





**3Y**

1. Remove harness 12354593 P1(1) from STE/ICE distribution box jack J1 (2).
2. Measure voltage between 12354593 P1 (1), pins L (+) (3) and k (-) (4).
3. Does VTM indicate other than battery voltage?



**NO**

**3YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**4Y**

1. Repair/replace wiring harness 12354593 circuit 778 or 779 (WP 0382 00) or (WP 0882 00).
2. Verify no faults found.



**DCA CURRENT SHUNT DIAGNOSTIC TROUBLESHOOTING**

**0142 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Jumper wire (WP 0927 00)  
STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

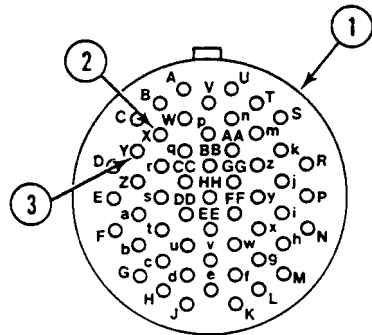
Engine stopped (see your -10)  
Vehicle blocked (see your -10)

Personnel Required

Unit Mech

**T**

1. Remove plug W1 P1 from VTM jack J1.
2. Hook up VTM to vehicle batteries TM 9-4910-571-12&P.
3. Set up Test 89 TM 9-4910-571-12&P.
4. Measure resistance between plug W1 P1(1), sockets X (2) and Y (3).
5. Does VTM read 0 ohms?



**NO**

**GO TO BY (PAGE 0142 00-3)**

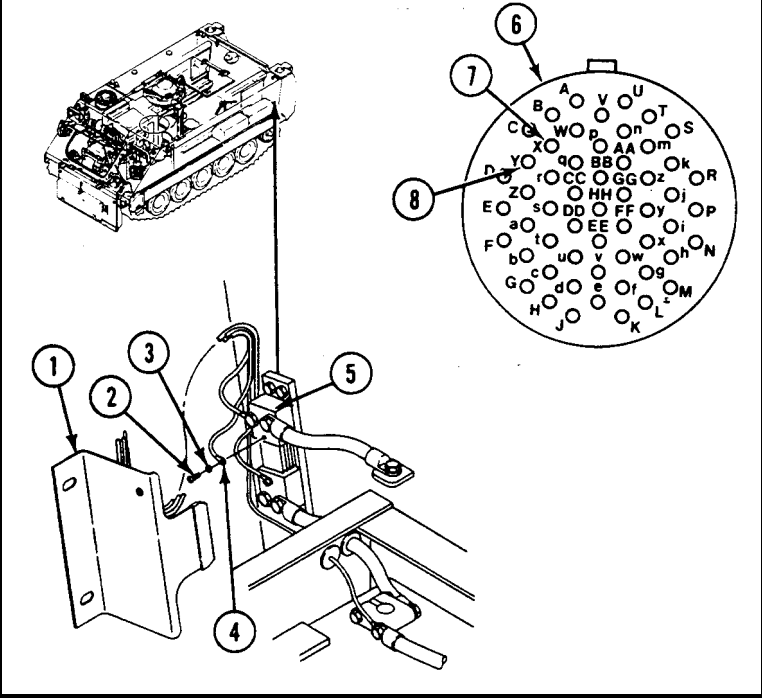
**YES**

**Y**

1. Remove shunt guard (1) with attached lead.
2. Remove screw (2), lockwasher (3), and harness 12354593 circuit 780 terminal lead E1 (4) from current shunt 1228937(5).
3. Wrap terminal lead E1 (4) with electrical tape.
4. Measure resistance between plug W1 P1 (6), socket X (7) and Y (8).
5. Does VTM read infinity?

**NO**

GO TO CY (PAGE 0142 00-4)



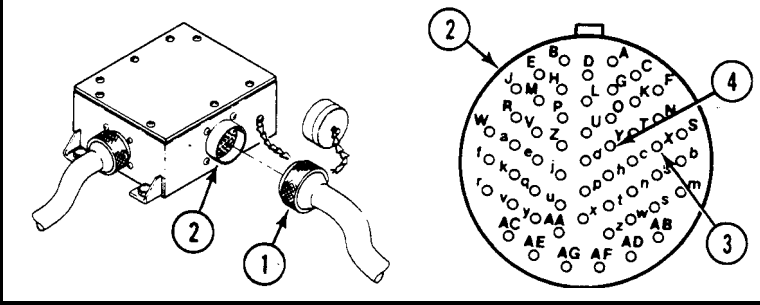
**YES**

**2Y**

1. Faulty VTM.
2. Notify supervisor.

**BY**

1. Remove plug W1 P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), socket X (3) and Y (4).
3. Does VTM read more than one ohm?



NO

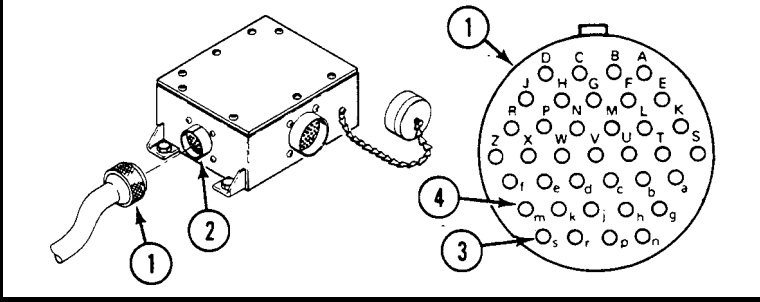
**BYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**B2Y**

1. Remove harness 12354593 P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between harness 12354593 P1 (1), socket s (3) and m(4).
3. Does VTM read more than one ohm?



NO

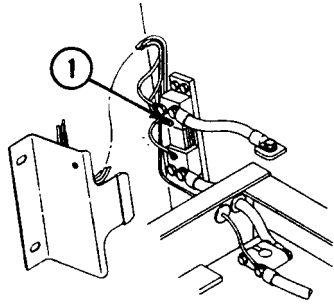
**B2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

YES

**B3Y**

1. Inspect harness 123454593 circuit 780 and 781 terminals (1) on current shunt.
2. Are all connections tight, clean, and free from damage?



NO

**B3YN**

1. Clean, tighten or replace parts, as necessary. See Service Vehicle Batteries (WP 0337 00) thru (WP 0358 00).
2. Verify no faults found.

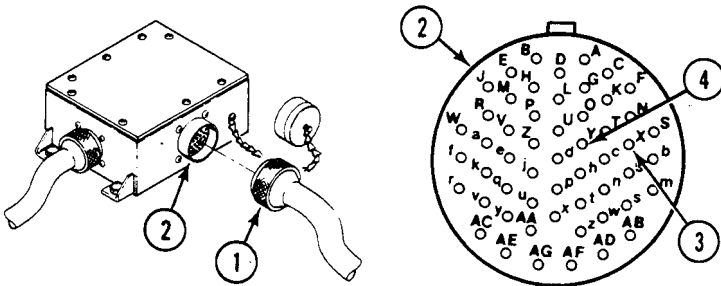
YES

**B4Y**

1. Repair/replace harness 12354593 (WP 0882 00).
2. Verify no faults found.

**CY**

1. Remove plug W1 P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), socket X (3) and Y (4).
3. Does VTM still fail to read infinity?



NO

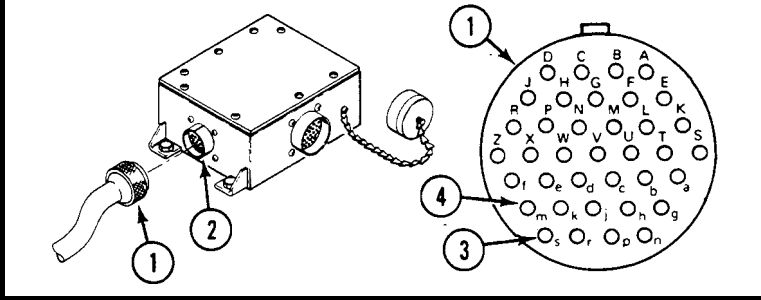
**CYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**C2Y**

1. Remove harness 12354593 P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between harness 12354593 P1 (1), socket s (3) and m(4).
3. Does VTM still fail to read infinity?



**NO**

**C2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**C3Y**

1. Repair/Replace harness 12354593 (WP 0882 00).
2. Verify no faults found.





**STE/ICE TEST 24 FUEL SUPPLY PRESSURE DIAGNOSTIC TROUBLESHOOTING**

**0143 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Electrical connector pliers (WP 0926 00, Item 31)  
Jumper wire (WP 0927 00)  
STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

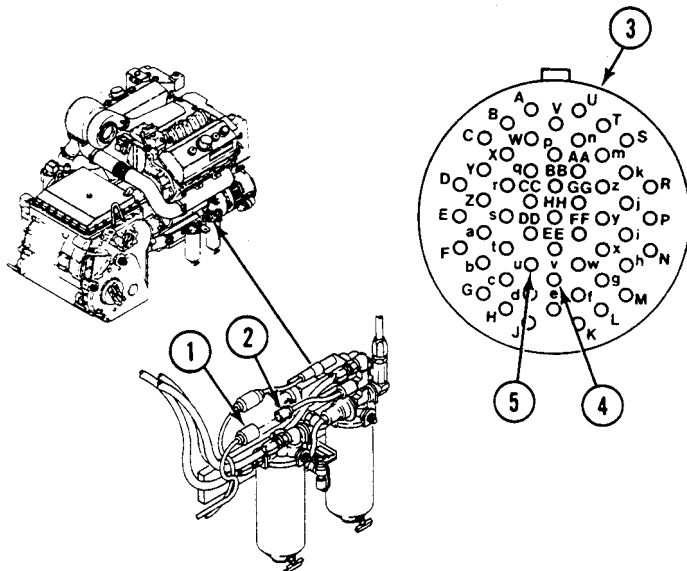
Engine stopped (see your -10)  
Vehicle blocked (see your -10)  
Trim vane lowered (see your -10)  
Power plant access panel open (see your -10)  
Driver's power plant access panel removed(WP 0441 00)

Personnel Required

Unit Mechanic 63T10

**T**

1. Remove plug W1 P1 from VTM jack J1.
2. Hook up VTM to vehicle batteries TM 9-4910-571-12&P.
3. Remove harness 12345672 plug P8 (1) from fuel supply pressure tachometer (2).
4. Set up Test 91 TM 9-4910-571-12&P.
5. Measure resistance between W1 P1 (3), pins v (4) and u (5).
6. Does VTM read infinity?



**NO**

**GO TO BY (PAGE 0143 00-4)**

**YES**

**STE/ICE TEST 24 FUEL SUPPLY PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

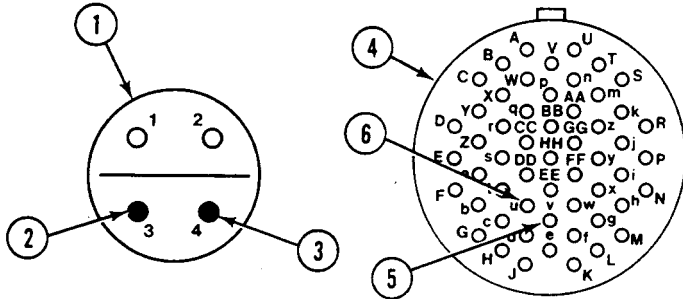
0143 00

**Y**

1. Install jumper wire between harness 12354672 plug P8 (1), pins 3 (2) and 4 (3).
2. Measure resistance between plug W1 P1 (4), pins v (5) and u (6).
3. Does VTM read 0 ohms?

**NO**

**GO TO CY (PAGE 0143 00-6)**



**YES**

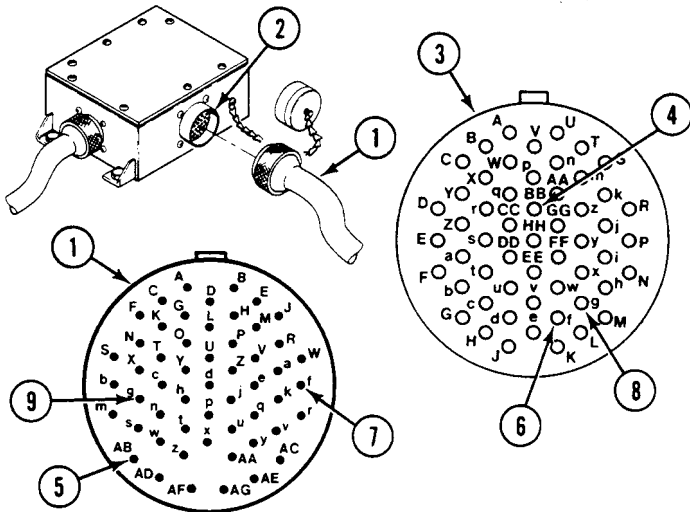
**2Y**

1. Remove plug W1 P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between the following plug pins:  
W1 P1 (3), pin BB (4) to W1 P2 (1), pin AB (5)  
W1 P1 (3), pin f (6) to W1 P2 (1), pin f (7)  
W1 P1 (3), pin g (8) to W1 P2 (1), pin g (9)
3. Does VTM read 0 ohms for each measurement?

**NO**

**2YN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.



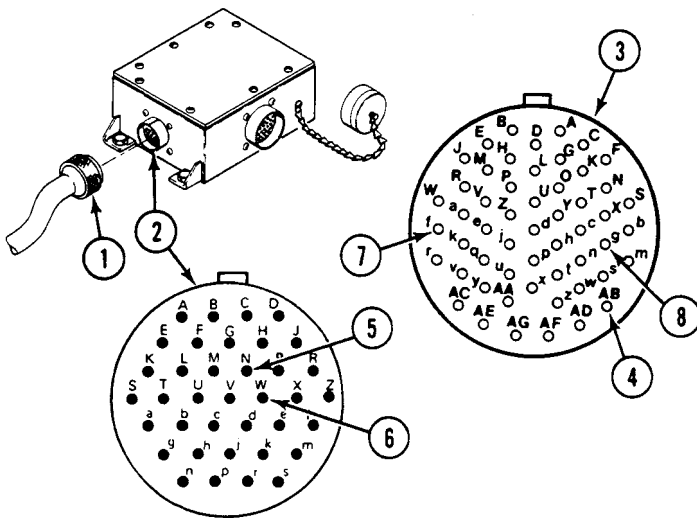
**YES**

**STE/ICE TEST 24 FUEL SUPPLY PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0143 00

**3Y**

1. Remove harness 12354593 P1 (1) from STE/ICE distribution box jack J1 (2).
2. Set up Test 92 TM 9-4910-571-12&P.
3. Measure resistance between STE/ICE distribution box jack J2 (3), pin AB (4) and the following jack pins:  
 STE/ICE distribution box jack J2 (3) pin f (7)  
 STE/ICE distribution box jack J2 (3) pin g (8)  
 STE/ICE distribution box jack J1 (2) pin N (5)  
 STE/ICE distribution box jack J1 (2) pin W (6)
4. Does VTM read between 3600 and 4400 ohms for each measurement?



**NO**

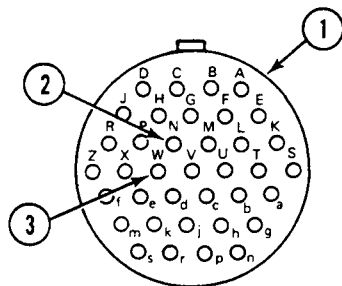
**3YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**4Y**

1. Set up Test 91 TM 9-4910-571-12&P.
2. Measure resistance between harness 12354593 plug P1 (1), pins N (2) and W (3).
3. Does VTM read infinity?



**NO**

**GO TO DY (PAGE 0143 00-8)**

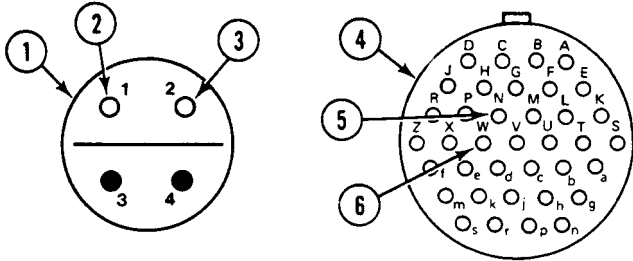
**YES**

**STE/ICE TEST 24 FUEL SUPPLY PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0143 00

**5Y**

1. Move jumper wire on harness 12354672 plug P8 (1) from pins 3 and 4 to pins 1 (2) and 2 (3).
2. Measure resistance between harness 12354593 plug P1 (4), pins N (5) and W (6).
3. Does VTM read 0 ohms?



**NO** → GO TO EY (PAGE 0143 00-9)

**YES**

**6Y**

1. Has fuel supply pressure tachometer been replaced?

**NO** → **6YN**  

1. Replace fuel supply pressure tachometer (WP 0324 00).
2. Verify no faults found.

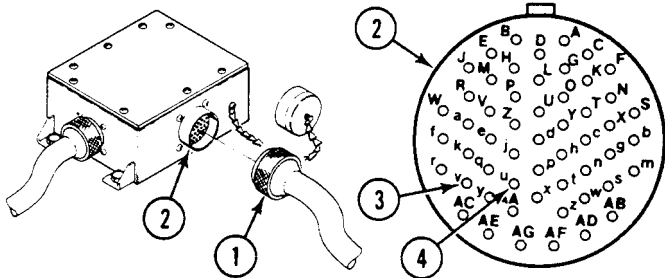
**YES**

**7Y**

1. Faulty VTM.
2. Notify supervisor.

**BY**

1. Remove plug W1 P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins v (4) and u (5). VTM should read infinity.
3. Does VTM indicate a fault?



**NO** → **BYN**  

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

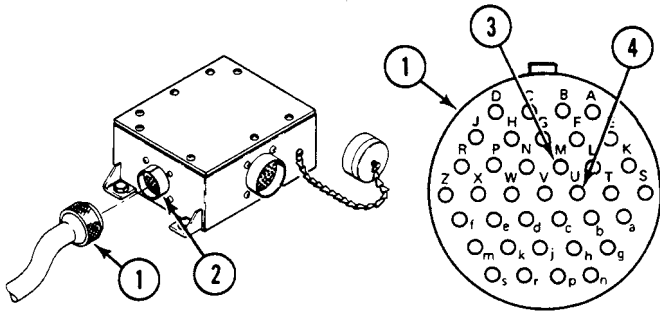
**YES**

**STE/ICE TEST 24 FUEL SUPPLY PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0143 00

**B2Y**

1. Remove harness 12354593 P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between 12354593 P1 (1), pins M (3) and U (4). VTM should read infinity.
3. Does VTM indicate a fault?



NO

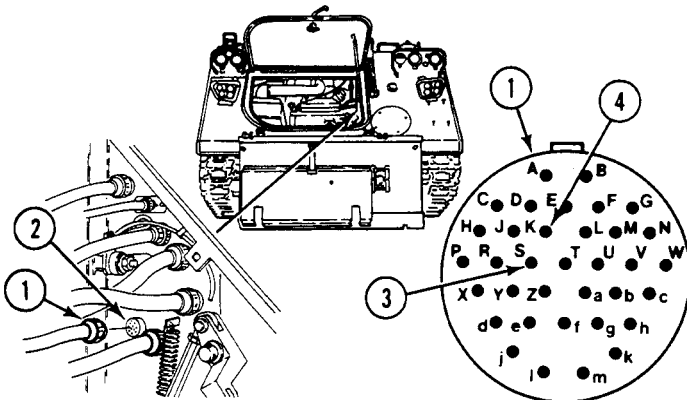
**B2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

YES

**B3Y**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins S (3) and K (4).
3. Does VTM read infinity?



NO

**B3YN**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.

YES

**B4Y**

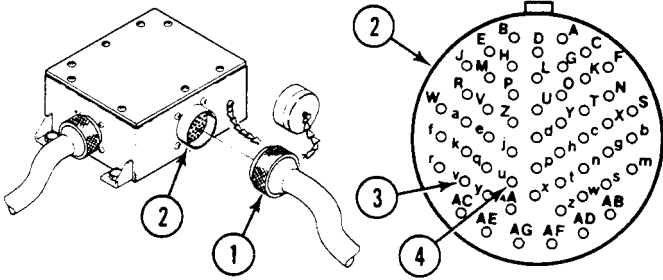
1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

**STE/ICE TEST 24 FUEL SUPPLY PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0143 00

**CY**

1. Remove plug W1 P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins v (3) and u (4). VTM should read 0 ohms.
3. Does VTM indicate a fault?



**NO**

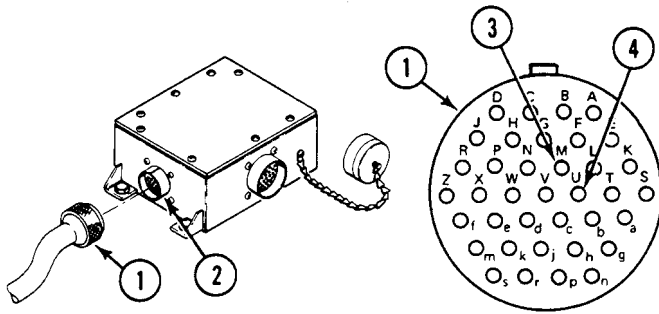
**CYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**C2Y**

1. Remove harness 12354593 P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between 12354593 P1 (1), pins M (3) and U (4). VTM should read 0 ohms.
3. Does VTM indicate a fault?



**NO**

**C2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

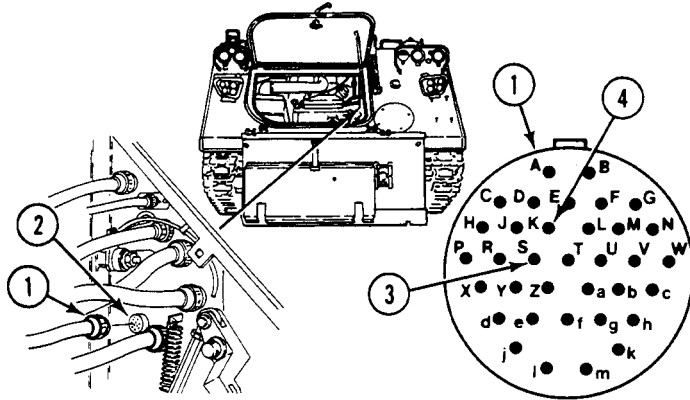
**YES**

**STE/ICE TEST 24 FUEL SUPPLY PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0143 00

**C3Y**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins S (3) and K (4).
3. Does VTM read 0 ohms?



**NO**

**C3YN**

1. Repair/replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.

**YES**

**C4Y**

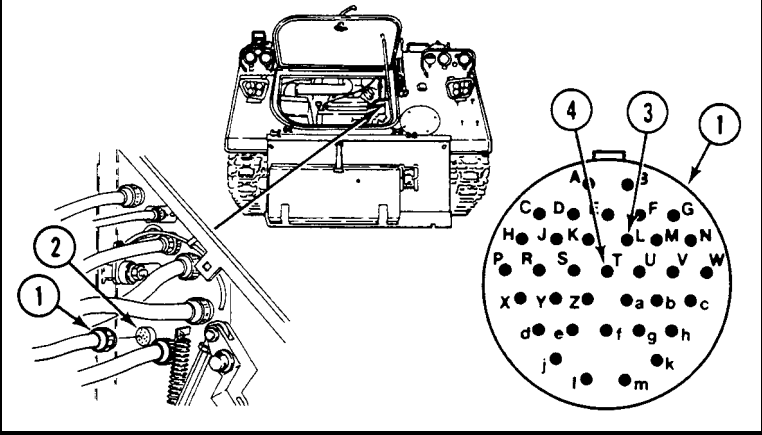
1. Repair/replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

**STE/ICE TEST 24 FUEL SUPPLY PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0143 00

**DY**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins L (3) and T (4). Use VTM.
3. Does VTM read infinity?



**NO**

**DYN**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.

**YES**

**D2Y**

1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

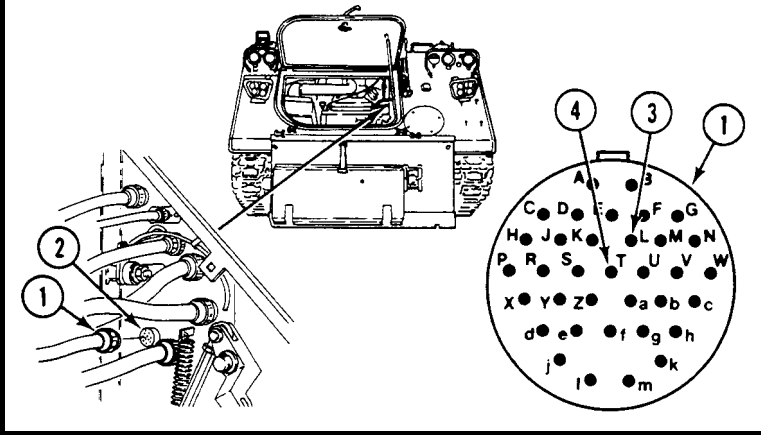


**STE/ICE TEST 24 FUEL SUPPLY PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0143 00

**EY**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins L (3) and T (4).
3. Does VTM read 0 ohms?



**NO**

**EYN**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.

**YES**

**E2Y**

1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.



**STE/ICE TEST 25 FUEL RETURN PRESSURE DIAGNOSTIC TROUBLESHOOTING**

**0144 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Electrical connector pliers (WP 0926 00, Item 31)  
STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

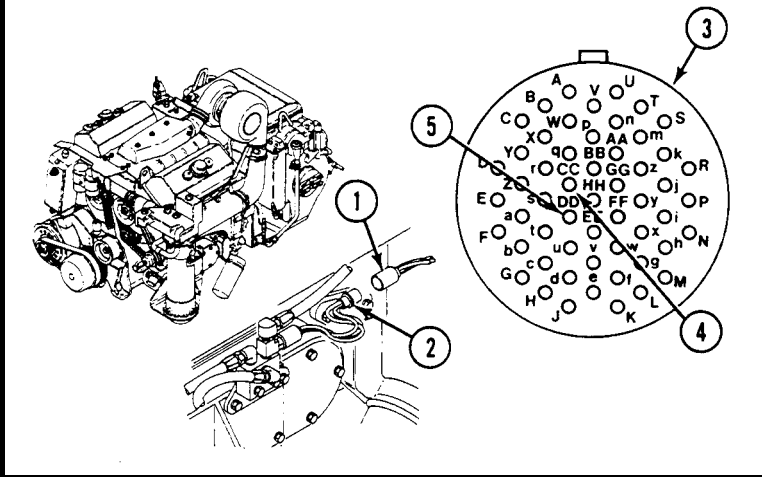
Engine stopped (see your -10)  
Vehicle blocked (see your -10)  
STE/ICE hooked up to vehicle batteries (TM 9-4910-571-12&P)  
Trim vane lowered (see your -10)  
Power plant access panels open (see your -10)  
Power plant access panel removed (WP 0439 00)

Personnel Required

Unit Mechanic 63T10

**T**

1. Remove plug W1 P1 from VTM jack J1.
2. Hook up VTM to vehicle batteries TM 9-4910-571-12&P.
3. Set up Test 91 TM 9-4910-571-12&P.
4. Remove harness 12345672 plug (1) from fuel pressure tachometer jack (2).
5. Measure resistance between W1 P1 (3), pins CC (4) and DD (5).
6. Does VTM read infinity?



**NO**

**GO TO BY (PAGE 0144 00-5)**

**YES**

**STE/ICE TEST 25 FUEL RETURN PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

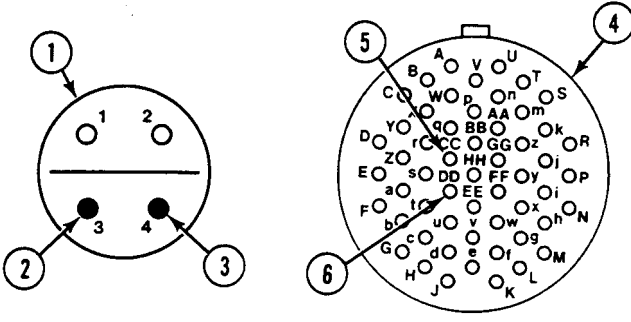
0144 00

**Y**

1. Install jumper wire between harness 12354672 plug P1 (1), pins 3 (2) and 4 (3).
2. Measure resistance between plug W1 P1 (4), pins CC (5) and DD (6).
3. Does VTM read 0 ohms?

**NO**

**GO TO CY (PAGE 0144 00-6)**



**YES**

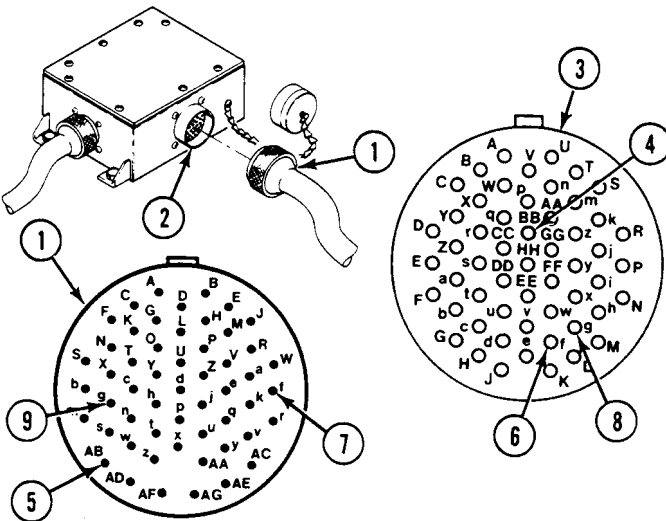
**2Y**

1. Remove plug W1 P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between the following plug pins:  
 W1 P1 (3), pin BB (4) to W1 P2 (1), pin AB (5)  
 W1 P1 (3), pin f (6) to W1 P2 (1), pin f (7)  
 W1 P1 (3), pin g (8) to W1 P2 (1), pin g (9)
3. Does VTM read 0 ohms for each measurement?

**NO**

**2YN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.



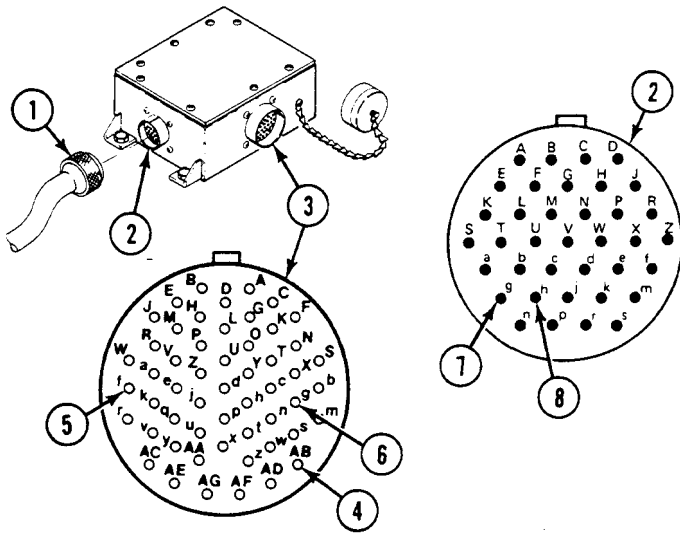
**YES**

**STE/ICE TEST 25 FUEL RETURN PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0144 00

**3Y**

1. Remove harness 12354593 P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (3), pin AB (4) and the following jack pins:  
 STE/ICE distribution box jack J2 (3) pin f (5)  
 STE/ICE distribution box jack J2 (3) pin g (6)  
 STE/ICE distribution box jack J1 (2) pin g (7)  
 STE/ICE distribution box jack J1 (2) pin h (8)
3. Does VTM read between 3600 and 4400 ohms for each measurement?



**NO**

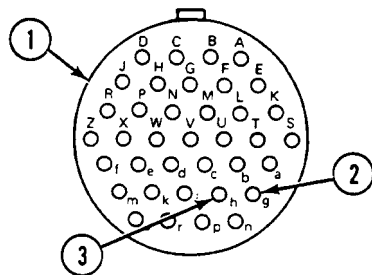
**3YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**4Y**

1. Measure resistance between harness 12354593 plug P1 (1), pins g (2) and h (3).
2. Does VTM read infinity?



**NO**

**GO TO DY (PAGE 0144 00-8)**

**YES**

**STE/ICE TEST 25 FUEL RETURN PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

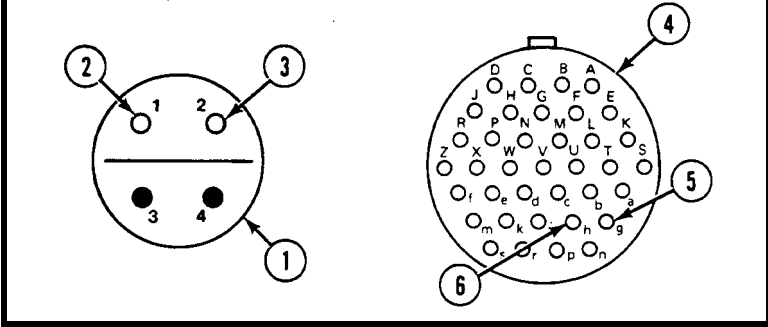
0144 00

**5Y**

1. Move jumper wire on harness 12354672 plug P1 (1) from pins 3 and 4 to pins 1 (2) and 2 (3).
2. Measure resistance between harness 12354593 plug P1 (4), pins g (5) and h (6).
3. Does VTM read 0 ohms?

**NO**

**GO TO EY (PAGE 0144 00-9)**



**YES**

**6Y**

1. Has fuel return pressure tachometer been replaced?

**NO**

**6YN**

1. Replace fuel return pressure tachometer (WP 0325 00).
2. Verify no faults found.

**YES**

**7Y**

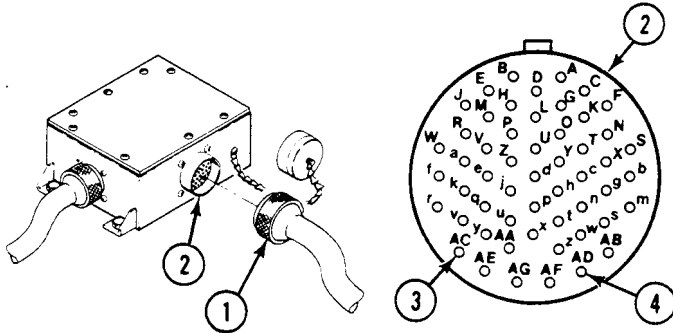
1. Faulty VTM.
2. Notify supervisor.

**STE/ICE TEST 25 FUEL RETURN PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0144 00

**BY**

1. Remove plug W1 P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins AC (3) and AD (4). VTM should read infinity.
3. Does VTM indicate a fault?



**NO**

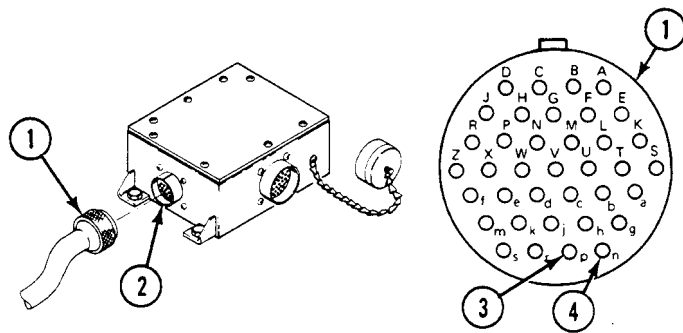
**BYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**B2Y**

1. Remove harness 12354593 P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between 12354593 P1 (1), pins p (3) and n (4). VTM should read infinity.
3. Does VTM indicate a fault?



**NO**

**B2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**STE/ICE TEST 25 FUEL RETURN PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0144 00

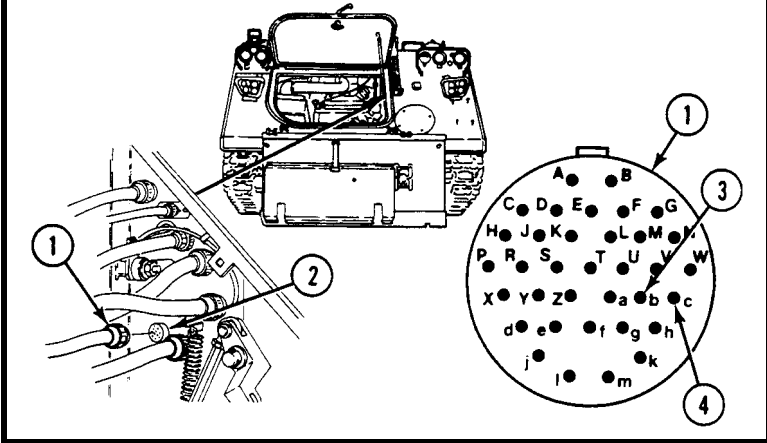
**B3Y**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins b (3) and c (4).
3. Does VTM read infinity?

NO

**B3YN**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.



YES

**B4Y**

1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

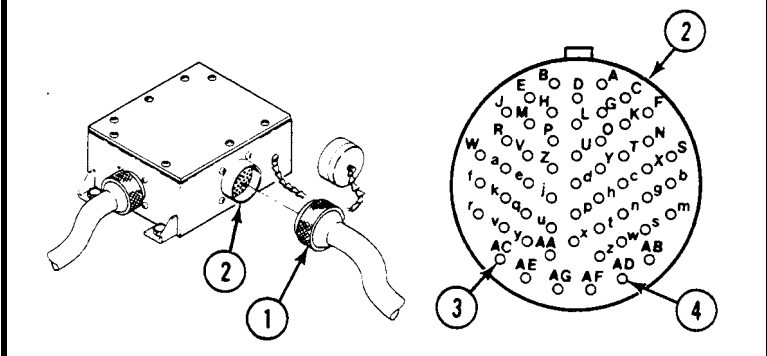
**CY**

1. Remove plug W1 P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins AC (3) and AD (4). VTM should read 0 ohms.
3. Does VTM indicate a fault?

NO

**CYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.



YES

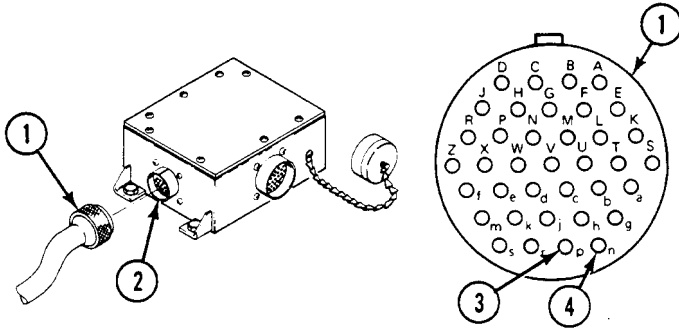


**STE/ICE TEST 25 FUEL RETURN PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0144 00

**C2Y**

1. Remove harness 12354593 P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between 12354593 P1 (1), pins p (3) and n (4). VTM should read 0 ohms.
3. Does VTM indicate a fault?



**NO**

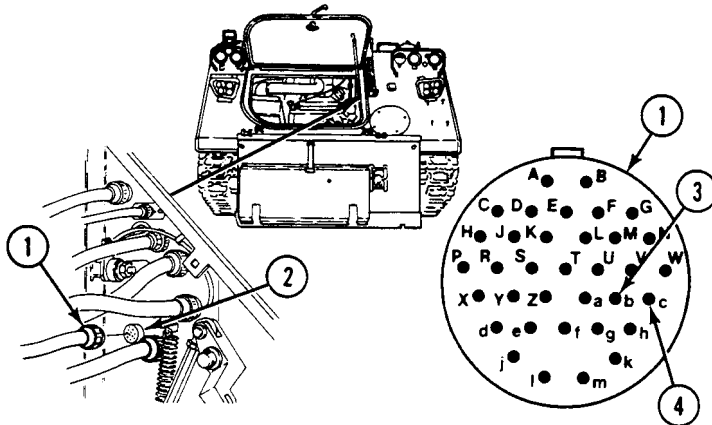
**C2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**C3Y**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins b (3) and c (4).
3. Does VTM read 0 ohms?



**NO**

**C3YN**

1. Repair/replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.

**YES**

**C4Y**

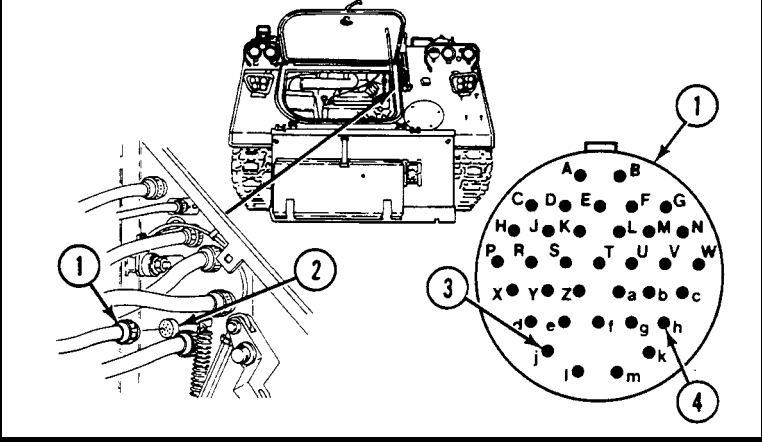
1. Repair/replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

**STE/ICE TEST 25 FUEL RETURN PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0144 00

**DY**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins j (3) and h (4).
3. Does VTM read infinity?



**NO**

**DYN**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.

**YES**

**D2Y**

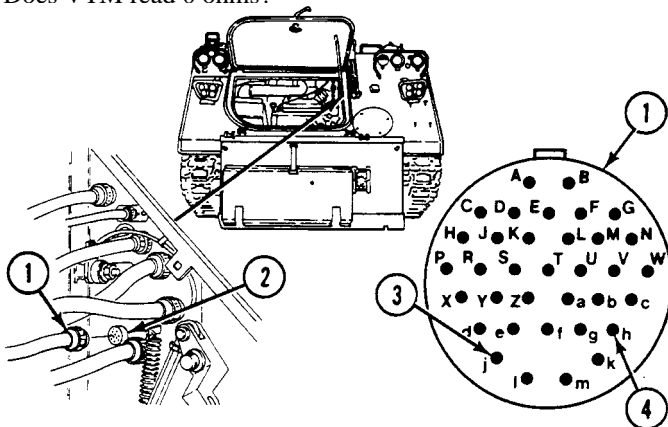
1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

**STE/ICE TEST 25 FUEL RETURN PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0144 00

**EY**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (1).
2. Measure resistance between harness 12354672 plug P4 (1), pins j (1) and h (1).
3. Does VTM read 0 ohms?



**NO**

**EYN**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.

**YES**

**E2Y**

1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.



**STE/ICE TEST 26 FUEL FILTER PRESSURE DROP DIAGNOSTIC  
TROUBLESHOOTING**

**0145 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Electrical connector pliers (WP 0926 00, Item 31)  
STE/ICE Test Set (WP 0926 00, Item 61)  
Jumper wire (WP 0927 00)

Equipment Condition

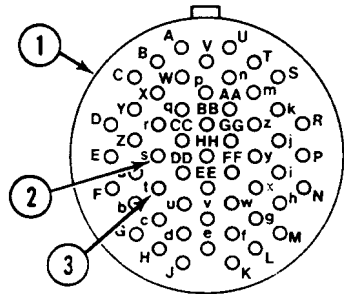
Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Power plant access door open (see your -10)  
Trim vane lowered (see your -10)  
Driver's power plant access panel removed(WP 0441 00)

Personnel Required

Unit Mechanic 63T10

**T**

1. Remove plug W1 P1 from VTM jack J1.
2. Hook up VTM to vehicle batteries TM 9-4910-571-12&P.
3. Set up Test 91 TM 9-4910-571-12&P.
4. Measure resistance between W1P1 (1), pins s (2) and t (3).
5. Does VTM read 0 ohms?



**NO**

**GO TO 2Y (PAGE 0145 00-2)**

**YES**



**STE/ICE TEST 26 FUEL FILTER PRESSURE DROP DIAGNOSTIC  
TROUBLESHOOTING—Continued**

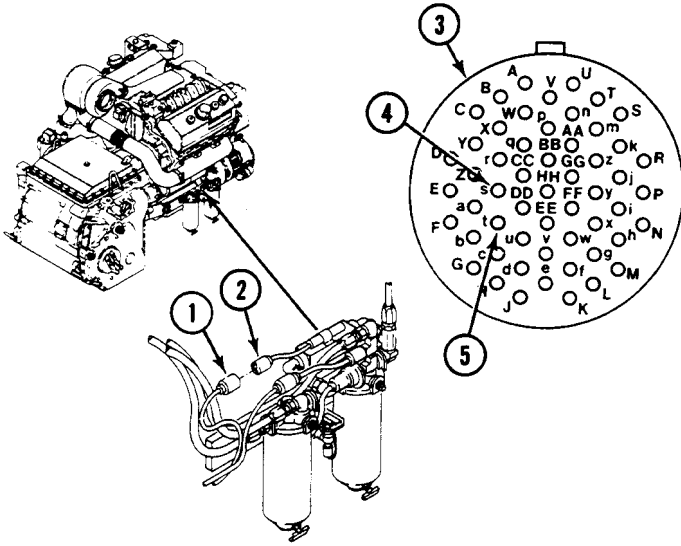
0145 00

**Y**

1. Remove harness 12354672 plug P7 (1) from FUEL FILTER PRESSURE DROP switch (2).
2. Measure resistance between plug W1 P1 (3), pins s (4) and t (5).
3. Does VTM read more than 0 ohms?

**NO**

GO TO **CY** (PAGE 0145 00-5)



**YES**

**2Y**

1. Set up Test 92 TM 9-4910-571-12&P.
2. Repeat step 2 in block T20120-9-2350-277-brY above.
3. Does VTM read more than 52k ohms?

**NO**

GO TO **BY** (PAGE 0145 00-3)

**YES**



**STE/ICE TEST 26 FUEL FILTER PRESSURE DROP DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0145 00

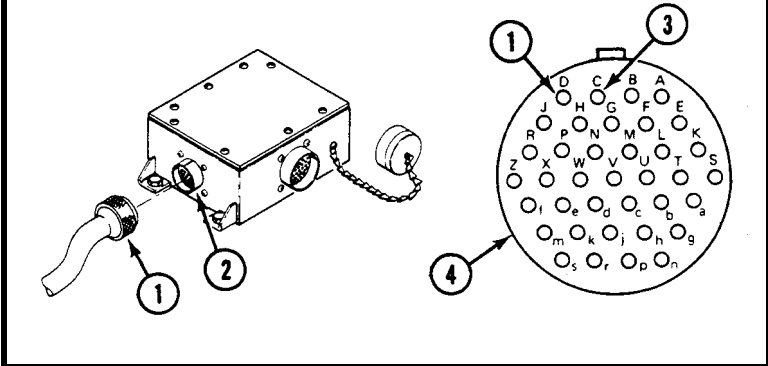
**B2Y**

1. Remove harness 12354593 P1(1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between 12354593 P1 (4), pins C (3) and D (1).
3. Does VTM read more than 0 ohms?

NO

**B2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.



YES

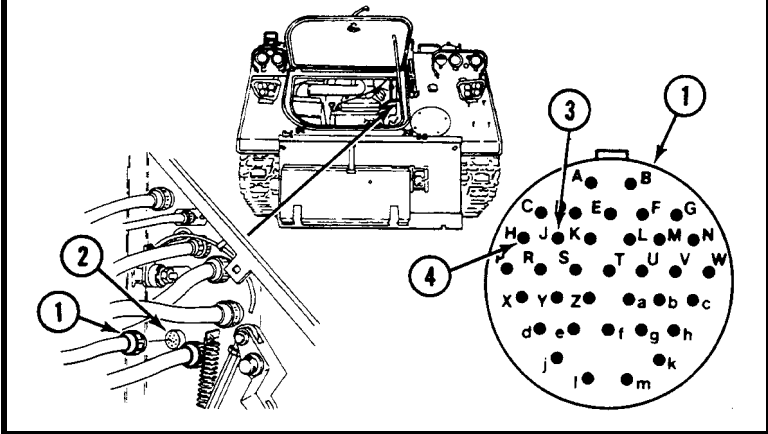
**B3Y**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins J (3) and H (4).
3. Does VTM read more than 0 ohms?

NO

**B3YN**

1. Replace FUEL FILTER PRESSURE DROP switch (WP 0328 00).
2. Verify no faults found.



YES

**B4Y**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.

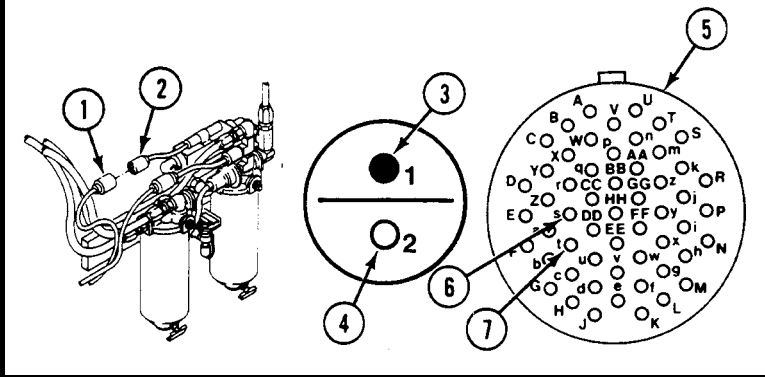


**STE/ICE TEST 26 FUEL FILTER PRESSURE DROP DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0145 00

**CY**

1. Remove harness 12354672 plug P7 (1) from FUEL FILTER PRESSURE DROP switch (2).
2. Short harness 12354672 plug P7 (1), pins 1 (3) to 2 (4).
3. Set up Test 91 TM 9-4910-571-12&P.
4. Measure resistance between W1 P1 (5), pins s (6) and t (7).
5. Does VTM read 0 ohms?



**NO**

**GO TO BY (PAGE 0145 00-3)**

**YES**

**C2Y**

1. Replace FUEL FILTER PRESSURE DROP switch (WP 0328 00).
2. Verify no faults found.



**STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE DIAGNOSTIC TROUBLESHOOTING**

**0146 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Electrical connector pliers (WP 0926 00, Item 31)  
STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

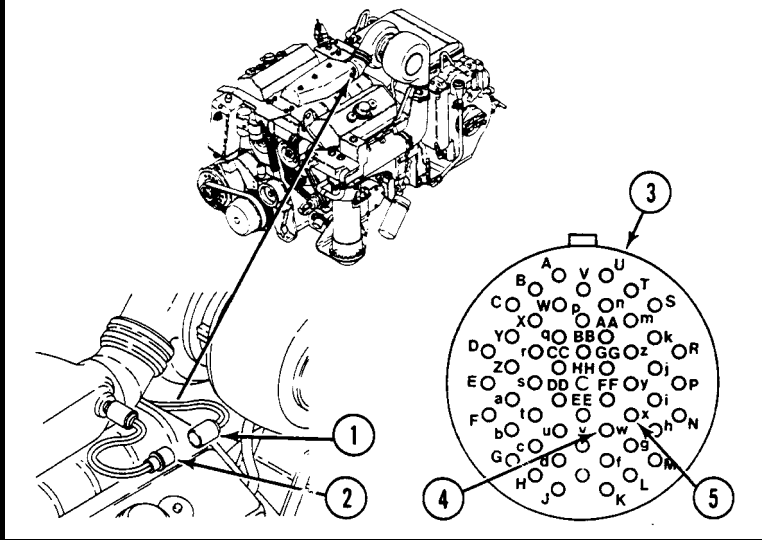
Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Trim vane lowered (see your -10)  
Power plant access door open (see your -10)  
Driver's power plant access panels removed (WP 0441 00)  
Power plant access panels removed (WP 0439 00)

Personnel Required

Unit Mechanic 63T10  
Helper (H)

**T**

1. Remove plug W1P1 from VTM jack J1.
2. Hook up VTM to vehicle batteries TM 9-4910-571-12&P.
3. Set up Test 91 TM 9-4910-571-12&P.
4. Remove harness 12345672 plug P3 (1) from turbo pressure tachometer jack (2).
5. Measure resistance between W1 P1 (3), pins w (4) and x (5).
6. Does VTM read infinity?



**NO**

**GO TO BY (PAGE 0146 00-5)**

**YES**

**STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

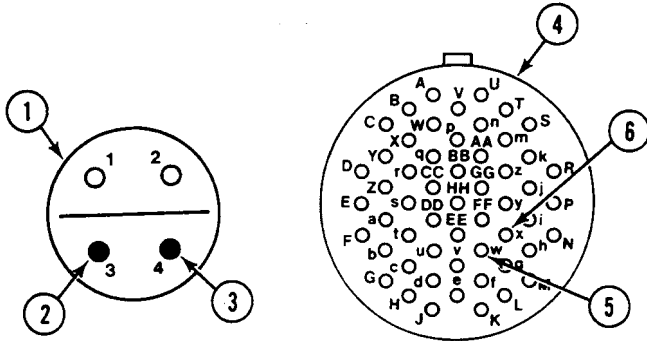
0146 00

**Y**

1. Install jumper wire between harness 12354672 plug P3 (1), pins 3 (2) and 4 (3).
2. Measure resistance between plug W1 P1 (4), pins w (5) and x (6).
3. Does VTM read 0 ohms?

**NO**

**GO TO CY (PAGE 0146 00-7)**



**YES**

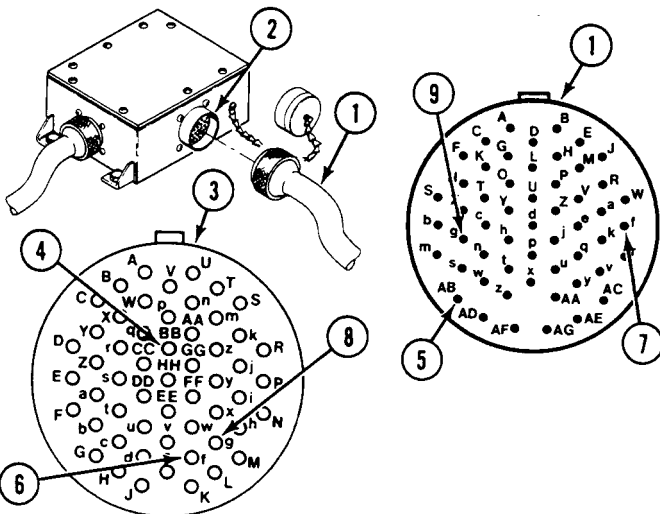
**2Y**

1. Remove plug W1P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between the following plug pins:  
 W1P1 (3), pin BB (4) to W1 P2 (1), pin AB (5)  
 W1P1 (3), pin f (6) to W1 P2 (1), pin f (7)  
 W1P1 (3), pin g (8) to W1 P2 (1), pin g (9)
3. Does VTM read 0 ohms for each measurement?

**NO**

**2YN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.



**YES**

**STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0146 00

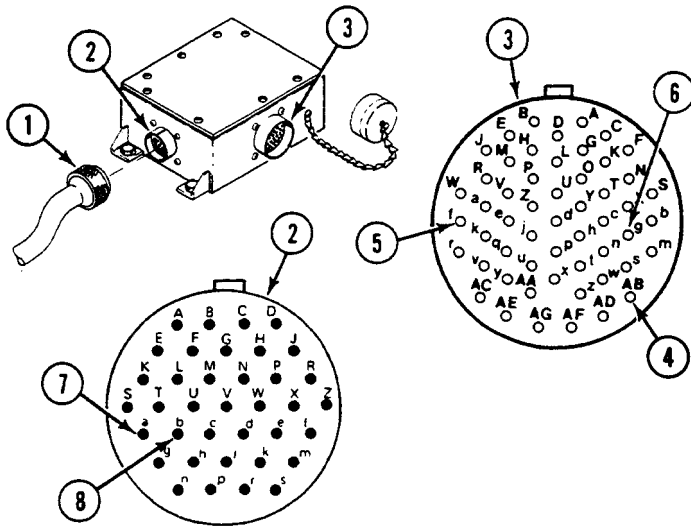
**3Y**

1. Remove harness 12354593 P1(1) from STE/ICE distribution box jack J1 (2).
2. Set up Test 92 TM 9-4910-571-12&P.
3. Measure resistance between STE/ICE distribution box jack J2 (3), pin AB (4) and the following jack pins:
  - a. STE/ICE distribution box jack J2 (3) pin f (5)
  - b. STE/ICE distribution box jack J2 (3) pin g (6)
  - c. STE/ICE distribution box jack J1 (2) pin a (7)
  - d. STE/ICE distribution box jack J1 (2) pin b (8)
4. Does VTM read between 3600 and 4400 ohms for each measurement?

**NO**

**3YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.



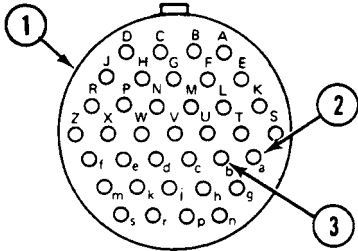
**YES**

**STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0146 00

**4Y**

1. Set up Test 91 TM 9-4910-571-12&P.
2. Measure resistance between harness 12354593 plug P1 (1), pins a (2) and b (3).
3. Does VTM read infinity?

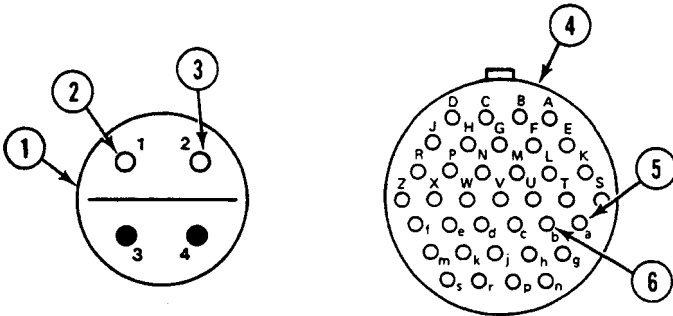


**NO** → GO TO **DY** (PAGE 0146 00-9)

**YES**

**5Y**

1. Move jumper wire on harness 12354672 plug P3 (1) from pins 3 and 4 to pins 1 (2) and 2 (3).
2. Measure resistance between harness 12354593 plug P1 (4), pins a (5) and b (6).
3. Does VTM read 0 ohms?



**NO** → GO TO **EY** (PAGE 0146 00-10)

**YES**

**6Y**

1. Has turbo outlet pressure tachometer been replaced?

**NO** → **6YN**  
 1. Replace turbo outlet pressure tachometer (WP 0326 00).  
 2. Verify no faults found.

**YES**

**STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

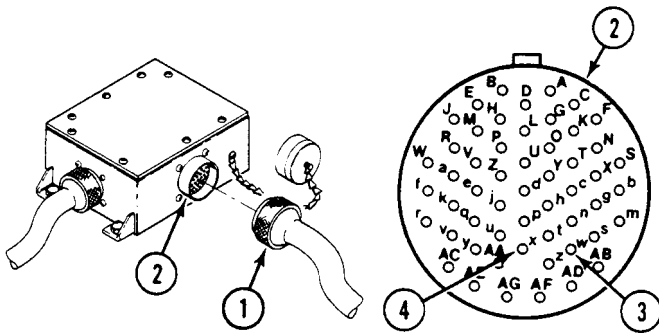
0146 00

**7Y**

1. Faulty VTM.
2. Notify supervisor.

**BY**

1. Remove plug W1P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins w (3) and x (4). VTM should read infinity.
3. Does VTM indicate a fault?



**NO**

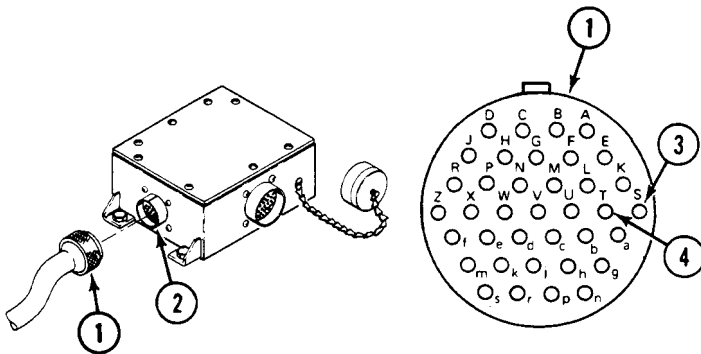
**BYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**B2Y**

1. Remove harness 12354593 P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between 12354593 P1 (1), pins S (3) and T (4). VTM should read infinity.
3. Does VTM indicate a fault?



**NO**

**B2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0146 00

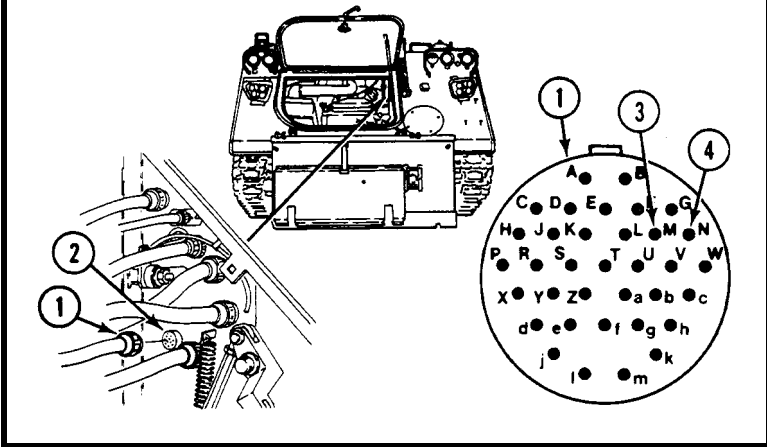
**B3Y**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins M (3) and N (4).
3. Does VTM read infinity?

**NO**

**B3YN**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.



**YES**

**B4Y**

1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

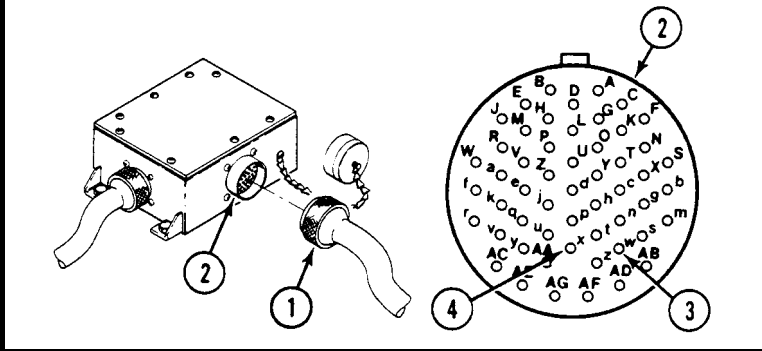


**STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0146 00

**CY**

1. Remove plug W1 P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins w (3) and x (4). VTM should read 0 ohms.
3. Does VTM indicate a fault?



**NO**

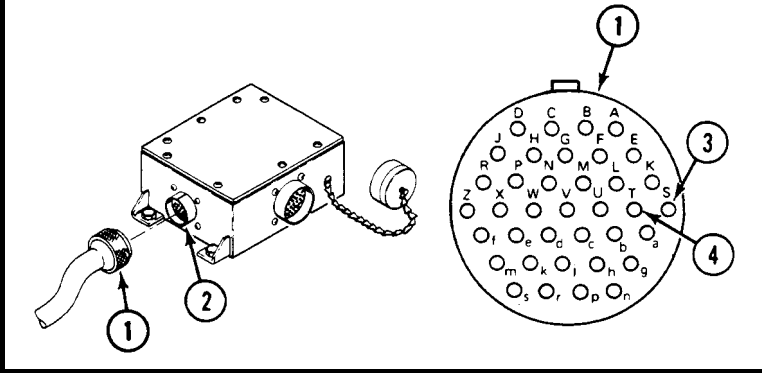
**CYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**C2Y**

1. Remove harness 12354593 P1(1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between 12354593 P1 (1), pins S (3) and T (4). VTM should read 0 ohms.
3. Does VTM indicate a fault?



**NO**

**C2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0146 00

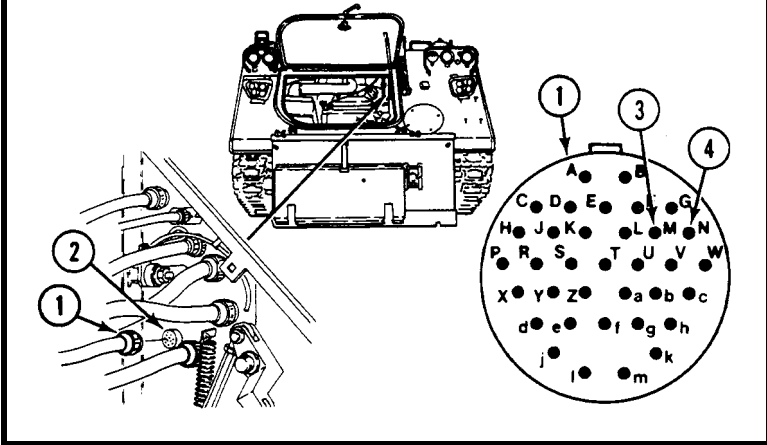
**C3Y**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins M (3) and N (4).
3. Does VTM read 0 ohms?

**NO**

**C3YN**

1. Repair/replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.



**YES**

**C4Y**

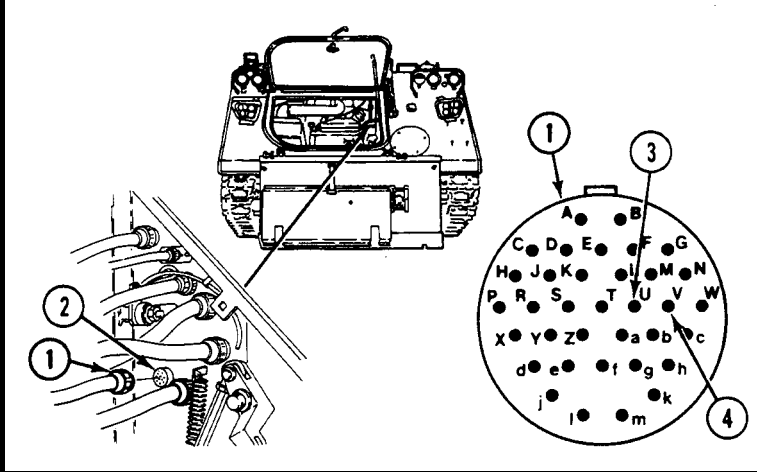
1. Repair/replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

**STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0146 00

**DY**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins U (3) and V (4).
3. Does VTM read infinity?



**NO**

**DYN**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.

**YES**

**D2Y**

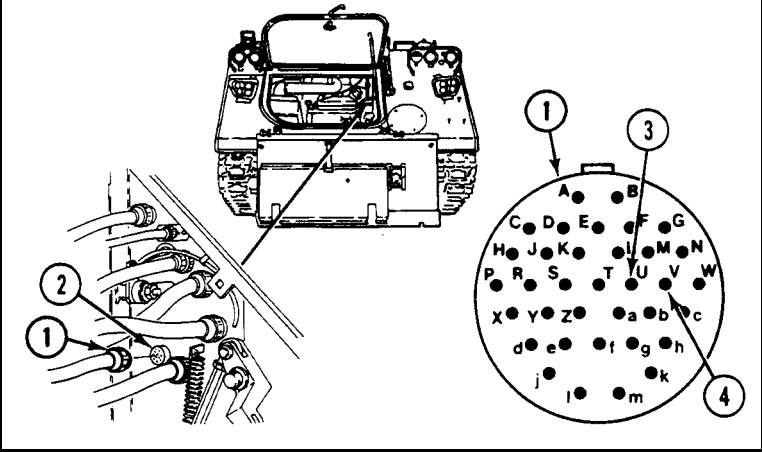
1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

**STE/ICE TEST 30 TURBOCHARGER OUTLET PRESSURE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0146 00

**EY**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins U (3) and V (4).
3. Does VTM read 0 ohms?



**NO** →

**EYN**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.

**YES** ↓

**E2Y**

1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

**STE/ICE TEST 32 AIR BOX PRESSURE DIAGNOSTIC TROUBLESHOOTING**

**0147 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Electrical connector pliers (WP 0926 00, Item 31)  
Jumper wire (WP 0927 00)  
STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Trim vane lowered (see your -10)  
Power plant access door open (see your -10)  
Driver's power plant access panel removed (WP 0441 00)  
Power plant access panels removed (WP 0439 00)

Materials/Parts

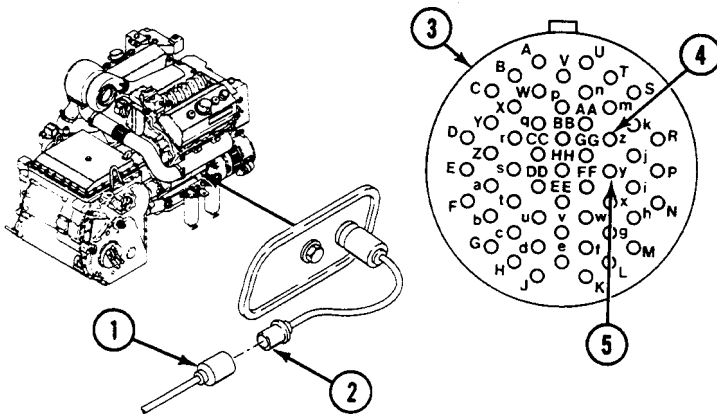
Insulation tape (WP 0928 00, Item 39)

Personnel Required

Unit Mechanic 63T10  
Helper (H)

**T**

1. Remove plug W1P1 from VTM jack J1.
2. Hook up VTM to vehicle batteries TM 9-4910-571-12&P.
3. Set up Test 91 TM 9-4910-571-12&P.
4. Remove harness 12345672 plug P9 (1) from air box pressure transducer (2).
5. Measure resistance between plug W1P1 (3) pins z (4) and y (5).
6. Does VTM read infinity?



**NO**

**GO TO BY (PAGE 0147 00-5)**

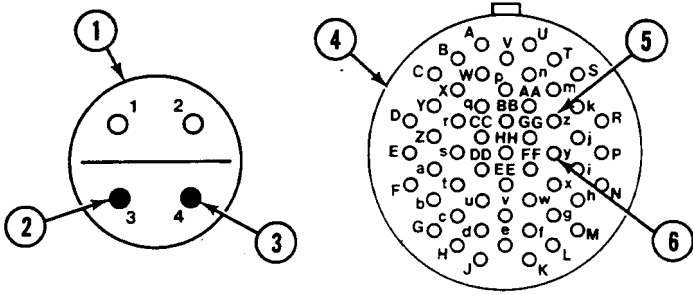
**YES**

Y

1. Install jumper wire between harness 12354672 plug P9 (1), pins 3 (2) and 4 (3).
2. Measure resistance between plug W1P1 (4), pins z (5) and y (6).
3. Does VTM read 0 ohms?

NO

GO TO CY (PAGE 0147 00-7)



YES

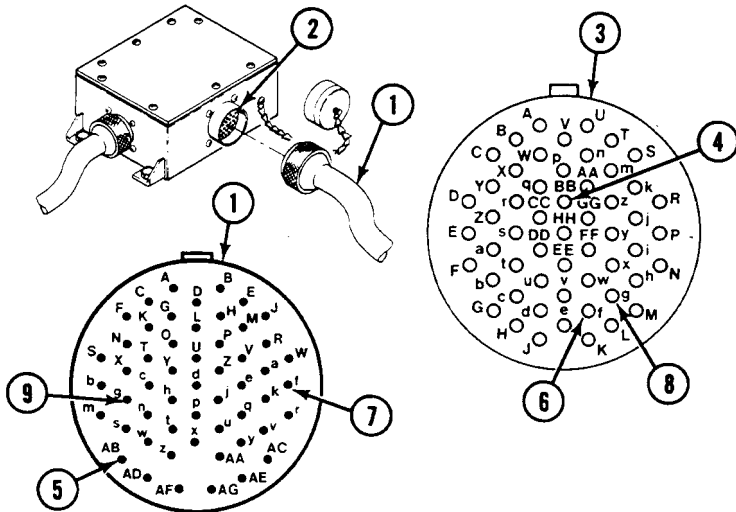
2Y

1. Remove plug W1P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between the following plug pins:  
 W1P1 (3) pin BB (4) to W1P2 (1) pin AB (5).  
 W1P1 (3) pin f (6) to W1P2 (1) pin f (7).  
 W1P1 (3) pin g (8) to W1P2 (1) pin g (9).
3. Did VTM read 0 ohms for each measurement?

NO

2YN

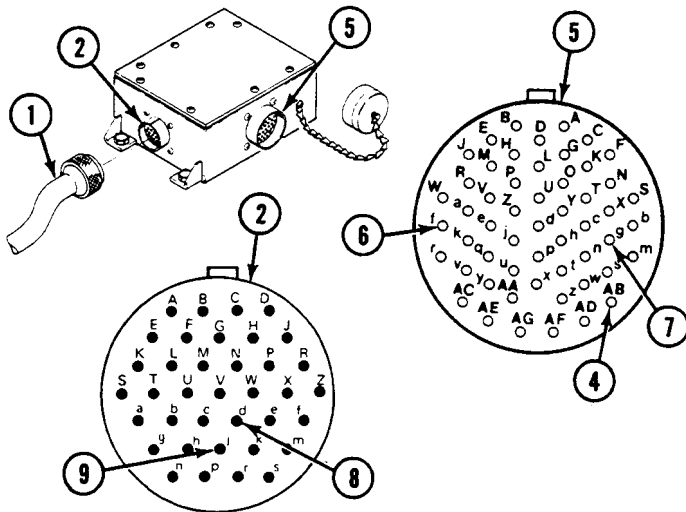
1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.



YES

**3Y**

1. Remove harness 12354593 plug P1(1) from STE/ICE distribution box jack J1 (2).
2. Set up Test 92 TM 9-4910-571-12&P.
3. Measure resistance between STE/ICE distribution box jack J2 (3), pin AB (4) and the following jack pins:  
 STE/ICE distribution box jack J2 (5) pin f (6)  
 STE/ICE distribution box jack J2 (5) pin g (7)  
 STE/ICE distribution box jack J1 (2) pin d (8)  
 STE/ICE distribution box jack J1 (2) pin i (9)
4. Does VTM read between 3600 and 4400 ohms for each measurement?



**NO**

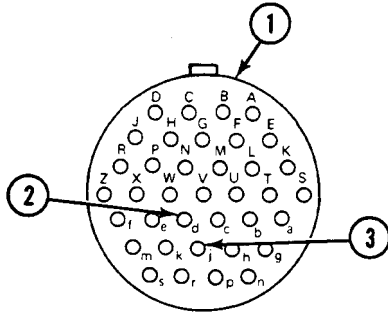
**3YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**4Y**

1. Set up Test 91 TM 9-4910-571-12&P.
2. Measure resistance between harness 12354593 plug P1 (1), pins d (2) and j (3).
3. Does VTM read infinity?

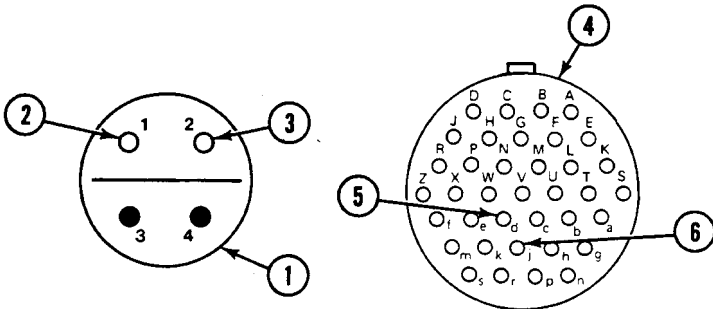


**NO** → GO TO **DY** (PAGE 0147 00-9)

**YES**

**5Y**

1. Move jumper wire on harness 12354672 plug P9 (1) from pins 3 and 4 to pins 1 (2) and 2 (3).
2. Measure resistance between harness 12354593 plug P1 (4), pins d (5) and j (6).
3. Does VTM read 0 ohms?



**NO** → GO TO **EY** (PAGE 0147 00-10)

**YES**

**6Y**

1. Has air box pressure transducer been replaced?

**NO** → **6YN**  
 1. Replace air box pressure transducer (WP 0327 00).  
 2. Verify no faults found.

**YES**

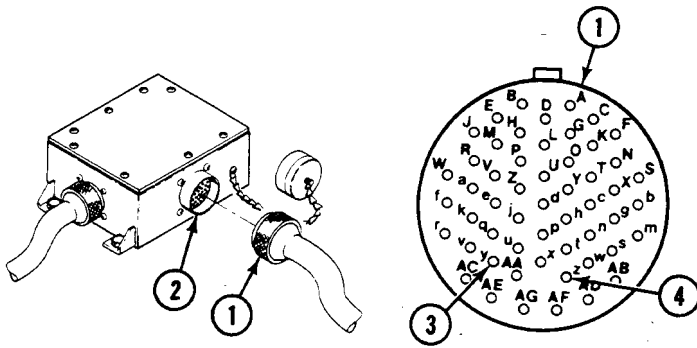


**7Y**

1. Faulty VTM.
2. Notify supervisor.

**BY**

1. Remove plug W1P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins y (3) and z (4). VTM should read infinity.
3. Does VTM indicate a fault?



NO

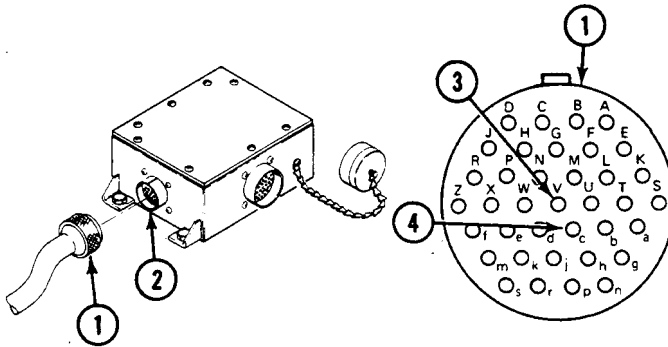
**BYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

YES

**B2Y**

1. Remove harness 12354593 P1(1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between 12354593 P1 (1), pins V (3) and c (4). VTM should read infinity.
3. Does VTM indicate a fault?



NO

**B2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

YES

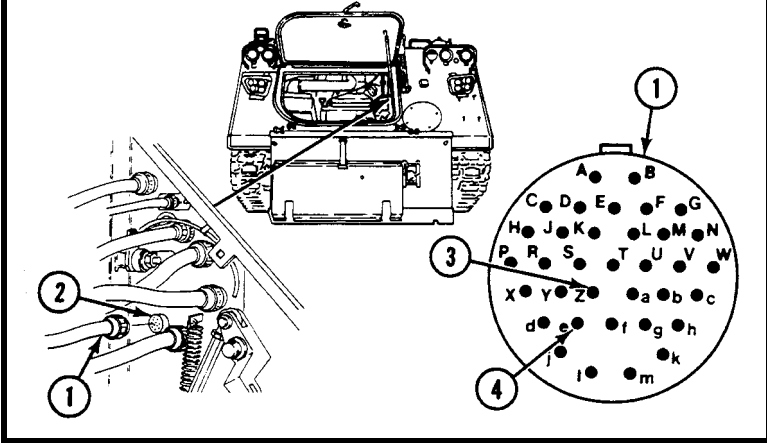
**B3Y**

1. Remove harness 12354672 P4(1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins Z (3) and e (4).
3. Does VTM read infinity?

NO

**B3YN**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.



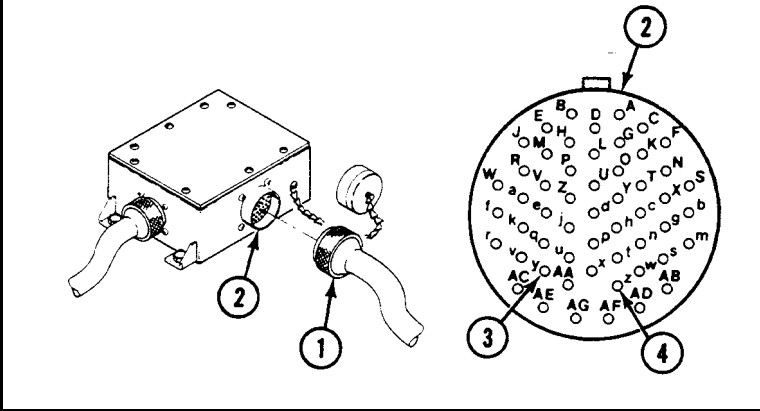
YES

**B4Y**

1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

**CY**

1. Remove plug W1P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins y (3) and z (4). VTM should read 0 ohms.
3. Does VTM indicate a fault?



**NO**

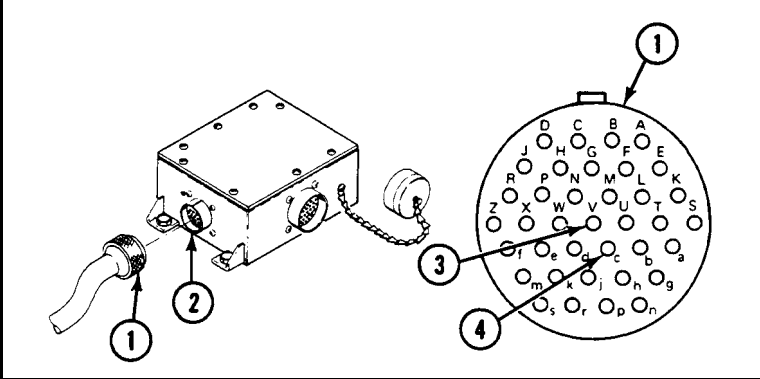
**CYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**C2Y**

1. Remove harness 12354593 P1(1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between 12354593 P1 (1), pins V (3) and c (4). VTM should read 0 ohms.
3. Does VTM indicate a fault?



**NO**

**C2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

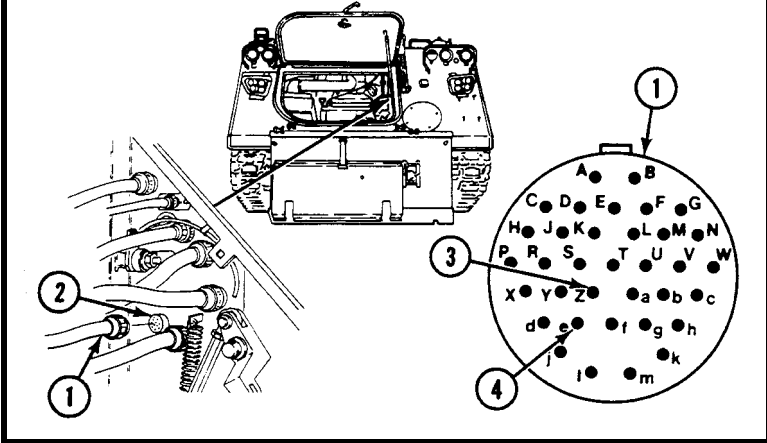
**C3Y**

1. Remove harness 12354672 plug P4(1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins Z (3) and e (4).
3. Does VTM read 0 ohms?

NO

**C3YN**

1. Repair/replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.



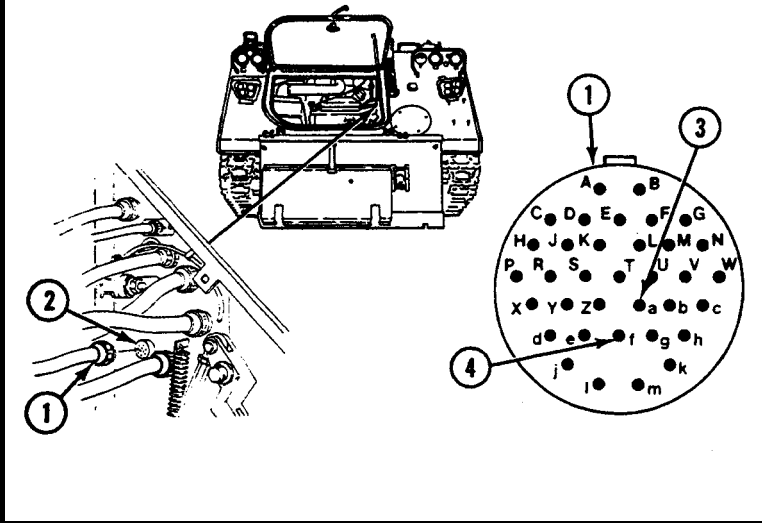
YES

**C4Y**

1. Repair/replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

**DY**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins a (3) and f (4).
3. Does VTM read infinity?



**NO**

**DYN**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.

**YES**

**D2Y**

1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

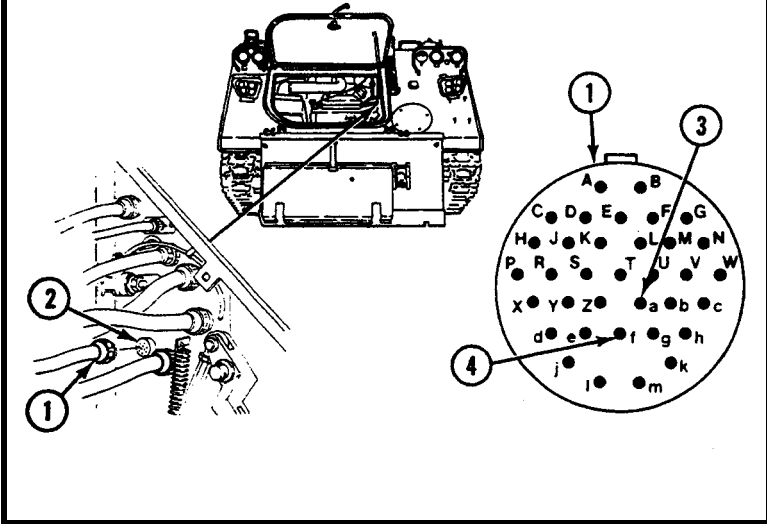
**EY**

1. Remove harness 12354672 plug P4(1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins a (3) and f (4).
3. Does VTM read 0 ohms?

**NO**

**EYN**

1. Replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.



**YES**

**E2Y**

1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

**STE/ICE TEST 68 STARTER MOTOR VOLTAGE DIAGNOSTIC TROUBLESHOOTING**

**0148 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Electrical connector pliers (WP 0926 00, Item 31)  
Jumper wire (WP 0927 00)  
STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

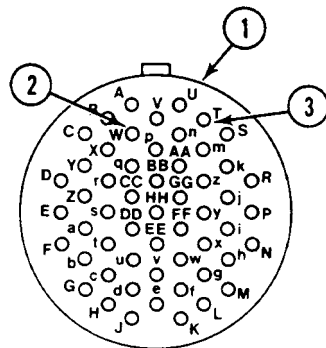
Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Power plant access door open (see your -10)  
Trim vane lowered (see your -10)  
Driver's power plant access panel removed (WP 0441 00)

Personnel Required

Unit Mechanic 63T10

**T**

1. Remove plug W1P1 from VTM jack J1.
2. Hook up VTM to vehicle batteries TM 9-4910-571-12&P.
3. Turn MASTER SWITCH ON.
4. Set up Test 89 TM 9-4910-571-12&P.
5. Measure voltage between W1P1 (1) pins W (2) and T (3) with START switch depressed.
6. Does VTM read 0 volts?



**YES**

**NO**

**TN**

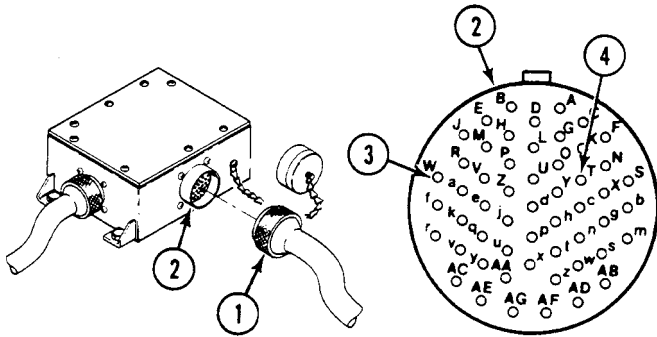
1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

**STE/ICE TEST 68 STARTER MOTOR VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0148 00

**Y**

1. Remove plug W1P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure voltage between STE/ICE distribution box jack J2 (2), pins W (3) and T (4).
3. Press START button for 2 to 4 seconds.
4. Does VTM read 0 volts?



**NO**

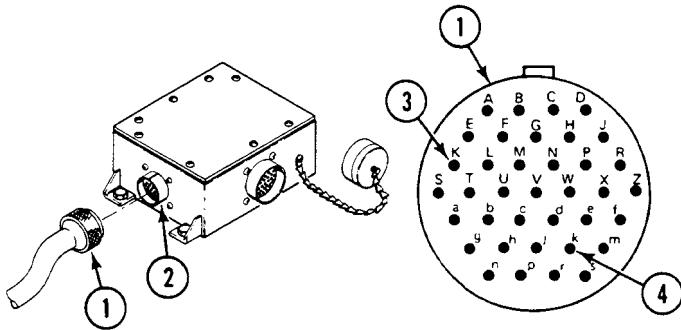
**YN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**2Y**

1. Remove harness 12354593 P1(1) from STE/ICE distribution box jack J1 (2).
2. Measure voltage between 12354593 plug P1 (1), pins K (+) (3) and k (-) (4).
3. Press START button for 2 to 4 seconds.
4. Does VTM read 0 volts?



**NO**

**2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

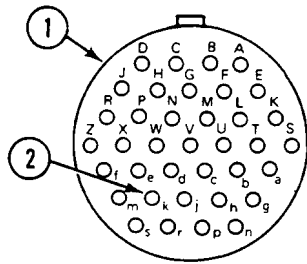


**STE/ICE TEST 68 STARTER MOTOR VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0148 00

**3Y**

1. Turn MASTER SWITCH OFF.
2. Set up Test 91 TM 9-4910-571-12&P.
3. Measure resistance between harness 12354593 plug P1 (1), pin k (2) and ground.
4. Does VTM read more than 0 ohms?



NO

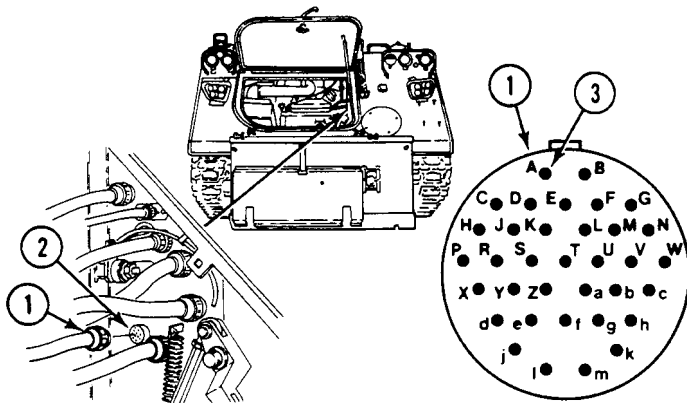
**3YN**

1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

YES

**4Y**

1. Set up Test 89 TM 9-4910-571-12&P.
2. Remove harness 12354672 plug P4 (1) from harness 12354593 jack J1 (2).
3. Turn MASTER SWITCH ON.
4. Measure voltage between harness 12354672 plug P4 (1), pin A (3) and ground.
5. Depress START button for 2 to 4 seconds.
6. Does VTM read 0 volts?



NO

**4YN**

1. Repair/replace wiring harness 12354593 circuit 799 (WP 0382 00) or (WP 0882 00).
2. Verify no faults found.

YES

---

**STE/ICE TEST 68 STARTER MOTOR VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

---

0148 00

**5Y**

1. Repair/replace wiring harness 12354672 circuit 776 (WP 0382 00) or (WP 0882 00).
2. Verify no faults found.

**STE/ICE TEST 69 STARTER NEGATIVE CABLE VOLTAGE DROP  
DIAGNOSTIC TROUBLESHOOTING**

0149 00

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Electrical connector pliers (WP 0926 00, Item 31)  
Jumper wire  
STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

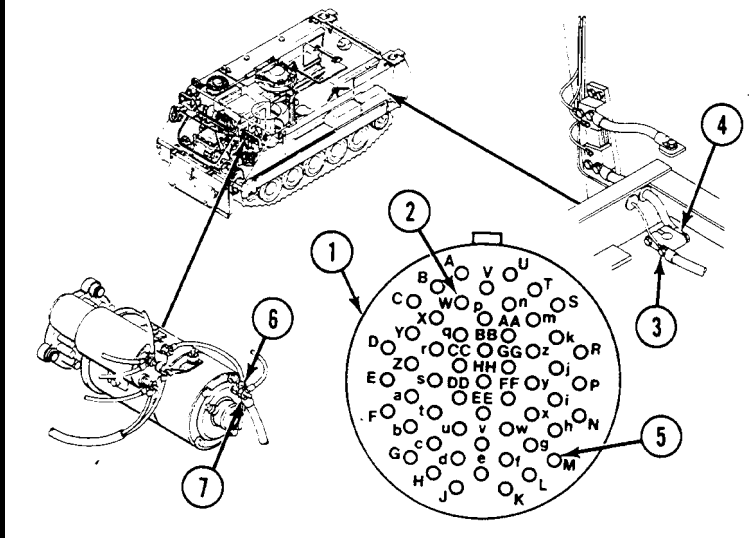
Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Power plant access door opened (see your -10)  
Driver's power plant access panel removed (WP 0441 00)  
Trim vane lowered (see your -10)

Personnel Required

Unit Mech 63T10

**T**

1. Remove plug W1P1 from VTM jack J1.
2. Hook up VTM to carrier batteries TM 9-4910-571-12&P.
3. Set up Test 89 TM 9-4910-571-12&P.
4. Measure resistance between plug W1P1 (1), pin W (2) and harness 12354593 circuit 779 terminal E4 (3) on battery negative terminal (4).
5. Measure resistance between W1P1 (1), pin M (5) and harness 12354672 circuit 773 terminal E2 (6) on starter ground stud (7).
6. Did VTM read more than one ohm either time?



**NO**

**TN**

1. Faulty VTM.
2. Notify supervisor.

**YES**

**STE/ICE TEST 69 STARTER NEGATIVE CABLE VOLTAGE DROP DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0149 00

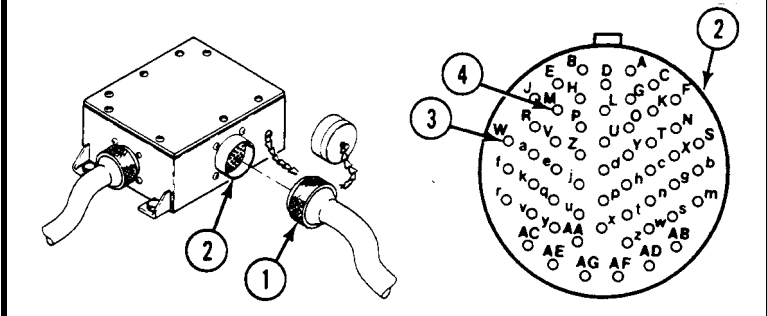
**Y**

1. Remove cable W1P2 plug (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pin W (3) and harness 12354593 circuit 779 terminal E4 on battery negative terminal.
3. Measure resistance between STE/ICE distribution box jack J2 (2), pin M (4) and harness 12345472 circuit 773 terminal E2 on starter.
4. Did VTM read more than one ohm either time?

**NO**

**YN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.



**YES**

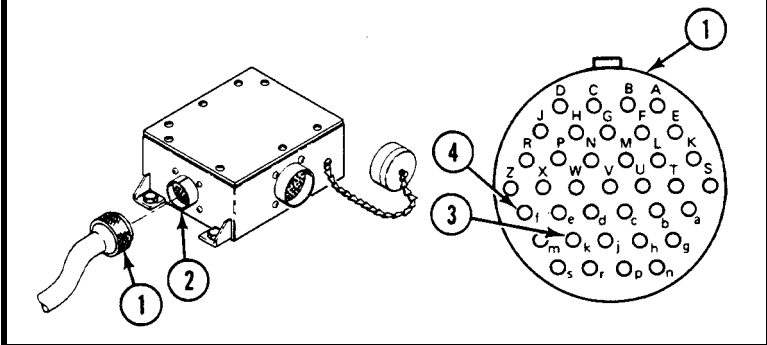
**2Y**

1. Remove harness 12354593 plug P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between 12354593 plug P1 (1), pin k (3) and harness 1235493 circuit 779 terminal E4 on battery negative terminal (1).
3. Measure resistance between 12354593 plug P1 (1), pin f (4) and harness 12354672 circuit 773 terminal E2 on starter.
4. Does VTM read more than one ohm either time?

**NO**

**2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.



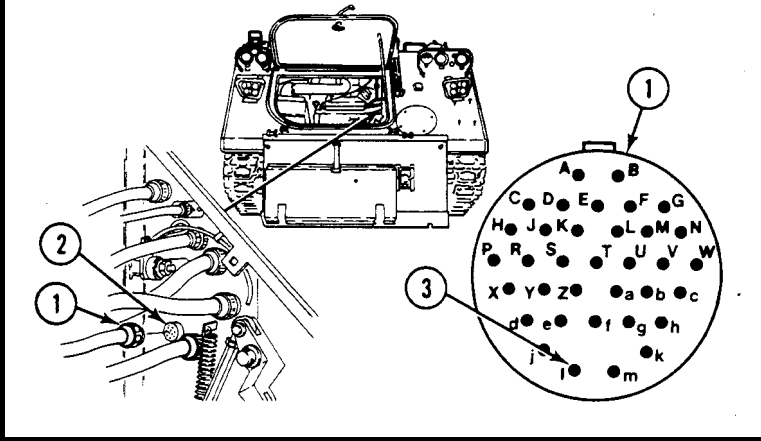
**YES**

**STE/ICE TEST 69 STARTER NEGATIVE CABLE VOLTAGE DROP DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0149 00

**3Y**

1. Remove harness 12354672 P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pin 1 (3) and starter ground stud (4).
3. Does VTM read more than 1 ohm?



**NO**

**3YN**

1. Replace harness 12354593 (WP 0882 00).
2. Verify no faults found.

**YES**

**4Y**

1. Replace harness 12354672 (WP 0882 00).
2. Verify no faults found.



**STE/ICE TEST 70 STARTER SOLENOID VOLTAGE DIAGNOSTIC TROUBLESHOOTING**

**0150 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Electrical connector pliers (WP 0926 00, Item 31)  
Jumper wire  
STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

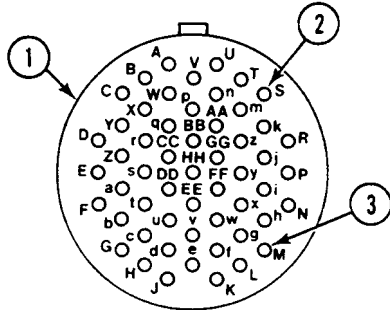
Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Power plant access door open (see your -10)  
Driver's power plant access panel removed (WP 0441 00)  
Trim vane lowered (see your -10)

Personnel Required

Unit Mechanic 63T10

**T**

1. Remove plug W1P1 from VTM jack J1.
2. Hook up VTM to carrier batteries TM 9-4910-571-12&P.
3. Set up Test 89 TM 9-4910-571-12&P.
4. Turn MASTER SWITCH ON.
5. Measure voltage between W1P1 (1), pins S (+) (2) and M (-) (3).
6. Does VTM read 0 volts?



**YES**

**NO**

**TN**

1. Faulty VTM.
2. Notify supervisor.

**STE/ICE TEST 70 STARTER SOLENOID VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0150 00

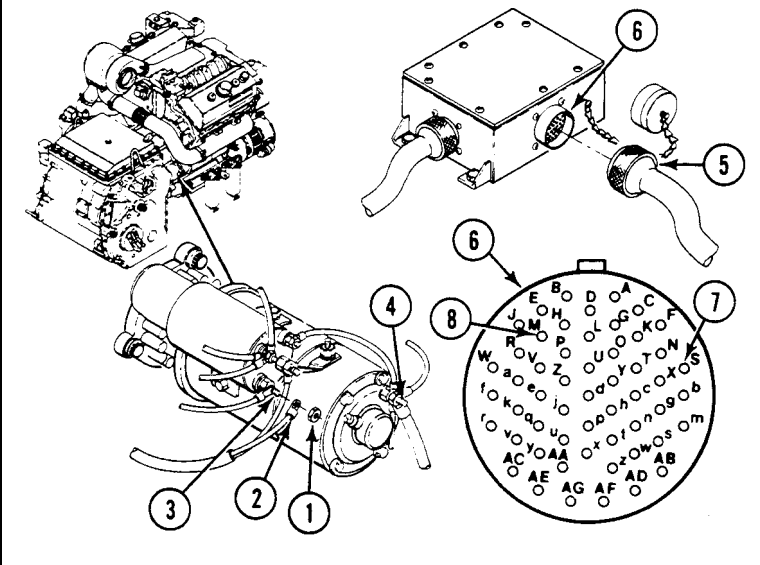
**Y**

1. Turn MASTER SWITCH OFF.
2. Set up Test 91 TM 9-4910-571-12&P.
3. Remove nut (1) and harness 12354672 circuit 775 terminal end E3 (circuit 775) (2) from solenoid positive terminal (3).
4. Ground terminal E3 to starter ground stud (4).
5. Remove plug W1P2 (5) from STE/ICE distribution box jack J2 (6).
6. Measure resistance between STE/ICE distribution box jack J2 (6), pins S (7) and M (8).
7. Does VTM read more than 0 ohms?

**NO**

**YN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.



**YES**

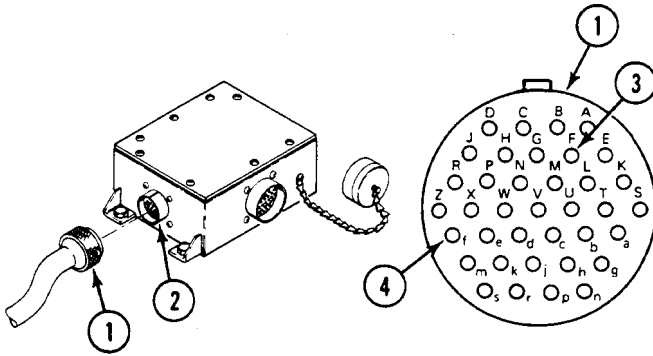


**STE/ICE TEST 70 STARTER SOLENOID VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0150 00

**2Y**

1. Remove harness 12354593 plug P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between 12354593 plug P1 (1), pins F (3) and f(4).
3. Does VTM read more than 0 ohms?



**NO**

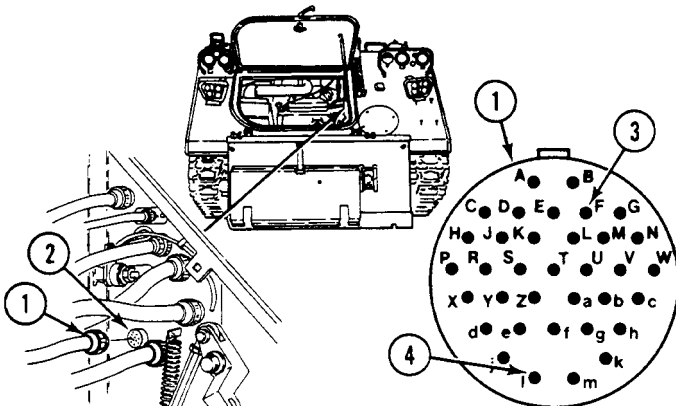
**2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**3Y**

1. Remove harness 12354672 plug P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins F (3) and f(4).
3. Does VTM read more than 0 ohms?



**NO**

**3YN**

1. Replace harness 12354593 (WP 0882 00).
2. Verify no faults found.

**YES**

---

**STE/ICE TEST 70 STARTER SOLENOID VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

---

**0150 00**

**4Y**

- |  |
|--|
| <ol style="list-style-type: none"><li>1. Replace harness 12354672 (WP 0882 00).</li><li>2. Verify no faults found.</li></ol> |
|--|

**STE/ICE TEST 82 GENERATOR OUTPUT VOLTAGE DIAGNOSTIC TROUBLESHOOTING**

**0151 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Electrical connector pliers (WP 0926 00, Item 31)  
STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

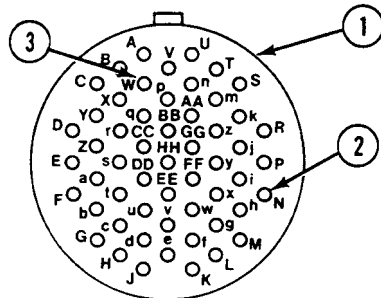
Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Driver's power plant access panel removed (WP 0441 00)  
Trim vane lowered (see your -10)  
Power plant access door open (see your -10)

Personnel Required

Unit Mech 63T10  
Helper (H)

**T**

1. Remove W1P1 from VTM J1.
2. Hook up VTM to vehicle batteries TM 9-4910-571-12&P.
3. Set up Test 89 TM 9-4910-571-12&P.
4. Measure voltage between plug W1P1 (1), pins N (+) (2) and W (-) (3).
5. Does VTM read 0 volts?



**YES**



**NO**

**TN**

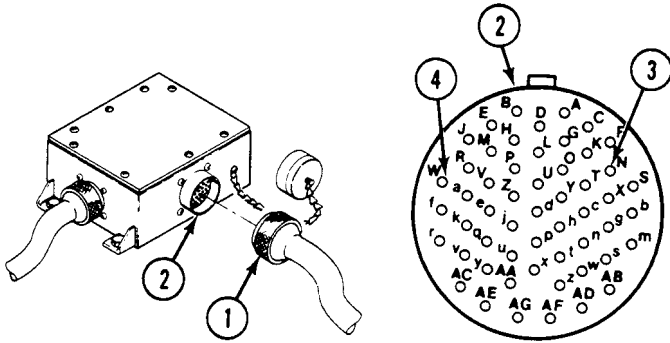
1. Faulty VTM.
2. Notify supervisor.

**STE/ICE TEST 82 GENERATOR OUTPUT VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0151 00

**Y**

1. Remove plug W1P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure voltage between STE/ICE distribution box jack J2 (2), pins N (+)(3) and W (-) (4).
3. Does VTM read 0 volts?



**NO**

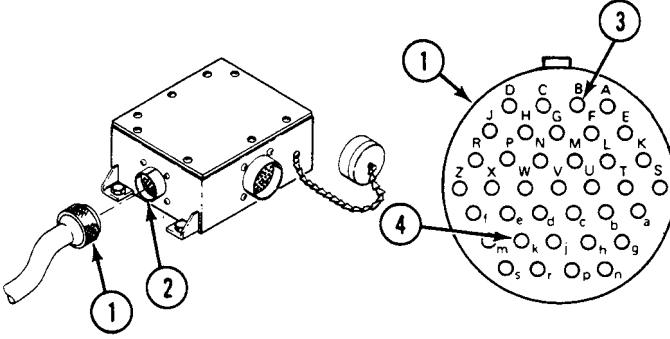
**YN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**2Y**

1. Remove harness 12354593 plug P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between harness 12354593 plug P1 (1), pins B (+) (3) and k (-) (4).
3. Does VTM read 0 volts?



**NO**

**2YN**

1. Replace wiring harness 12354593 (WP 0882 00).
2. Verify no faults found.

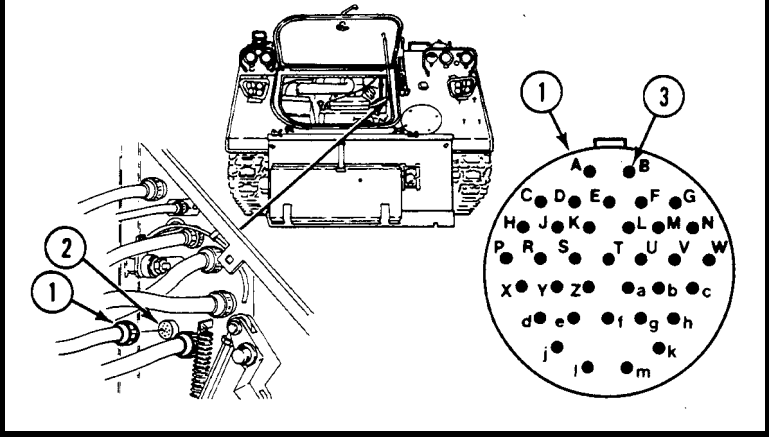
**YES**

**STE/ICE TEST 82 GENERATOR OUTPUT VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0151 00

**3Y**

1. Remove harness 12354672 plug P4 (1) from harness 12354593 jack J1 (2).
2. Measure voltage between harness 12354672 plug P4 (1), pin B (3) and ground.
3. Does VTM read 0 volts?



**NO**

**3YN**

1. Replace harness 12354593 (WP 0882 00).
2. Verify no faults found.

**YES**

**4Y**

1. Repair/replace wiring harness 12354672 (WP 0882 00).
2. Verify no faults found.



**STE/ICE TEST 83 GENERATOR FIELD VOLTAGE DIAGNOSTIC TROUBLESHOOTING**

**0152 00**

**INITIAL SETUP:**

Maintenance Level

Unit

Tools and Special Tools

- Electrical connector pliers (WP 0926 00, Item 31)
- Jumper wire
- STE/ICE Test Set (WP 0926 00, Item 61)

Materials/Parts

Insulation tape (WP 0928 00, Item 39)

Personnel Required

- Unit Mech 63T10
- Helper (H)

References

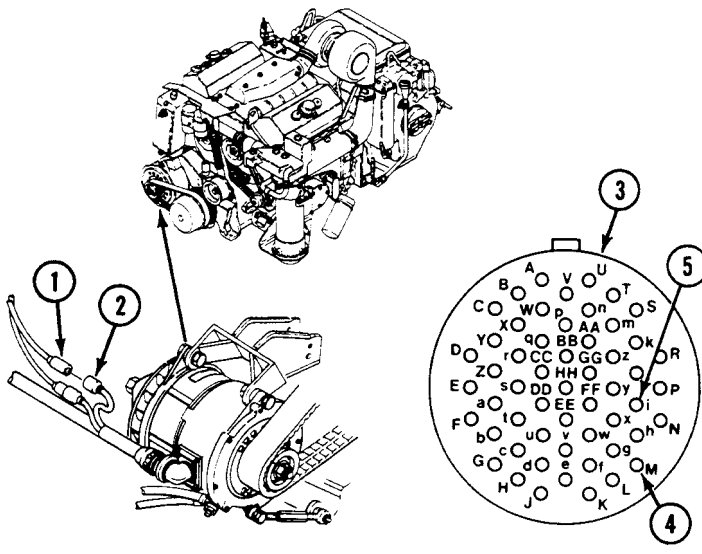
See your -10  
TM 9-4910-571-12&P

Equipment Condition

- Engine stopped (see your -10)
- Carrier blocked (see your -10)
- Power plant access door open (see your -10)
- Driver's power plant access panel removed (WP 0441 00)
- Trim vane lowered (see your -10)

**T**

1. Remove plug W1P1 from VTM J1.
2. Hook up VTM to carrier batteries TM 9-4910-571-12&P.
3. Set up Test 91 TM 9-4910-571-12&P.
4. Remove harness 12354672 circuit 785 plug P6 (1) from harness 12349873 (2).
5. Measure resistance between W1P1 (3), pins M (4) and i (5).
6. Does VTM read infinity?



**NO**

**GO TO BY (PAGE 0152 00-3)**

**YES**

STE/ICE TEST 83 GENERATOR FIELD VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued

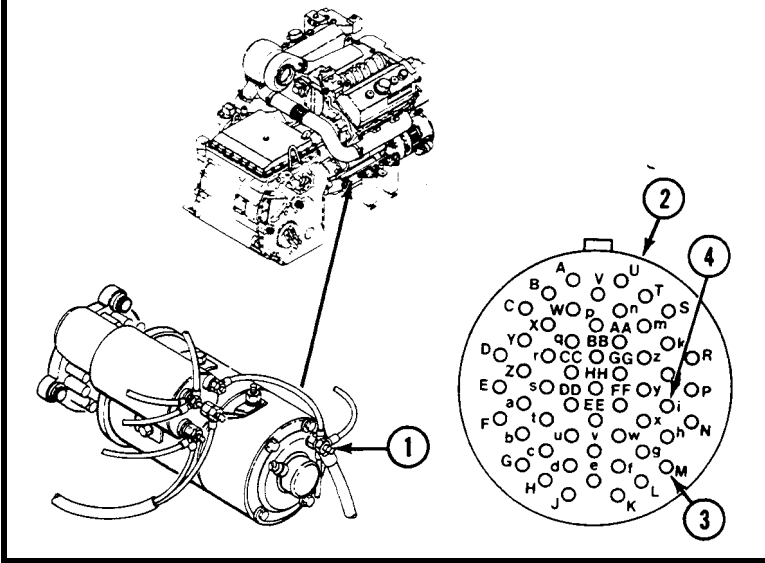
0152 00

**Y**

1. Install jumper wire between harness 12354672 circuit 785 plug P6 and starter ground post (1).
2. Measure resistance between plug W1P1 (2), pins M (3) and i (4).
3. Does VTM read 0 ohms?

**NO**

GO TO CY (PAGE 0152 00-5)



**YES**

**2Y**

1. Faulty VTM.
2. Notify supervisor.

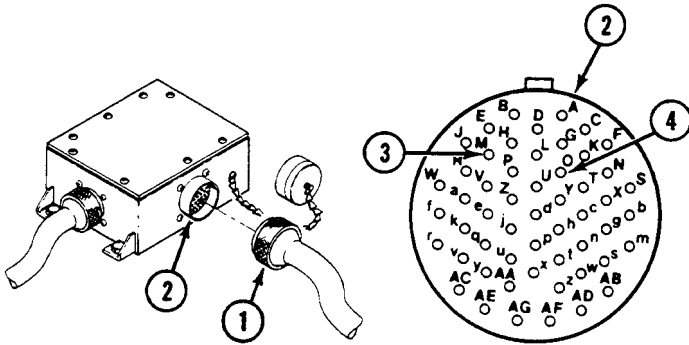


**STE/ICE TEST 83 GENERATOR FIELD VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0152 00

**BY**

1. Remove plug W1P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins M (3) and O (4). VTM should read infinity.
3. Does VTM indicate a fault?



**NO**

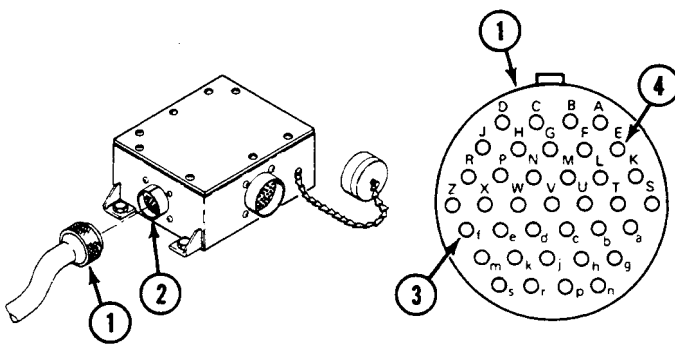
**BYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**B2Y**

1. Remove harness 12354593 plug P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between harness 12354593 plug P1 (1), pins f (3) and E (4). VTM should read infinity.
3. Does VTM indicate a fault?



**NO**

**B2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**STE/ICE TEST 83 GENERATOR FIELD VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0152 00

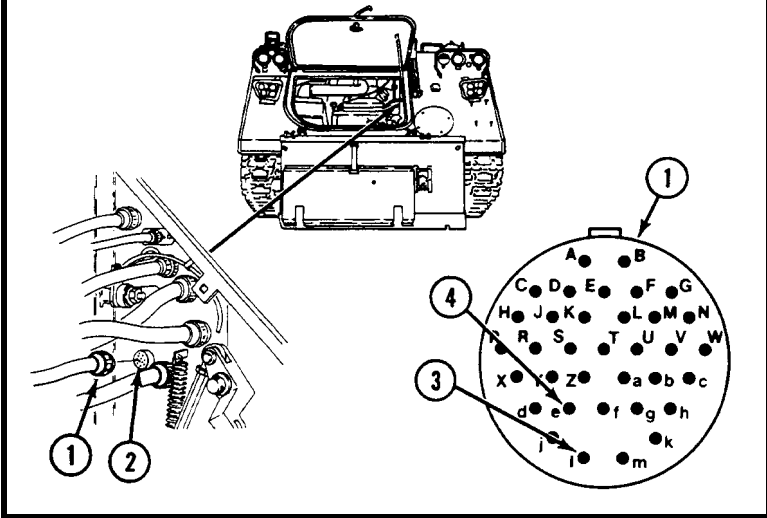
**B3Y**

1. Remove harness 12354672 plug P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins l (3) and E (4). VTM should read infinity.
3. Does VTM indicate a fault?

**NO**

**B3YN**

1. Replace harness 12354593 (WP 0882 00).
2. Verify no faults found.



**YES**

**B4Y**

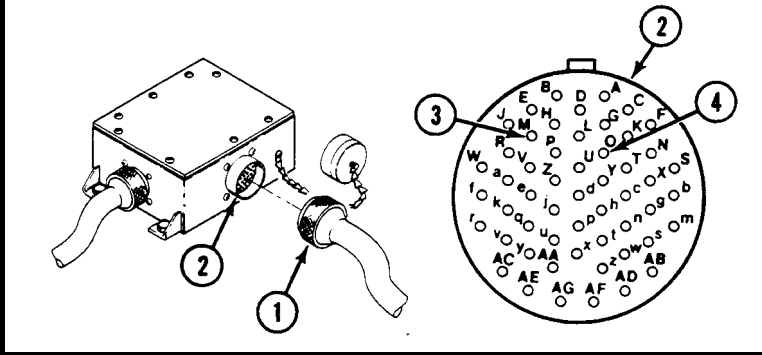
1. Replace harness 12354672 (WP 0882 00).
2. Verify no faults found.

**STE/ICE TEST 83 GENERATOR FIELD VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0152 00

**CY**

1. Remove plug W1P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins M (3) and O (4). VTM should read 0 ohms.
3. Does VTM indicate a fault?



**NO**

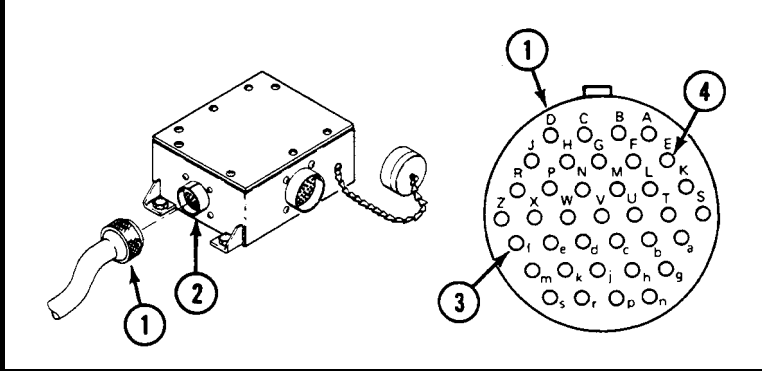
**CYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**C2Y**

1. Remove harness 12354593 plug P1 (1) from STE/ICE distribution box jack J1 (1).
2. Measure resistance between 12354593 plug P1 (1), pins f (3) and E (4). VTM should read 0 ohms.
3. Does VTM indicate a fault?



**NO**

**C2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**STE/ICE TEST 83 GENERATOR FIELD VOLTAGE DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0152 00

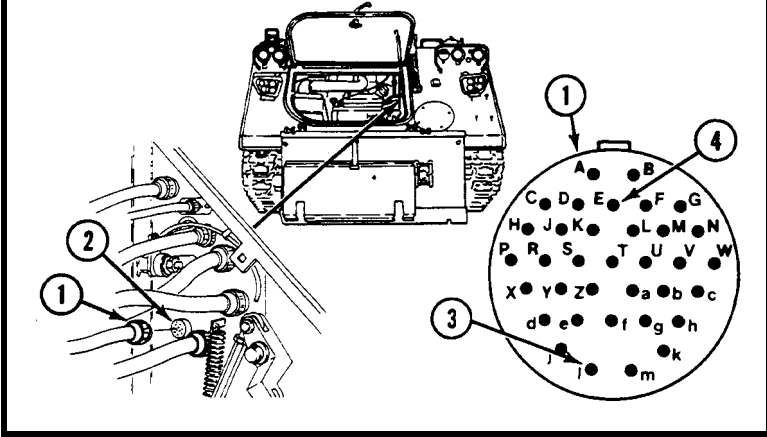
**C3Y**

1. Remove harness 12354672 plug P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins I (3) and E (4). VTM should read 0 ohms.
3. Does VTM indicate a fault?

**NO**

**C3YN**

1. Replace harness 12354593 (WP 0882 00).
2. Verify no faults found.



**YES**

**C4Y**

1. Replace harness 12354672 (WP 0882 00).
2. Verify no faults found.

**STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP  
DIAGNOSTIC TROUBLESHOOTING**

**0153 00**

**INITIAL SETUP:**

Maintenance Level

Unit

References

See your -10  
TM 9-4910-571-12&P

Tools and Special Tools

Electrical connector pliers (WP 0926 00, Item 31)  
Jumper wire  
STE/ICE Test Set (WP 0926 00, Item 61)

Equipment Condition

Engine stopped (see your -10)  
Carrier blocked (see your -10)  
Driver's power plant access panel removed  
(WP 0441 00)  
Trim vane lowered (see your -10)  
Power plant access door open (see your -10)

Materials/Parts

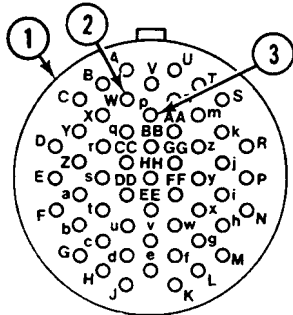
Insulation tape (WP 0928 00, Item 39)

Personnel Required

Unit Mech 63T10

**T**

1. Remove plug W1P1 from VTM jack J1.
2. Hook up VTM to vehicle batteries TM 9-4910-571-12&P.
3. Set up Test 91 TM 9-4910-571-12&P.
4. Measure resistance between W1P1 (1), pins W (2) and P (3).
5. Does VTM read less than one ohm?



**NO**

**GO TO BY (PAGE 0153 00-3)**

**YES**

**STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP DIAGNOSTIC  
TROUBLESHOOTING—Continued**

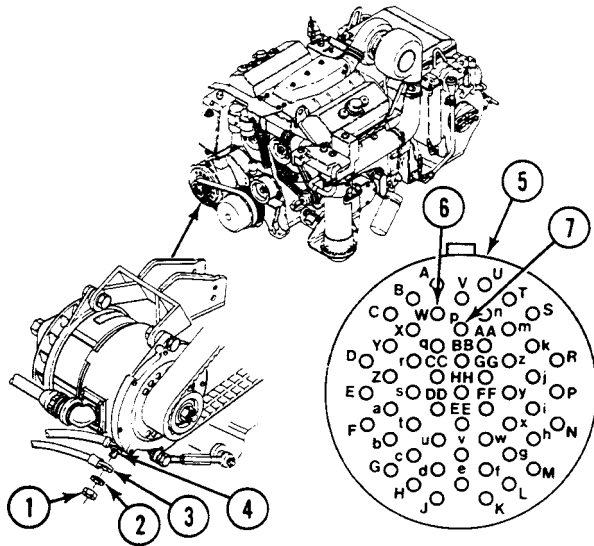
0153 00

**Y**

1. Remove nut (1), lockwasher (2), and harness 12354672 circuit 771 terminal end E2 (3) from generator ground stud (4).
2. Wrap harness 12354672 circuit 771 terminal end E2 (3) with tape.
3. Measure resistance between plug WIP1 (5), pins W (6) and P (7).
4. Does VTM read infinity?

**NO**

**GO TO CY (PAGE 0153 00-4)**



**YES**

**2Y**

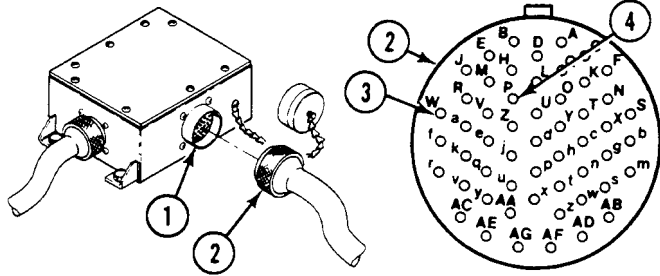
1. Faulty VTM.
2. Notify supervisor.

**STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0153 00

**BY**

1. Remove plug W1P2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins W (3) and P (4).
3. Does VTM read more than one ohm?



**NO**

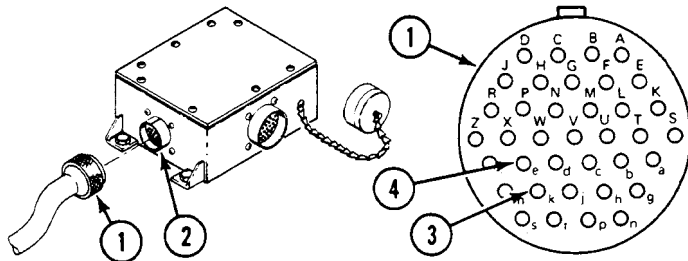
**BYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.

**YES**

**B2Y**

1. Remove harness 12354593 plug P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between harness 12354593 plug P1 (1), pins k (3) and e (4). Use VTM.
3. Does VTM read more than one ohm?



**NO**

**B2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0153 00

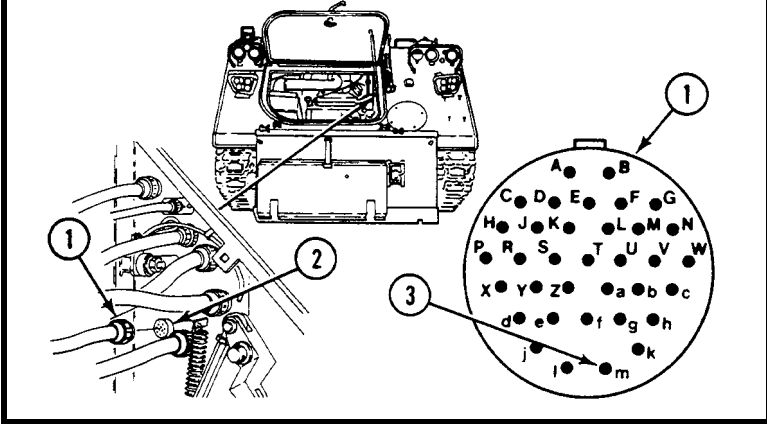
**B3Y**

1. Remove harness 12354672 plug P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pins m (3) and ground.
3. Does VTM read more than one ohm?

NO

**B3YN**

1. Replace harness 12354693 (WP 0882 00).
2. Verify no faults found.



YES

**B4Y**

1. Replace harness 12354672 (WP 0882 00).
2. Verify no faults found.

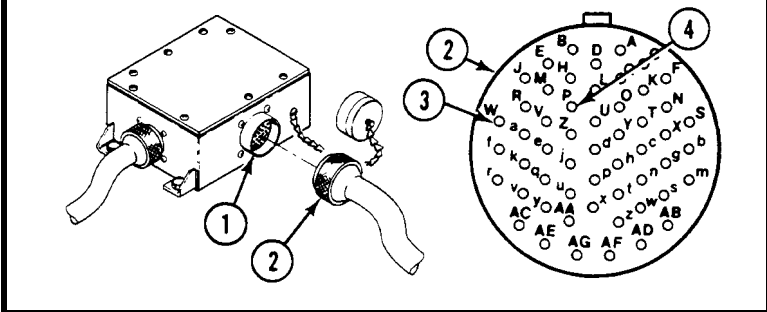
**CY**

1. Remove WIP2 (1) from STE/ICE distribution box jack J2 (2).
2. Measure resistance between STE/ICE distribution box jack J2 (2), pins W (3) and P (4).
3. Does VTM fail to read infinity?

NO

**CYN**

1. Faulty W1 cable. Beyond unit maintenance repair.
2. Notify supervisor.



YES

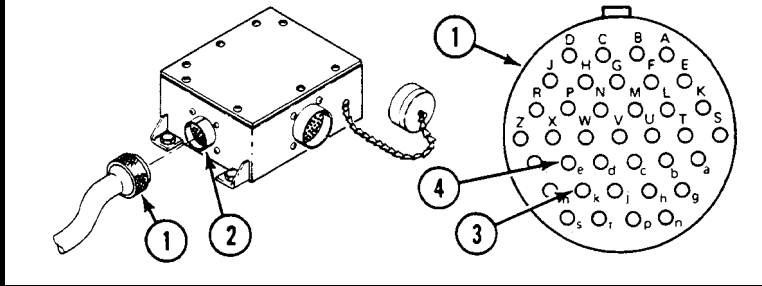


**STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP DIAGNOSTIC  
TROUBLESHOOTING—Continued**

0153 00

**C2Y**

1. Remove harness 12354593 plug P1 (1) from STE/ICE distribution box jack J1 (2).
2. Measure resistance between harness 12354593 plug P1 (1), pins k (3) and e (4).
3. Does VTM fail to read infinity?



**NO**

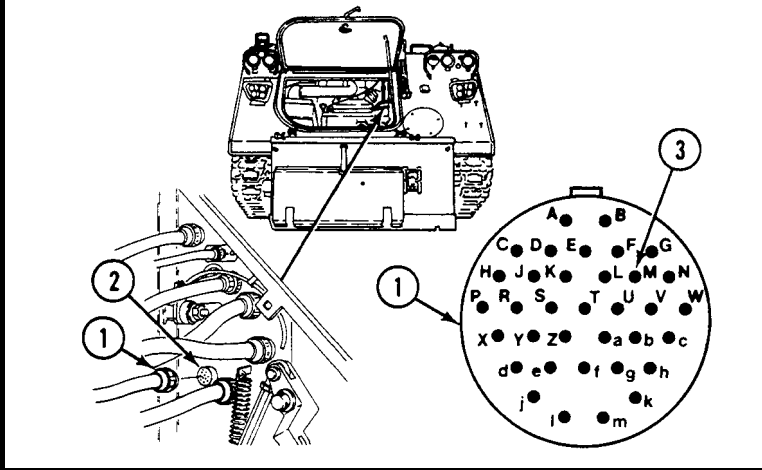
**C2YN**

1. Replace STE/ICE distribution box (WP 0874 00) thru (WP 0877 00).
2. Verify no faults found.

**YES**

**C3Y**

1. Remove harness 12354672 plug P4 (1) from harness 12354593 jack J1 (2).
2. Measure resistance between harness 12354672 plug P4 (1), pin M (3) and ground.
3. Does VTM read other than infinity?



**NO**

**C3YN**

1. Replace harness 12354593 (WP 0882 00).
2. Verify no faults found.

**YES**

---

**STE/ICE TEST 84 GENERATOR NEGATIVE CABLE VOLTAGE DROP DIAGNOSTIC  
TROUBLESHOOTING—Continued**

---

**0153 00**

**C4Y**

1. Replace harness 12354672 (WP 0882 00).
2. Verify no faults found.

INDEX

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
5.0 KW Auxiliary power unit M577A3 and M1068A3 only Replace . . . . .	0675 00-1
<b>A</b>	
A.C. Power Extension Box A7 (M1068A3) Replace . . . . .	0815 00-1
A1 Enclosure Assembly Power Control Replace . . . . .	0826 00-1
AC Cable Assembly W252 (M1068A3) Replace . . . . .	0857 00-1
AC Light Cable (W11) (M1068A3) Replace . . . . .	0845 00-1
AC Power Extension Box A19 (M1068A3) Replace . . . . .	0822 00-1
AC power extension box (M1068A) A6, replace . . . . .	0834 00-1
AC Power Extension Cable (W7) Replace . . . . .	0842 00-1
AC Power Extension Cable (W8) (M1068A3) Replace . . . . .	0843 00-1
Accelerator Linkage Adjust . . . . .	0214 00-1
Accelerator Pedal Lower Replace . . . . .	0215 00-1
Upper Replace . . . . .	0216 00-1
Access Box, Vehicle M901A3 and M981A3 Replace . . . . .	0593 00-1
Access cover Battery box M577A3 and M1068A3 only Repair . . . . .	0352 00-1
Fan drive pulley Removal/installation . . . . .	0440 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Hull front	
Replacement . . . . .	0449 00-1
Power plant bottom	
Replacement . . . . .	0450 00-1
Access covers	
Fuel tank (All except M577A3 and N1068A3)	
Replace . . . . .	0187 00-1
Access Covers	
Fuel Tank (M577A3 and M1068A3)	
Replace . . . . .	0188 00-1
Access door	
Radiator	
Replacement . . . . .	0469 00-1
Turbine	
M58 only	
Replacement . . . . .	0485 00-1
Access door gasket	
Turbine	
M58 only	
Replacement . . . . .	0486 00-1
Access door hinges	
Turbine	
M58 only	
Replacement . . . . .	0487 00-1
Access panel	
Driver's power plant	
Replacement . . . . .	0441 00-1
Access Plate	
Adapter	
Smoke Generator (M1059A3)	
Replace . . . . .	0766 00-1
Adapter	
Speedometer	
Replace . . . . .	0860 00-1
Tachometer	
Replace . . . . .	0863 00-1
Adjuster	
Track tension	
Replacement . . . . .	0419 00-1
Admittance buzzer and switch	
M577A3 and M1068A3 only	
Replacement . . . . .	0334 00-1
Air Box Heater	
Ignition Wire	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0204 00-1
Wiring Harness	
Replace . . . . .	0205 00-1
Air box pressure transducer	
Replacement . . . . .	0327 00-1
Air box, engine	
Drain check valve/tubes	
Right, replace . . . . .	0160 00-1
Heater	
Ignition coil, replace . . . . .	0208 00-1
Air Cleaner	
Elbow	
Replace . . . . .	0168 00-1
Filter Element	
Service . . . . .	0167 00-1
Replace . . . . .	0168 00-1
Air cleaner	
Restriction indicator	
Replace . . . . .	0171 00-1
Restriction indicator hose	
Replace . . . . .	0172 00-1
Air Cleaner Assembly	
Replace . . . . .	0169 00-1
Air Cleaner Retainer	
Repair . . . . .	0170 00-1
Air Compressor	
Electrical Cable Assembly	
(M1059A3 Only)	
Replace . . . . .	0758 00-1
Air Compressor Assembly	
(M1059A3 Only)	
Replace . . . . .	0762 00-1
Air Hose	
Adapter Access Plate to Cover Assembly	
Smoke Generator (M1059A3)	
Replace . . . . .	0768 00-1
Compressor Reservoir to Access Plate	
Smoke Generator (M1059A3)	
Replace . . . . .	0767 00-1
Air intake	
Elbow	
Replace . . . . .	0173 00-1
Air Intake and Exhaust Pipes	
Heater	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0683 00-1
Air Intake elbow and hose	
Grill	
Replace . . . . .	0174 00-1
Air Intake Pipes, Heater	
(All Except M1064A3)	
Replace . . . . .	0682 00-1
Air purifier and frame	
M13	
M1068A3 only	
Replace . . . . .	0779 00-1
Air ventilator	
Rear compartment	
Replacement . . . . .	0454 00-1
Alarm Kit	
Automatic	
Chemical Agent, M113A3	
Install/Remove . . . . .	0918 00-1
Ammunition rack	
M1064A3	
Horizontal	
Repair . . . . .	0607 00-1
Ammunition Rack	
M1064A3	
Horizontal	
Replace . . . . .	0606 00-1
Ammunition rack	
M1064A3	
Vertical, replace . . . . .	0608 00-1
Ammunition Stowage Rack	
M901A3, Replace . . . . .	0587 00-1
Amplifier	
Intercom	
M901A3 and M58	
Replace . . . . .	0888 00-1
Anchor	
Torsion bar	
Replacement . . . . .	0414 00-1
Antenna	
AS3916/VRC (M58)	
Replace . . . . .	0887 00-1
Cover	
All except M981A3	
Replace . . . . .	0576 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Covers	
M981A3, replace . . . . .	0601 00-1
Guard	
All except M981A3	
Replace . . . . .	0575 00-1
Guard (M981A3)	
Replace . . . . .	0600 00-1
M901A3	
Replace . . . . .	0886 00-1
Mast Bracket Assembly	
(M1068A3 Only)	
Repair . . . . .	0625 00-1
Replace . . . . .	0625 00-1
Support (M981A3 and M58 ), replace . . . . .	0602 00-1
APIU Rack	
Mount and Bracket (M1068A3)	
Replace . . . . .	0813 00-1
Arm	
Road wheel support	
Replacement . . . . .	0415 00-1
Arm assembly	
Idler wheel	
Replacement . . . . .	0417 00-1
Armor	
Kit (M113A3)	
Mine	
Install/Remove . . . . .	0752 00-1
Shields, Commander's Cupola (M113A3 and M1064A3)	
Replace . . . . .	0747 00-1
Side	
(M901A3)	
Replace . . . . .	0594 00-1
Smoke Generator (M1059A3)	
Replace . . . . .	0771 00-1
Armor Kit	
M113A3)	
Install . . . . .	0748 00-1
Armor plate	
Left front	
Replacement . . . . .	0447 00-1
Right front	
Replacement . . . . .	0448 00-1
AS3916/VRC Antenna	
(M58)	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0887 00-1
Assembly	
M8A3/M14 Orifice connector	
M113A3, M1059A3, and M577A3 only	
Replace . . . . .	0780 00-1
Auxiliary power (slave) receptacle	
M113A3, M901A3, M1059A3, M1064A3, and M58 only	
Replacement . . . . .	0263 00-1
Auxiliary power (slave) receptacle ground lead	
M113A3, M901A3, M1059A3, M1064A3, and M58 only	
Replacement . . . . .	0379 00-1
Auxiliary power unit fuel shutoff valve	
M577A3 and M1068A3 only	
Replace . . . . .	0676 00-1
Auxiliary power unit valve-to-bulkhead fuel supply hoses	
M577A3 and M1068A3 only	
Replace . . . . .	0677 00-1
Auxiliary Tank	
Replace . . . . .	0230 00-1
Auxiliary tank fluid level detector	
Replacement . . . . .	0329 00-1
Azimuth lock	
Commander's cupola	
M113A3, M1059A3, M58, and M1064A3 only	
Replacement . . . . .	0489 00-1
<b>B</b>	
Backpack stowage rack (M981A3)	
Replace . . . . .	0599 00-1
Balance Hose, replace . . . . .	0234 00-1
Base	
Smoke grenade launcher	
M113A3, M901A3, M981A3, and M1059A3 only	
Replacement . . . . .	0455 00-1
Base Extension	
Right Side M1068A3	
Replace . . . . .	0623 00-1
Base Extension Supports	
Right Side	
(M1068A3 Only)	
Replace . . . . .	0624 00-1
Batteries and battery box	
M981A3 and M58 only	
Replacement . . . . .	0348 00-1



INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Batteries and retainers	
(Left side)	
M1064A3 only	
Replacement . . . . .	0349 00-1
M113A3, M901A3, and M1059A3 only	
Replacement . . . . .	0346 00-1
M577A3 and M1068A3 only	
Replacement . . . . .	0347 00-1
Batteries and retainers (left side)	
M1064A3 only	
Replacement . . . . .	0349 00-1
Battery	
Drawer (M1064A3)	
Insulation, Coolant Heater	
Replace . . . . .	0719 00-1
Battery box	
M113A3, M901A3, and M1059A3 only	
Repair . . . . .	0350 00-1
M577A3 and M1068A3 only	
Repair . . . . .	0351 00-1
Battery box (right side)	
M1064A3	
Repair . . . . .	0354 00-1
Battery box access cover	
M577A3 and M1068A3 only	
Repair . . . . .	0352 00-1
Battery Box Insulation and Heat Exchanger	
Replace . . . . .	0718 00-1
Battery box vent fitting	
M981A3 and M58 only	
Replacement . . . . .	0355 00-1
Battery drawer	
M1064A3 only	
Repair . . . . .	0353 00-1
Battery ground lead	
M577A3 and M1068A3 only	
Connect . . . . .	0338 00-1
Disconnect . . . . .	0338 00-1
M981A3 only	
Connect . . . . .	0339 00-1
Disconnect . . . . .	0339 00-1
Battery ground strap	
M113A3, M901A3, M1059A3, M1064A3, and M58 only	
Connect . . . . .	0337 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Disconnect . . . . .	0337 00-1
Battery leads and terminals	
M113A3, M901A3, and M1059A3 only	
Replacement . . . . .	0340 00-1
M577A3 and M1068A3 only	
Replacement . . . . .	0341 00-1
M58 only	
Replacement . . . . .	0345 00-1
M981A3 only	
Replacement . . . . .	0342 00-1
Battery leads and terminals (left side)	
M1064A3 only	
Replacement . . . . .	0343 00-1
Battery leads and terminals (right side)	
M1064A3 only	
Replacement . . . . .	0344 00-1
Battery to master switch lead (circuit 6)	
M1064A3 only	
Replacement . . . . .	0358 00-1
M113A3, M901A3 and M1059A3 only	
Replacement . . . . .	0356 00-1
M577A3 and M1068A3 only	
Replacement . . . . .	0357 00-1
Battery-to-radio wiring harness (ckt 48)	
M981A3 only	
Replacement . . . . .	0371 00-1
Battery-to-radio wiring harness (left side)	
M113A3, M901A3, and M1059A3 only	
Replacement . . . . .	0369 00-1
Battery-to-radio wiring harness (right side)	
M113A3 only	
Replacement . . . . .	0370 00-1
Battery/generator indicator malfunctions . . . . .	0051 00-1
Bearing	
Tow Start Control Assembly	
Replace . . . . .	0391 00-1
Bearings	
Idler wheel arm	
Replacement . . . . .	0418 00-1
Road wheel support	
Replacement . . . . .	0415 00-1
Belt	
Generator drive	
Adjustment . . . . .	0252 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replacement . . . . .	0253 00-1
Belts	
Personnel	
M113A3 only	
Replace . . . . .	0546 00-1
M577A3 only	
Replace . . . . .	0547 00-1
Personnel seat	
M1059A3, Replace . . . . .	0549 00-1
M1064A3, Replace . . . . .	0550 00-1
M981A3, Replace . . . . .	0548 00-1
Bilge Pump	
Front	
Replace . . . . .	0632 00-1
Pipes	
Front, Replace . . . . .	0631 00-1
Rear	
Replace . . . . .	0635 00-1
Bilge pump circuit breakers	
All except M981A3	
Replacement . . . . .	0275 00-1
Blackout Curtain	
Replace (M577A3 and M1068A3) . . . . .	0629 00-1
Blackout dome lights do not work	
M1068A3 only . . . . .	0041 00-1
Blackout drive light doesn't work . . . . .	0030 00-1
Blackout headlight	
Repair . . . . .	0306 00-1
Replacement . . . . .	0305 00-1
Blackout marker light	
Repair . . . . .	0308 00-1
Replacement . . . . .	0307 00-1
Blackout marker light(s) don't work . . . . .	0034 00-1
Blank display diagnostic troubleshooting	
STE/ICE . . . . .	0138 00-1
Blower switch	
M577A3 and M1068A3 only	
Replacement . . . . .	0278 00-1
Bottom access cover	
Power plant	
Replacement . . . . .	0450 00-1
Box	
Battery	
M113A3, M901A3, and M1059A3 only	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Repair . . . . .	0350 00-1
M577A3 and M1068A3 only	
Repair . . . . .	0351 00-1
Control	
Personnel heater	
Replace . . . . .	0701 00-1
Control, heater	
Personnel heater	
Repair . . . . .	0702 00-1
Heater Control	
Coolant Heater	
Repair . . . . .	0737 00-1
Replace . . . . .	0736 00-1
Box Assembly A5	
Tent Interface Panel (M1068A3)	
Replace . . . . .	0833 00-1
Bracket	
Coolant Heater and Pump	
Replace . . . . .	0732 00-1
Generator	
Replacement . . . . .	0255 00-1
Heater, VFM, M25/M25A1	
M981A3)	
Replace . . . . .	0912 00-1
M13 Orifice	
M1068A3 only	
Replace . . . . .	0781 00-1
Oil can	
Replace . . . . .	0574 00-1
Parking brake	
Replacement . . . . .	0331 00-1
Power Extension Box A18 (M1068A3)	
Replace . . . . .	0836 00-1
Ramp	
(M113A3, M577A3, and M1068A3 Only)	
Replace . . . . .	0516 00-1
Ramp Door Stop	
Replace . . . . .	0517 00-1
Refill Tray	
Chemical Alarm, M113A3	
Replace . . . . .	0922 00-1
Rifle	
Replace . . . . .	0573 00-1
Roadside Data Panel Assembly A13 (M1068A3)	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0835 00-1
Spare Battery, Chemical Alarm, M113A3	
Replace/Repair . . . . .	0921 00-1
Transmission range controller	
Used with cable-activated steering lock	
Replace . . . . .	0387 00-1
Used with solenoid-activated steering lock	
Replace . . . . .	0386 00-1
Bracket,	
Mortar Base Stowage (M1064A3 Only)	
Replace . . . . .	0615 00-1
Windshield Stowage (M1064A3 Only)	
Replace . . . . .	0614 00-1
Brackets	
Tripod stowage (M901A3)	
Replace . . . . .	0592 00-1
Brackets and Mounts	
Right Equipment Rack (M1068A3)	
Replace . . . . .	0814 00-1
Brake	
Parking	
Adjustment . . . . .	0408 00-1
Brake adjustment	
Transmission	
Check . . . . .	0406 00-1
Brake assembly	
Commander's cupola M113A3, M1059A3, M58, and M1064A3 only	
Replacement . . . . .	0492 00-1
Brakes	
Transmission	
Adjust . . . . .	0394 00-1
Breather Hose	
Ramp Cylinder (All Except M1064A3)	
Replace . . . . .	0666 00-1
(M1064A3 Only)	
Replace . . . . .	0667 00-1
Bumper	
Driver's Hatch (M113A3, M1059A3, M1064A3, and M58 Only)	
Replace . . . . .	0532 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Buzzer and switch	
Admittance	
M577A3 and M1068A3 only	
Replacement . . . . .	0334 00-1
Bypass plug	
Pressure switch and differential	
Replace . . . . .	0401 00-1
<b>C</b>	
Cable	
Adapter	
(M1068A3)	
Replace . . . . .	0849 00-1
Adapter (M1068A3)	
Replace . . . . .	0850 00-1
Artillery Communication Inside (M577A3)	
Replace . . . . .	0746 00-1
Commander's Intercommunication Set (M58)	
Replace . . . . .	0893 00-1
Driver's Intercommunication Set (M58)	
Replace . . . . .	0892 00-1
Instrument panel special purpose	
Replacement . . . . .	0290 00-1
Operator's Intercommunication Set (M58)	
Replace . . . . .	0894 00-1
Reel holder (M981A3 and M1064A3)	
Replace . . . . .	0603 00-1
Speedometer	
Repair . . . . .	0861 00-1
Replace . . . . .	0860 00-1
Service . . . . .	0858 00-1
Tachometer	
Repair . . . . .	0865 00-1
Replace . . . . .	0864 00-1
Service . . . . .	0858 00-1
Tube, External, Fire Extinguisher	
Replace . . . . .	0905 00-1
W251, (M1068A3)	
Replace . . . . .	0852 00-1
W252 (M1068A3)	
Replace . . . . .	0857 00-1
W28	
(M1068A3)	
Replace . . . . .	0849 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
W29 (M1068A3)	
Replace . . . . .	0850 00-1
W35	
(M1068A3)	
Replace . . . . .	0849 00-1
W38 (M1068A3)	
Replace . . . . .	0850 00-1
W42, (M1068A3)	
Replace . . . . .	0852 00-1
W43, (M1068A3)	
Replace . . . . .	0852 00-1
Cable (W10)	
DC Power Extension (M1068A3)	
Replace . . . . .	0844 00-1
Cable (W11)	
AC Light (M1068A3)	
Replace . . . . .	0845 00-1
Cable (W4)	
DC Battery (M1068A3)	
Replace . . . . .	0838 00-1
Cable (W40)	
Single Point LAN (M1068A3)	
Replace . . . . .	0851 00-1
Cable (W5)	
Inverter AC	
Replace/Repair . . . . .	0839 00-1
Cable (W6)	
Inverter DC (M1068A3)	
Replace . . . . .	0840 00-1
Cable (W7)	
AC Power Extension	
Replace . . . . .	0842 00-1
Cable (W8)	
AC Power Extension (M1068A3)	
Replace . . . . .	0843 00-1
Cable assembly	
Driver's night vision (DNV) (AN/VVS-2) power supply	
All except M58	
Replacement . . . . .	0368 00-1
Cable Assembly	
Smoke Generator	
Internal (M1059A3 Only)	
Replace . . . . .	0760 00-1
Cable Assembly (W4/W6) (M1068A3)	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Repair . . . . .	0841 00-1
Cable reel holder assembly (M981A3 and M1064A3)	
Repair . . . . .	0604 00-1
Cable W3	
Power Distrubution (M1068A3)	
Replace . . . . .	0837 00-1
Cable, Control	
Fuel cutoff	
Replace . . . . .	0220 00-1
Hand throttle	
Replace . . . . .	0219 00-1
Cable-activated steering lock malfunctions . . . . .	0077 00-1
Cables	
LAN A or B	
W103/W104 (M1068A3)	
Replace . . . . .	0854 00-1
LAN A or B (W103/W104) (M1068A3)	
Replace . . . . .	0854 00-1
W124 (M1068A3)	
Replace . . . . .	0855 00-1
W126, (M1068A3)	
Replace . . . . .	0856 00-1
W45, (M1068A3)	
Replace . . . . .	0853 00-1
Cables and switch assembly	
M14 NBC	
M1059A3 only	
Replace . . . . .	0799 00-1
Capacitor cover	
M981A3 only	
Replacement . . . . .	0372 00-1
Cargo hatch cover	
M113A3, M901A3, M981A3, and M1059A3 only	
Replacement . . . . .	0479 00-1
Cargo hatch hold-open hook and bumpers	
M113A3, M901A3, M981A3, and M1059A3 only	
Replacement . . . . .	0474 00-1
Cargo hatch interior latch	
M113A3, M901A3, M981A3, and M1059A3 only	
Replacement . . . . .	0475 00-1
Cargo hatch latch	
M901A3 only	
Repair . . . . .	0476 00-1



INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Cargo hatch seals	
M113A3, M901A3, M981A3, and M1059A3 only	
Replacement . . . . .	0478 00-1
Cargo hatch support	
M901A3 only	
Replacement . . . . .	0477 00-1
Carrier assembly	
Drive sprocket	
Repair . . . . .	0421 00-1
Carrier does not move in any shift lever position . . . . .	0062 00-1
Carrier drifts or does not steer . . . . .	0063 00-1
Carrier moves with transmission in SL . . . . .	0061 00-1
Cascade Remote Harness	
(M1068A3) Replace . . . . .	0847 00-1
Catches and bumpers	
Mortar hatch exterior	
M1064A3 only	
Replacement . . . . .	0480 00-1
Chain Assembly, Litter Kit (M11A3)	
Repair . . . . .	0745 00-1
Chain Assembly, Litter Kit (M113A3)	
Replace . . . . .	0744 00-1
Chemical Agent Automatic Alarm Kit	
M113A3	
Install/Remove . . . . .	0918 00-1
Junction Box	
Replace . . . . .	0919 00-1
Chemical Agent Automatic Alarm Kit, M113A3	
Bracket	
Refill Tray	
Replace . . . . .	0922 00-1
Junction Box	
Repair . . . . .	0920 00-1
Spare Battery	
Replace/Repair . . . . .	0921 00-1
Wiring Harnesses, M43 Unit Interface	
Replace . . . . .	0923 00-1
Circuit breaker	
Dome light	
M577A3 and M1068A3 only	
Replacement . . . . .	0316 00-1
Replacement . . . . .	0280 00-1
Circuit breakers	
Bilge pump	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
All except M981A3	
Replacement . . . . .	0275 00-1
Rear utility receptacle	
M577A3 and M1068A3 only	
Replacement . . . . .	0276 00-1
Clamps,	
Tent (M577A3)	
Replace . . . . .	0627 00-1
Coil	
Ignition, air box heater	
Replace . . . . .	0208 00-1
Combat filler cover and lock	
Replacement . . . . .	0466 00-1
Combat lock	
Power plant door	
Replacement . . . . .	0473 00-1
Commander's Cupola (M113A3, M1059A3, and M1064A3)	
Armor Shields	
Replace . . . . .	0747 00-1
Commander's cupola azimuth lock	
M113A3, M1059A3, M58, and M1064A3 only	
Replacement . . . . .	0489 00-1
Commander's cupola brake assembly	
M113A3, M1059A3, M58, and M1064A3 only	
Replacement . . . . .	0492 00-1
Commander's cupola cover	
M113A3, M1059A3, and M1064A3 only	
Replacement . . . . .	0493 00-1
Commander's cupola cushioning pad and handle	
M113A3, M1059A3, M58, and M1064A3 only	
Replacement . . . . .	0488 00-1
Commander's cupola hold-open hook and bumper	
M113A3, M1059A3, M58, and M1064A3 only	
Replacement . . . . .	0494 00-1
Commander's cupola interior latch	
M113A3, M1059A3, M58, and M1064A3 only	
Replacement . . . . .	0496 00-1
Commander's cupola machine gun mount	
M113A3, M1059A3, M58, and M1064A3 only	
Repair . . . . .	0498 00-1
Replacement . . . . .	0497 00-1
Commander's cupola machine gun mount stops	
M1059A3 only	
Replacement . . . . .	0499 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Commander's cupola safety pin stowage block M113A3, M1059A3, M58, and M1064A3 only Replacement . . . . .	0495 00-1
Commander's cupola vision block locks and seals M1064A3 only Replacement . . . . .	0491 00-1
M113A3 and M1059A3, M58 only Replacement . . . . .	0490 00-1
Commander's hatch cover M577A3 and M1068A3 only Replacement . . . . .	0503 00-1
Commander's hatch cushioning pad and handle M577A3 and M1068A3 only Replacement . . . . .	0500 00-1
Commander's hatch hook and bumper M577A3 and M1068A3 only Replacement . . . . .	0501 00-1
Commander's hatch interior latch M577A3 and M1068A3 only Replacement . . . . .	0502 00-1
Commander's Intercommunication Set Cable (M58) Replace . . . . .	0893 00-1
Commander's Jump Seat M113A3 Replace . . . . .	0563 00-1
Commander's platform M113A3, M1059A3, M1064A3, and M58 Replace/repair . . . . .	0559 00-1
Commander's Platform (M577A3 and M1068A3) Replace/Repair . . . . .	0564 00-1
Commander's post M1064A3 Replace . . . . .	0561 00-1
M113A3, M1059A3, and M58 Replace . . . . .	0560 00-1
Commander's seat M1064A3 Replace . . . . .	0561 00-1
M1068A3, replace/repair . . . . .	0566 00-1
M113A3, M1059A3, and M58 Replace . . . . .	0560 00-1
M113A3, M1059A3, M1064A3, and M58	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Repair . . . . .	0562 00-1
Commander's Seat	
Replace . . . . .	0565 00-1
Communication Box A11, External	
Lid and Latches	
Replace (M1068A3) . . . . .	0818 00-1
Communication Box A11, External (M1068A3)	
Replace . . . . .	0817 00-1
Communication Cabling Diagram (M58) . . . . .	0884 00-1
Communication Cabling Diagram (M901A3) . . . . .	0883 00-1
Confidence test diagnostic troubleshooting	
STE/ICE . . . . .	0139 00-1
Connector assembly	
M13 Orifice	
M1068A3 only	
Replace . . . . .	0781 00-1
Orifice, VFM, M25/M25A1 (M981A3)	
Replace . . . . .	0908 00-1
Connector assembly, bracket, and quick coupling half	
M13 Orifice	
M1068A3 only	
Replace . . . . .	0781 00-1
Control	
Box	
Personnel heater	
Repair . . . . .	0702 00-1
Cable	
Tow Start	
Adjust . . . . .	0390 00-1
Intercommunications Set M901A3	
Replace . . . . .	0885 00-1
Tow Start	
Replace . . . . .	0391 00-1
Control assembly, bracket, links, and pins (cable-activated lock)	
Push-pull	
Replacement . . . . .	0429 00-1
Control Box	
Coolant Heater	
Repair . . . . .	0737 00-1
Replace . . . . .	0736 00-1
Control box	
Personnel heater	
Replace . . . . .	0701 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Control cable assembly	
Parking brake	
Replacement . . . . .	0411 00-1
Control lever assembly	
Parking brake	
Replacement . . . . .	0412 00-1
Control linkage	
Service brake	
Adjustment . . . . .	0407 00-1
Replacement . . . . .	0410 00-1
Trim vane	
Repair . . . . .	0461 00-1
Control Valve	
Fire Extinguisher	
Replace . . . . .	0904 00-1
Control Valve (with Internal Relief Valve)	
Ramp	
Replace . . . . .	0661 00-1
Controller	
Glow plug	
Replacement . . . . .	0210 00-1
Coolant air separator, replace . . . . .	0236 00-1
Coolant Heater	
Control Box	
Repair . . . . .	0737 00-1
Replace . . . . .	0736 00-1
Coolant	
Heater to Engine Elbow, Replace . . . . .	0715 00-1
Exhaust Elbow and Pipes	
Replace . . . . .	0724 00-1
Fuel Pump	
Replace . . . . .	0723 00-1
Fuel Shutoff Valve	
Replace . . . . .	0720 00-1
Hoses	
Fuel	
Inlet, Replace . . . . .	0712 00-1
Hoses	
Coolant	
Engine to Battery Box, Replace . . . . .	0714 00-1
Pump to Battery Box, Replace . . . . .	0713 00-1
Fuel	
Filter Valve, Replace . . . . .	0716 00-1
Pump, Replace . . . . .	0711 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Pump	
Replace . . . . .	0731 00-1
Replace . . . . .	0728 00-1, 0729 00-1
Wiring Harness	
Replace . . . . .	0735 00-1
Coolant Heater and Pump	
Bracket	
Replace . . . . .	0732 00-1
Coolant Heater Fuel Filter	
Service . . . . .	0708 00-1
Coolant Heater Fuel Pump	
Service . . . . .	0709 00-1
Coolant heater malfunctions . . . . .	0089 00-1
Coolant Heater to Surge Tank Hose	
Replace . . . . .	0725 00-1
Coolant hose and tube, upper, replace . . . . .	0232 00-1
Coolant pump	
Belts, adjust . . . . .	0239 00-1
Idler pulley/belts, replace . . . . .	0240 00-1
Coolant temp indicator malfunctions . . . . .	0053 00-1
Coolant temperature transmitter	
Replacement . . . . .	0321 00-1
Cooling system	
Drain and fill . . . . .	0227 00-1
Coupling assembly	
VFM (M981A3)	
Replace . . . . .	0910 00-1
Cover	
Antenna	
All except M981A3	
Replace . . . . .	0576 00-1
M981A3, replace . . . . .	0601 00-1
Battery box access	
M577A3 and M1068A3 only	
Repair . . . . .	0352 00-1
Capacitor	
M981A3 only	
Replacement . . . . .	0372 00-1
Cargo hatch	
M113A3, M901A3, M981A3, and M1059A3 only	
Replacement . . . . .	0479 00-1
Commander's cupola	
M113A3, M1059A3, and M1064A3 only	
Replacement . . . . .	0493 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Commander's hatch M577A3 and M1068A3 only Replacement . . . . .	0503 00-1
Driver's Hatch (All Except M901A3 and M981A3) Replace . . . . .	0531 00-1
Fan drive pulley access Removal/installation . . . . .	0440 00-1
Thermostat Replace . . . . .	0237 00-1
Tow Start Control Assembly Replace . . . . .	0392 00-1
Cover and lock Combat filler Replacement . . . . .	0466 00-1
Covers Fuel Tank Access (M577A3 and M1068A3) Replace . . . . .	0188 00-1
Mortar hatch M1064A3 only Replacement . . . . .	0482 00-1
Cushion Base Low-Stow M901A3, Replace . . . . .	0596 00-1
Cushioning Pad Driver's Hatch Replace . . . . .	0530 00-1
Cushioning pad and handle Commander's cupola M113A3, M1059A3, M58, and M1064A3 only Replacement . . . . .	0488 00-1
Commander's hatch M577A3 and M1068A3 only Replacement . . . . .	0500 00-1
Cushions Personnel M113A3 only Replace . . . . .	0546 00-1
M577A3 only Replace . . . . .	0547 00-1
Personnel Seat M1059A3, Replace . . . . .	0549 00-1
M1064A3, Replace . . . . .	0550 00-1
M981A3, Replace . . . . .	0548 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Cylinder	
Fire Extinguisher	
Discharge Tubes, Replace . . . . .	0899 00-1
Ramp	
Replace . . . . .	0656 00-1
Cylinder, Turbine	
Fire Extinguisher	
Discharge Tubes (M58 Only), Replace . . . . .	0900 00-1
<b>D</b>	
Data Panel Assembly	
A13 Roadside (M1068A3)	
Replace . . . . .	0835 00-1
Data Panel Assembly (M1068A3)	
A12, Curbside	
Replace . . . . .	0819 00-1
Data Plates, Stencils, Markers, and Decals	
Replace . . . . .	0654 00-1
Dataplates, Decals, and Markers	
All Models . . . . .	0644 00-1
M1059A3 . . . . .	0651 00-1
M1064A3 . . . . .	0652 00-1
M113A3, M1059A3 . . . . .	0647 00-1
M113A3, M901A3, M1059A3, M58 . . . . .	0646 00-1
M113A3, M901A3, M981A3, M1059A3 . . . . .	0645 00-1
M577A3, M1068A3 Only . . . . .	0648 00-1
M58 . . . . .	0653 00-1
M901A3 . . . . .	0649 00-1
M981A3 . . . . .	0650 00-1
DC Battery Cable (W4) (M1068A3)	
Replace . . . . .	0838 00-1
DC power extension box (M1068A)	
A9, replace . . . . .	0834 00-1
DC Power Extension Cable (W10)	
(M1068A3)	
Replace . . . . .	0844 00-1
DCA battery voltage diagnostic troubleshooting . . . . .	0141 00-1
DCA current shunt diagnostic troubleshooting . . . . .	0142 00-1
Detector	
Auxiliary tank fluid level	
Replacement . . . . .	0329 00-1
Diagram	
Communication Cabling (M58) . . . . .	0884 00-1
Communication Cabling (M901A3) . . . . .	0883 00-1



INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Differential pressure switch	
Bypass plug	
Replace . . . . .	0401 00-1
Fuel filter	
Replacement . . . . .	0328 00-1
Dipstick	
Transmission oil level filler tube, and adapter	
(X200-4 only)	
Replace . . . . .	0395 00-1
(X200-4A only)	
Replace . . . . .	0396 00-1
Discharge Tubes	
Cylinder	
Replace . . . . .	0899 00-1
Discharge Tubes (M58 Only)	
Cylinder, Turbine	
Replace . . . . .	0900 00-1
Distribution box	
M113A3, M901A3, M1059A3, M1064A3, and M58 only	
Repair . . . . .	0270 00-1
Replacement . . . . .	0269 00-1
M577A3 and M1068A3 only	
Replacement . . . . .	0271 00-1
Distribution Box	
M901A3 only	
Replacement . . . . .	0272 00-1
Distribution box	
M981A3 only	
Repair . . . . .	0273 00-1
Replacement . . . . .	0273 00-1
Distribution Box	
STE/ICE	
M113A3, M901A3, and M1059A3	
Replace . . . . .	0874 00-1
STE/ICE, M1064A3	
Replace . . . . .	0877 00-1
STE/ICE, M577A3 and M1068A3	
Replace . . . . .	0875 00-1
STE/ICE, M981A3	
Replace . . . . .	0876 00-1
Distribution box catch and strike	
M981A3 only	
Replacement . . . . .	0274 00-1
Distribution Panel Assembly, Power, VFM	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
M981A3	
Replace/Repair . . . . .	0913 00-1
Dome blackout light bypass switch	
M577A3 and M1068A3 only	
Replacement . . . . .	0317 00-1
Dome light	
All except M577A3 and M1068A3	
Repair . . . . .	0310 00-1
Replacement . . . . .	0309 00-1
M577A3 and M1068A3 only	
Repair . . . . .	0312 00-1
Replacement . . . . .	0311 00-1
Dome light and mount	
M577A3 and M1068A3 only	
Repair . . . . .	0312 00-1
Dome light circuit breaker	
M577A3 and M1068A3 only	
Replacement . . . . .	0316 00-1
Dome light lens	
All except M577A3 and M1068A3	
Replacement . . . . .	0313 00-1
Dome light malfunction	
M577A3 only . . . . .	0040 00-1
Dome light switch	
Front	
M577A3 and M1068A3 only	
Replacement . . . . .	0314 00-1
Rear	
M577A3 and M1068A3 only	
Replacement . . . . .	0315 00-1
Dome light(s) do not work . . . . .	0039 00-1
Door	
Power plant	
All except M113A3	
Replacement . . . . .	0471 00-1
M113A3 only	
Replacement . . . . .	0470 00-1
Repair . . . . .	0472 00-1
Door combat lock	
Power plant	
Replacement . . . . .	0473 00-1
Drain Check Valve and tubes	
Left Air Box	
Replace . . . . .	0159 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Drain cock and hose, replace . . . . .	0235 00-1
Drain plug	
Hull	
Replacement . . . . .	0451 00-1
Drain plugs	
Final drive hull	
Replacement . . . . .	0452 00-1
Fuel tank (all except M577A3 and M1068A3)	
Replace . . . . .	0187 00-1
Ramp	
Replacement . . . . .	0515 00-1
Drawer	
Battery	
M1064A3 only	
Repair . . . . .	0353 00-1
Small items storage (M981A3)	
Repair . . . . .	0598 00-1
Drive belt	
Generator	
Replacement . . . . .	0253 00-1
Drive Belt	
Ventilating Fan	
Replace . . . . .	0243 00-1
Drive pulley	
Ventilating fan	
Replace . . . . .	0244 00-1
Drive shaft and bearing housing	
Fan	
Replacement . . . . .	0248 00-1
Drive sprocket and carrier assembly	
Replacement . . . . .	0420 00-1
Drive sprocket carrier assembly	
Repair . . . . .	0421 00-1
Driver's compartment floor plates	
Replacement . . . . .	0453 00-1
Driver's footrest	
Replace . . . . .	0558 00-1
Driver's hatch	
AN/VVS-2 driver's night vision guard (All except M58)	
Replace . . . . .	0536 00-1
Driver's Hatch	
Bumper	
(M113A3, M1059A3, M1064A3, and M58 Only)	
Replace . . . . .	0532 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Cover	
(All Except M901A3 and M981A3)	
Replace . . . . .	0531 00-1
Cushioning Pad	
Replace . . . . .	0530 00-1
Exterior Lock	
(All Except M901A3 and M981A3)	
Replace . . . . .	0531 00-1
Hold-open Hook	
(M113A3, M1059A3, M1064A3, and M58 Only)	
Replace . . . . .	0532 00-1
Hold-open Hook and Bumper	
M577A3 and M1068A3, Replace . . . . .	0533 00-1
Interior Latch	
Replace . . . . .	0534 00-1
Interior Lock	
Replace . . . . .	0534 00-1
Driver's hatch	
M901A3 and M981A3	
Repair . . . . .	0538 00-1
Driver's Hatch	
Vision Block Locks and Seals, Replace . . . . .	0535 00-1
Driver's Intercommunication Set	
Cable (M58)	
Replace . . . . .	0892 00-1
Driver's Level Indicator	
(M901A3 and M981A3), Replace/Repair . . . . .	0630 00-1
Driver's night vision (DNV) (AN/VVS-2) power supply cable assembly	
All except M58	
Replacement . . . . .	0368 00-1
Driver's night vision mount (AN/VVS-2)	
All except M58	
Replace . . . . .	0537 00-1
Driver's Night Vision Stowage (AN/VVS-2)	
All except M58, Replace . . . . .	0572 00-1
Driver's power plant access panel	
Replacement . . . . .	0441 00-1
Driver's Seat	
Repair . . . . .	0552 00-1
Driver's seat assembly	
Replace . . . . .	0551 00-1
Driver's seat back assembly	
Repair . . . . .	0554 00-1
Replace . . . . .	0553 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Driver's seat impact absorber	
Replace . . . . .	0555 00-1
Driver's seat post assembly	
Repair . . . . .	0557 00-1
Replace . . . . .	0556 00-1
Driver's windshield	
Replace . . . . .	0739 00-1
towage bag, straps, and decal	
Replace . . . . .	0740 00-1
<b>E</b>	
Elbow	
Air intake	
Replace . . . . .	0173 00-1
Coolant Heater Exhaust	
Replace . . . . .	0724 00-1
Electrical Cable Assembly	
Air Compressor	
(M1059A3 Only)	
Replace . . . . .	0758 00-1
Fog Oil Pump	
(M1059A3 Only)	
Replace . . . . .	0759 00-1
Smoke Generator	
(Adapter Access Plate to Generator) (M1059A3 Only)	
Replace . . . . .	0761 00-1
Element	
Filter	
Air Cleaner	
Service . . . . .	0167 00-1
Enclosure	
Generator set (M577A3 and M1068A3)	
Replace . . . . .	0674 00-1
Enclosure Assembly	
A1	
Power Control	
Replace . . . . .	0826 00-1
Engine	
Adapter, Tachometer	
Replace . . . . .	0863 00-1
Block Fitting and Hardware	
Replace . . . . .	0717 00-1
Exhaust elbows	
Left/right, replace . . . . .	0225 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Fuel return hose	
Replace . . . . .	0201 00-1
Fuel supply hose	
Replace . . . . .	0200 00-1
Lifting bracket, replace . . . . .	0161 00-1
Oil filler cap, replace . . . . .	0162 00-1
Oil sampling valve and hose, replace . . . . .	0163 00-1
Engine Coolant Heater System	
Drain and Fill . . . . .	0710 00-1
Engine coolant low level indicator malfunctions . . . . .	0058 00-1
Engine Coolant Pump	
Replace . . . . .	0241 00-1
Engine cranks but will not start . . . . .	0021 00-1
Engine cranks but won't start below 40 degrees (air box heater is used) . . . . .	0022 00-1
Engine cranks but won't start below 40 degrees F (glow plugs are used) . . . . .	0023 00-1
Engine cranks slowly . . . . .	0020 00-1
Engine does not crank . . . . .	0016 00-1
Engine does not start (cold weather only) . . . . .	0017 00-1
Engine exhaust elbows and double flex joint	
Replacement . . . . .	0221 00-1
Engine fuel pump	
Replacement . . . . .	0166 00-1
Engine Mounts	
Replace . . . . .	0158 00-1
Engine oil low pressure indicator comes on . . . . .	0026 00-1
Engine oil low pressure indicator malfunctions . . . . .	0055 00-1
Engine oil low pressure transmitter and hardware	
Replacement . . . . .	0320 00-1
Engine overcools . . . . .	0015 00-1
Engine overheats . . . . .	0014 00-1
Engine runs rough, stalls, or doesn't put out full power . . . . .	0024 00-1
Engine start switch	
Replacement . . . . .	0284 00-1
Engine wiring harness	
Replacement . . . . .	0359 00-1
Equipment Description . . . . .	0002 00-1
Location and Description of Major Components . . . . .	0002 00-1
Evacuator valve and connector	
Exhaust	
Replace . . . . .	0175 00-1
Exhaust	
Evacuator valve and connector	
Replace . . . . .	0175 00-1
Exhaust elbows and double flex joint	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Engine	
Replacement . . . . .	0221 00-1
Exhaust Joint, Double Flex, Repair . . . . .	0222 00-1
Exhaust muffler and bracket	
Replace . . . . .	0224 00-1
Exhaust Pipe Heat Shield, Turbo, Left/Right, Replace . . . . .	0226 00-1
Exhaust Pipes, Heater	
IAll Except M1064A3)	
Replace . . . . .	0682 00-1
Expendable/Durable Supplies and Materials List . . . . .	0928 00-1
Extension Box A7	
AC Power	
Replace . . . . .	0815 00-1
Exterior catches and bumpers	
Mortar hatch	
M1064A3 only	
Replacement . . . . .	0480 00-1
Exterior Lock	
Driver's Hatch	
(All Except M901A3 and M981A3)	
Replace . . . . .	0531 00-1
External Handle	
Fire Extinguisher	
Replace . . . . .	0904 00-1
External Handle Shield	
M1064A3	
Replace . . . . .	0903 00-1
M113A3, M901A3, M981A3, and M1059A3	
Replace . . . . .	0901 00-1
M577A3 and M1068A3	
Replace . . . . .	0902 00-1
Extinguisher, Fire	
Cylinder and Mount	
Replace . . . . .	0898 00-1
<b>F</b>	
Fan	
Ventilating (M901A3 and M981A3)	
Replace . . . . .	0866 00-1
Ventilation	
M577A3 and M1068A3 only	
Replacement . . . . .	0383 00-1
Fan and generator variable speed drive	
Replacement . . . . .	0249 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Fan drive pulley access cover	
Removal/installation . . . . .	0440 00-1
Fan drive shaft and bearing housing	
Replacement . . . . .	0248 00-1
Field pressure switch	
Generator	
Replacement . . . . .	0323 00-1
Filler Cap	
Strainer Parts	
(All Except M577A3 and M1068A3)	
Replace . . . . .	0184 00-1
(M577A3 AND M1068A3), Replace . . . . .	0185 00-1
Filler Cover and Lock	
Fuel Tank	
Replace . . . . .	0182 00-1
Filler Flange	
Fuel Tank	
(M577A3 and M1068A3 Only)	
Replace . . . . .	0189 00-1
Filler tube	
Dipstick, transmission oil level	
(X200-4 only)	
Replace . . . . .	0395 00-1
(X200-4A only)	
Replace . . . . .	0396 00-1
Filler tube and dipstick	
Final drive	
Replacement . . . . .	0402 00-1
Filler, fuel and strainer parts (M577A3 and M1068A3), replace . . . . .	0186 00-1
Filter	
Fuel	
Replace . . . . .	0726 00-1
Gas, VFM, M25/M25A1	
(M981A3)	
Replace . . . . .	0906 00-1
Filter assembly	
Precleaner/particulate	
(M981A3 )	
Replace . . . . .	0909 00-1
Filter Element	
Transmission oil	
Replace . . . . .	0398 00-1
Final drive	
Replacement . . . . .	0403 00-1



INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Final drive differential oil seal	
Replacement . . . . .	0404 00-1
Final drive filler tube and dipstick	
Replacement . . . . .	0402 00-1
Final drive hull drain plugs	
Replacement . . . . .	0452 00-1
Fire Extinguisher	
Cylinder and Mount	
Replace . . . . .	0898 00-1
Fire Extinguisher	
Control Valve	
Replace . . . . .	0904 00-1
External Handle	
Replace . . . . .	0904 00-1
M1059A3	
Replace . . . . .	0896 00-1
Fittings	
Coolant Heater Fuel Inlet	
Replace . . . . .	0712 00-1
Fuel Return	
M1064A3	
Replace . . . . .	0197 00-1
M113A3, M901A3, M981A3, M1059A3, and M58	
Replace . . . . .	0195 00-1
M577A3 and M1068A3	
Replace . . . . .	0196 00-1
Fuel Vent (M577A3 and M1068A3)	
Replace . . . . .	0198 00-1
Personnel heater	
M577A3, M901A3, and M1068A3 only	
Replace . . . . .	0700 00-1
Ramp Control Valve (with Internal Relief Valve)	
Replace . . . . .	0661 00-1
Flame Detector Switch	
Adjust . . . . .	0727 00-1
Coolant Heater	
Replace . . . . .	0734 00-1
Flat pulleys and bearings	
Replacement . . . . .	0245 00-1
Floor plates	
Driver's compartment	
Replacement . . . . .	0453 00-1
M1068A3 only	
Replace . . . . .	0544 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Floor Plates	
M113A3 and M577A3 only	
Replace . . . . .	0539 00-1
Floor plates	
M58 only	
Replace . . . . .	0545 00-1
Floor Plates (M1059A3)	
Replace . . . . .	0542 00-1
Floor Plates (M1064A3)	
Replace . . . . .	0543 00-1
Floor Plates (M901A3)	
Replace . . . . .	0540 00-1
Floor Plates (M981A3)	
Replace . . . . .	0541 00-1
Fluid level detector	
Auxiliary tank	
Replacement . . . . .	0329 00-1
Fluorescent Light Assemblies	
(M1068A3)	
Replace . . . . .	0825 00-1
Fluorescent lights do not operate	
M1068A3 only . . . . .	0102 00-1
Fog Oil (M1059A3)	
Tank Module	
Replace . . . . .	0753 00-1
Fog Oil Pump	
Electrical Cable Assembly	
(M1059A3 Only)	
Replace . . . . .	0759 00-1
Fog Oil Pump Assembly	
(M1059A3 Only)	
Replace . . . . .	0763 00-1
Fog Oil Quick Disconnect to Adapter Access Plate Hose (M1059A3), Cover Assembly	
Replace . . . . .	0770 00-1
Fog Oil Tank (M1059A3)	
Hose	
Quick Disconnect to Adapter Access Plate	
Replace . . . . .	0769 00-1
Footrest	
Driver's	
Replace . . . . .	0558 00-1
Forward spall liner and bracket	
M113A3 only	
Replacement . . . . .	0507 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Forward Table, Right	
M577A3, Replace . . . . .	0581 00-1
Forward upper right and left side spall liners	
M113A3 only	
Replacement . . . . .	0508 00-1
Frame	
Blackout Curtain (M577A3 and M1068A3)	
Replace . . . . .	0629 00-1
Front access cover	
Hull	
Replacement . . . . .	0449 00-1
Front and/or rear bilge pump(s) and/or lights don't work . . . . .	0080 00-1
Front Armor	
(M113A3) Replace . . . . .	0749 00-1
Front armor plate	
Left	
Replacement . . . . .	0447 00-1
Right	
Replacement . . . . .	0448 00-1
Front Bilge Pump	
Replace . . . . .	0632 00-1
Strainer	
Replace . . . . .	0632 00-1
Front Bilge Valve	
Replace . . . . .	0633 00-1
Front dome light switch	
M577A3 and M1068A3 only	
Replacement . . . . .	0314 00-1
Fuel control cable	
Replace . . . . .	0220 00-1
Fuel Shutoff Valve	
Coolant Heater	
Replace . . . . .	0720 00-1
Fuel Can Lid Assembly	
Smoke Generator (M1059A3)	
Replace . . . . .	0764 00-1
Fuel cap vent and filter screen, clean . . . . .	0176 00-1
Fuel Control Linkage	
Replace . . . . .	0217 00-1
Fuel Control Shaft	
Replace . . . . .	0217 00-1
Fuel Filter	
Coolant Heater	
Service . . . . .	0708 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Fuel filter	
Personnel heater	
M577A3, M901A3, and M1068A3 only	
Replace . . . . .	0700 00-1
Fuel Filter	
Replace . . . . .	0726 00-1
Fuel filter differential pressure switch	
Replacement . . . . .	0328 00-1
Fuel Filter Elements	
Primary and Secondary	
Replace . . . . .	0202 00-1
Fuel filter, hose, tube, and fittings	
Personnel heater	
M577A3, M901A3, and M1068A3 only	
Replace . . . . .	0700 00-1
Fuel filter, hoses, and fittings	
Personnel heater	
M1064A3 only	
Replace . . . . .	0688 00-1
Fuel Filters and Brackets	
Primary and Secondary	
Replace . . . . .	0203 00-1
Fuel level indicator malfunctions . . . . .	0049 00-1
Fuel Line	
Air box Heater	
Replace . . . . .	0206 00-1
Fuel Lines	
Air From Personnel Heater	
Bleed . . . . .	0679 00-1
Fuel Lines and Guards	
Smoke Generator (M1059A3)	
Replace . . . . .	0765 00-1
Fuel Pump	
Coolant Heater	
Replace . . . . .	0723 00-1
Service . . . . .	0709 00-1
Fuel pump	
Engine	
Replacement . . . . .	0166 00-1
Fuel Pump Hose	
Coolant Heater	
Replace . . . . .	0711 00-1
Fuel quantity transmitter	
All except M577A3 and M1068A3, replace . . . . .	0190 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
M577A3A and M1068A3, replace . . . . .	0191 00-1
Fuel return hoses	
Engine	
Replace . . . . .	0201 00-1
M1064A3	
Replace . . . . .	0197 00-1
M113A3, M901A3, M981A3, M1059A3, and M58	
Replace . . . . .	0195 00-1
M577A3 and M1068A3	
Replace . . . . .	0196 00-1
Fuel return pressure transducer	
Replacement . . . . .	0325 00-1
Fuel select switch to gauge lead	
All except M577A3 and M1068A3	
Replacement . . . . .	0281 00-1
Fuel selector switch	
M577A3 and M1068A3 only	
Replacement . . . . .	0277 00-1
Fuel shut-off valve	
Assembly (M113A3, M981A3, M1059A3, and M58)	
Personnel heater	
Replace . . . . .	0684 00-1
Fuel shutoff valve	
Auxiliary power unit	
M577A3 and M1068A3 only	
Replace . . . . .	0676 00-1
Fuel Supply	
Hoses, Tubes, and Fittings	
M1064A3	
Replace . . . . .	0194 00-1
M113A3, M901A3, M981A3, M1059A3, and M58	
Replace . . . . .	0192 00-1
Fuel supply	
Hoses, tubes, and fittings	
M577A3 and M1068A3	
Replace . . . . .	0193 00-1
Fuel supply hoses	
Auxiliary power unit bulkhead-to-hull	
M577A3 and M1068A3 only	
Replace . . . . .	0678 00-1
Auxiliary power unit valve-to-bulkhead	
M577A3 and M1068A3 only	
Replace . . . . .	0677 00-1
Engine	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0200 00-1
Fuel supply pressure transducer	
Replacement . . . . .	0324 00-1
Fuel Tank	
Access Covers (M577A3 and M1068A3)	
Replace . . . . .	0188 00-1
Filler Cover and Lock	
Replace . . . . .	0182 00-1
Filler Flange	
(M577A3 and M1068A3 Only)	
Replace . . . . .	0189 00-1
Fuel tank access covers	
All except M577A3 abd N1068A3, replace . . . . .	0187 00-1
Fuel tank drain plugs (all except M577A3 and M1068A3), replace . . . . .	0187 00-1
Fuel tank filler	
Cover and lock (M577A3 and M1068A3), replace . . . . .	0183 00-1
Fuel tanks	
All except M577A3 and M1068A3, replace . . . . .	0179 00-1
Drain	
All except M577A3 and M1068A3 . . . . .	0177 00-1
Fuel Tanks	
Drain	
M577A3 and M1068A3 . . . . .	0178 00-1
Fuel tanks	
M577A3 and M1068A3	
Replacement . . . . .	0180 00-1
Temporary repair (M577A3 and M1068A3) . . . . .	0181 00-1
Fuel tube	
Personnel heater	
All except M1064A3	
Replace . . . . .	0686 00-1
Fuel Valve	
Mounting Blocks	
(All Except M577A3 and M1068A3)	
Replace . . . . .	0199 00-1
Fuel Vent Hoses, Tubes, and Fittings (M577A3 and M1068A3)	
Replace . . . . .	0198 00-1
<b>G</b>	
Gas filter	
VFM, M25/M25A1	
(M981A3)	
Replace . . . . .	0906 00-1
Gasket	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Adapter Access Plate	
Smoke Generator (M1059A3)	
Replace . . . . .	0766 00-1
Turbine access door	
M58 only	
Replacement . . . . .	0486 00-1
Gauges	
Instrument panel	
Replacement . . . . .	0285 00-1
General Information . . . . .	0001 00-1
Generator	
Drive belt	
Replacement . . . . .	0253 00-1
Replacement . . . . .	0255 00-1
Turnbuckle parts	
Replacement . . . . .	0254 00-1
Generator drive belt	
Adjustment . . . . .	0252 00-1
Generator field pressure switch	
Replacement . . . . .	0323 00-1
Generator malfunctions as indicated by battery/generator indicator . . . . .	0025 00-1
Generator set	
Enclosure (M577A3 and M1068A3)	
Replace . . . . .	0674 00-1
Glow Plug	
Controller Mounting Bracket	
Replace . . . . .	0212 00-1
Glow plug	
Power harness, replace . . . . .	0211 00-1
Glow Plug Cable Assembly	
Smoke Generator (M1059A3)	
Replace . . . . .	0772 00-1
Glow plug controller	
Replacement . . . . .	0210 00-1
Glow plug harness	
Replacement . . . . .	0209 00-1
Glow plugs	
Replacement . . . . .	0209 00-1
Governor assembly	
Replace . . . . .	0397 00-1
Grill	
Air Intake elbow and hose	
Replace . . . . .	0174 00-1
Grill screen	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Power plant	
Replacement . . . . .	0468 00-1
Grill support arm	
Power plant	
Replacement . . . . .	0467 00-1
Grille	
Power plant	
Raise and lower . . . . .	0464 00-1
Removal/installation . . . . .	0465 00-1
Ground lead	
Auxiliary power (slave) receptacle	
M113A3, M901A3, M1059A3, M1064A3, and M58 only	
Replacement . . . . .	0379 00-1
Battery	
M577A3 and M1068A3 only	
Connect . . . . .	0338 00-1
Disconnect . . . . .	0338 00-1
M981A3 only	
Connect . . . . .	0339 00-1
Disconnect . . . . .	0339 00-1
Ground strap	
Battery	
M113A3, M901A3, M1059A3, M1064A3, and M58 only	
Connect . . . . .	0337 00-1
Disconnect . . . . .	0337 00-1
Ground Strap (W12)	
(M1068A3) Replace . . . . .	0846 00-1
Guard	
AN/VVS-2 driver's night vision	
Driver's hatch (All except M58)	
Replace . . . . .	0536 00-1
Antenna	
All except M981A3	
Replace . . . . .	0575 00-1
Antenna (M981A3)	
Replace . . . . .	0600 00-1
Headlight	
Replacement . . . . .	0446 00-1
Smoke grenade launcher	
M113A3, M901A3, M981A3, and M1059A3 only	
Replacement . . . . .	0455 00-1
STE/ICE Shunt (M113A3, M901A3, and M1059A3)	
Replace . . . . .	0868 00-1
STE/ICE Shunt (M981A3)	



INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0869 00-1
<b>H</b>	
Hand throttle control cable	
Replace . . . . .	0219 00-1
Handle and Arms	
Ramp Lock	
(All Except M577A3 and M1068A3)	
Repace . . . . .	0524 00-1
Harness	
Cascade Remote (M1068A3)	
Replace . . . . .	0847 00-1
Glow plug	
Replacement . . . . .	0209 00-1
Trailer	
Replacement . . . . .	0375 00-1
Harness W32	
(M1068A3) Replace . . . . .	0848 00-1
Headlight	
Blackout	
Repair . . . . .	0306 00-1
Replacement . . . . .	0305 00-1
Headlight guard	
Replacement . . . . .	0446 00-1
Headlight high beam selector switch	
Replacement . . . . .	0333 00-1
Headlights	
Service and infrared	
Repair . . . . .	0304 00-1
Replacement . . . . .	0303 00-1
Heat Exchanger	
Battery Box Insulation	
Replace . . . . .	0718 00-1
Heat shield	
Turbo exhaust pipe	
Left/right, replace . . . . .	0226 00-1
Heater	
VFM, M25/M25A1	
M981A3)	
Replace . . . . .	0911 00-1
Water/Ration	
Mount Bracket (M113A3 Only)	
Replace . . . . .	0811 00-1
Power Cable (M113A3 Only)	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0810 00-1
Heater control box	
M3 NBC	
M1068A3 only	
Replace . . . . .	0793 00-1
Heater Hoses and Fittings	
M3 NBC	
Replace . . . . .	0784 00-1
High beam indicator light doesn't work . . . . .	0050 00-1
High beam selector switch	
Headlight	
Replacement . . . . .	0333 00-1
Hinges	
Turbine access door	
M58 only	
Replacement . . . . .	0487 00-1
Hold-open Hook	
Driver's Hatch	
(M113A3, M1059A3, M1064A3, and M58 Only)	
Replace . . . . .	0532 00-1
Hold-open hook and bumper	
Commander's cupola	
M113A3, M1059A3, M58, and M1064A3 only	
Replacement . . . . .	0494 00-1
Hook and bumper	
Commander's cupola hold-open	
M113A3, M1059A3, M58, and M1064A3 only	
Replacement . . . . .	0494 00-1
Commander's hatch	
M577A3 and M1068A3 only	
Replacement . . . . .	0501 00-1
Hook and bumpers	
Cargo hatch hold-open	
M113A3, M901A3, M981A3, and M1059A3 only	
Replacement . . . . .	0474 00-1
Hopper hatch	
M58 only	
Replacement . . . . .	0484 00-1
Hopper hatch lock assembly	
M58 only	
Replacement . . . . .	0483 00-1
Horn and ground lead	
Replacement . . . . .	0336 00-1
Horn does not work . . . . .	0037 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Horn switch	
Replacement . . . . .	0293 00-1
Hose	
Battery Plate to Battery Plate	
Replace . . . . .	0722 00-1
Bulkhead to Ramp Cylinder	
Replace . . . . .	0665 00-1
Coolant Heater to Surge Tank	
Replace . . . . .	0725 00-1
Fuel Pump Tee To Elbow	
Replace . . . . .	0721 00-1
Fuel return	
Engine	
Replace . . . . .	0201 00-1
Fuel supply	
Engine	
Replace . . . . .	0200 00-1
Personnel heater	
M577A3, M901A3, and M1068A3 only	
Replace . . . . .	0700 00-1
Quick Disconnect to Adapter Access Plate	
Fog Oil Tank (M1059A3)	
Replace . . . . .	0769 00-1
Hose, restriction indicator	
Air cleaner	
Replace . . . . .	0172 00-1
Hoses	
Auxiliary power unit bulkhead-to-hull fuel supply	
M577A3 and M1068A3 only	
Replace . . . . .	0678 00-1
Fuel Vent (M577A3 and M1068A3)	
Replace . . . . .	0198 00-1
M13 NBC heater	
M1068A3 only	
Replace . . . . .	0790 00-1
Transmission oil supply and return	
Replacement . . . . .	0251 00-1
Hoses from thermostat to	
Variable speed drive	
Replacement . . . . .	0250 00-1
Hoses from thermostat to variable speed drive	
Replacement . . . . .	0250 00-1
Hoses, Tubes, and Fittings	
Fuel Supply	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
M1064A3	
Replace . . . . .	0194 00-1
M113A3, M901A3, M981A3, M1059A3, and M58	
Replace . . . . .	0192 00-1
Hoses, tubes, and fittings	
Fuel supply	
M577A3 and M1068A3	
Replace . . . . .	0193 00-1
How to Use Troubleshooting	
Introduction . . . . .	0005 00-1
Hub	
Road wheel	
Replacement . . . . .	0416 00-1
Hull	
Repair By Welding . . . . .	0529 00-1
Hull drain plug	
Replacement . . . . .	0451 00-1
Hull drain plugs	
Final drive	
Replacement . . . . .	0452 00-1
Hull front access cover	
Replacement . . . . .	0449 00-1
Hydraulic Reservoir	
Breather	
Service . . . . .	0670 00-1
Hydraulic Hoses	
Power Plant	
Replace . . . . .	0668 00-1
Hydraulic Pump	
Ramp	
Replace . . . . .	0655 00-1
Hydraulic Reservoir	
Repair . . . . .	0672 00-1
Replace . . . . .	0671 00-1
Hydraulic Reservoir	
Service . . . . .	0669 00-1
<b>I</b>	
Idler	
Pulley/belts, coolant pump, replace . . . . .	0240 00-1
Idler Arm	
Replacement . . . . .	0246 00-1
Idler wheel	
Replacement . . . . .	0425 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Idler wheel arm assembly	
Replacement . . . . .	0417 00-1
Idler wheel arm bearings and seals	
Replacement . . . . .	0418 00-1
Igniter	
Air Heater	
Replace . . . . .	0207 00-1
Replace . . . . .	0730 00-1
Ignition coil	
Air box heater	
Replace . . . . .	0208 00-1
Impact absorber	
Driver's seat	
Replace . . . . .	0555 00-1
In blackout mode, fluorescent lights operate incorrectly	
M1068A3 only . . . . .	0101 00-1
Indicator	
Driver's Level	
Replace/Repair (M901A3 and M981A3) . . . . .	0630 00-1
Indicator lights	
Replacement . . . . .	0286 00-1
Infrared headlight(s) don't work . . . . .	0032 00-1
Inoperable ramp	
Lower . . . . .	0513 00-1
Raise . . . . .	0513 00-1
Instrument panel	
Replacement . . . . .	0279 00-1
Instrument panel and/or trans controller illumination lights malfunction . . . . .	0038 00-1
Instrument panel gauges	
Replacement . . . . .	0285 00-1
Instrument panel mounts and ground lead	
Replacement . . . . .	0295 00-1
Instrument panel on-off switches	
Replacement . . . . .	0282 00-1
Instrument panel special purpose cable	
Replacement . . . . .	0290 00-1
Instrument panel warning lights	
Replacement . . . . .	0287 00-1
Instrument panel wiring harness	
Battery-generator gauge	
All except M981A3	
Replacement . . . . .	0289 00-1
Instrument warning light panel	
Replacement . . . . .	0288 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Insulation, Battery Drawer, Coolant Heater (M1064A3)	
Replace . . . . .	0719 00-1
Intercom Amplifier	
M901A3 and M58	
Replace . . . . .	0888 00-1
Intercommunications Set Control	
M901A3 and M58	
Replace . . . . .	0885 00-1
Interface Wiring Harnesses	
M43 Unit	
Chemical Alarm, M113A3	
Replace . . . . .	0923 00-1
Interior latch	
Cargo hatch	
M113A3, M901A3, M981A3, and M1059A3 only	
Replacement . . . . .	0475 00-1
Commander's cupola	
M113A3, M1059A3, M58, and M1064A3 only	
Replacement . . . . .	0496 00-1
Commander's hatch	
M577A3 and M1068A3 only	
Replacement . . . . .	0502 00-1
Interior Latch	
Driver's Hatch	
Replace . . . . .	0534 00-1
Interior Lock	
Driver's Hatch	
Replace . . . . .	0534 00-1
Interior release mechanisms	
Mortar hatch	
M1064A3 only	
Replacement . . . . .	0481 00-1
Intervehicle power cable	
M577A3 and M1068A3 only	
Replacement . . . . .	0381 00-1
Inverter	
Housing A2 Terminal Blocks TB1 and TB2	
Replace (M1068A3) . . . . .	0830 00-1
Inverter AC Cable (W5)	
Replace/Repair . . . . .	0839 00-1
Inverter DC Cable (W6) (M1068A3)	
Replace . . . . .	0840 00-1

**J**

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Jump Seat	
Commander's	
M113A3 Replace . . . . .	0563 00-1
Junction Box	
Chemical Alarm, M113A3	
Repair . . . . .	0920 00-1
Power Cable/Alarm Cable, Chemical Alarm	
M113A3	
Replace . . . . .	0919 00-1
<b>K</b>	
Kits	
Armor	
Mine (M113A3)	
Install/Remove . . . . .	0752 00-1
Armor (M113A3)	
Install . . . . .	0748 00-1
Litter (M113A3), Initial Installation of . . . . .	0741 00-1
<b>L</b>	
Lamp	
Transmission range controller	
Replace . . . . .	0388 00-1
LAN (M1068A3)	
Ground Box Assembly A15	
Repair . . . . .	0821 00-1
Replace . . . . .	0820 00-1
LAN Cable (W40) Single Point (M1068A3)	
Replace . . . . .	0851 00-1
Latch	
Cargo hatch	
M901A3 only	
Repair . . . . .	0476 00-1
Launch Tube	
Stowage Bracket	
Replace, M901A3 . . . . .	0590 00-1
Launcher	
Low-stow stowage bracket	
M901A3, Replace . . . . .	0595 00-1
Lead	
Battery ground	
M577A3 and M1068A3 only	
Connect . . . . .	0338 00-1
Disconnect . . . . .	0338 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
M981A3 only	
Connect . . . . .	0339 00-1
Disconnect . . . . .	0339 00-1
Circuit 44A	
Power Control Enclosure (M1068A3)	
Replace . . . . .	0829 00-1
Horn and ground	
Replacement . . . . .	0336 00-1
Lead (circuit 49)	
Master switch to distribution box	
M113A3, M901A3, M1059A3, M1064A3, and M58 only	
Replacement . . . . .	0266 00-1
M577A3 and M1068A3 only	
Replacement . . . . .	0267 00-1
Lead (circuit 50)	
Master switch to auxiliary power receptacle	
M113A3, M901A3, M1059A3, M1064A3, and M58	
Replacement . . . . .	0268 00-1
Lead assembly	
Master switch panel dome lights	
M577A3 and M1068A3 only	
Replacement . . . . .	0380 00-1
Utility outlet	
M577A3 and M1068A3 only	
Replacement . . . . .	0377 00-1
Leads and terminals	
Battery	
M113A3, M901A3, and M1059A3 only	
Replacement . . . . .	0340 00-1
M577A3 and M1068A3 only	
Replacement . . . . .	0341 00-1
M58 only	
Replacement . . . . .	0345 00-1
M981A3 only	
Replacement . . . . .	0342 00-1
Leads and terminals (left side)	
Battery	
M1064A3 only	
Replacement . . . . .	0343 00-1
Leads and terminals (right side)	
Battery	
M1064A3 only	
Replacement . . . . .	0344 00-1
Left Air Box	



INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Drain Check Valve and tubes	
Replace . . . . .	0159 00-1
Left front armor plate	
Replacement . . . . .	0447 00-1
Left rear utility outlet/blower does not work	
M577A3 and M1068A3 only . . . . .	0043 00-1
Left Side Rack Base	
(M1068A3 Only)	
Replace . . . . .	0616 00-1
Left side spill liners	
M113A3 only	
Replacement . . . . .	0505 00-1
Left stop light - tail light	
M577A3 and M1068A3 only	
Replacement . . . . .	0299 00-1
Repair . . . . .	0300 00-1
Lens	
Dome light	
All except M577A3 and M1068A3	
Replacement . . . . .	0313 00-1
Lever and Cable	
Ramp Lock	
(M577A3 and M1068A3 only)	
Repace . . . . .	0525 00-1
Lid and Latches	
External Communication Box A11	
Replace (M1068A3) . . . . .	0818 00-1
Lifting Eye	
Replacement . . . . .	0444 00-1
Light	
Blackout marker	
Repair . . . . .	0308 00-1
Replacement . . . . .	0307 00-1
Dome	
All except M577A3 and M1068A3	
Repair . . . . .	0310 00-1
Replacement . . . . .	0309 00-1
M577A3 and M1068A3 only	
Repair . . . . .	0312 00-1
Replacement . . . . .	0311 00-1
Tent	
M577A3 and M1068A3 only	
Replacement . . . . .	0318 00-1
Utility	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
M981A3	
Replacement . . . . .	0319 00-1
Light Assemblies	
Fluorescent (M1068A3)	
Replace . . . . .	0825 00-1
Light Indicators	
AC AND DC	
Power Control Enclosure (M1068A3)	
Replace . . . . .	0827 00-1
Light switch	
Main	
Replacement . . . . .	0283 00-1
Lights	
Indicator	
Replacement . . . . .	0286 00-1
Instrument panel warning	
Replacement . . . . .	0287 00-1
Panel	
Replacement . . . . .	0286 00-1
Warning panel	
Replacement . . . . .	0294 00-1
Linkage	
Accelerator	
Adjust . . . . .	0214 00-1
Fuel Control	
Replace . . . . .	0217 00-1
Ramp	
(M1064A3 only)	
Replace . . . . .	0528 00-1
(M113A3, M901A3, M981A3, and M1059A3)	
Replace . . . . .	0526 00-1
(M577A3 and M1068A3 only)	
Repace . . . . .	0527 00-1
Steering wheel	
Adjustment . . . . .	0427 00-1
Replacement . . . . .	0430 00-1
Litter Kit (M113A3), Initial Installation of . . . . .	0741 00-1
Lock assembly	
Hopper hatch	
M58 only	
Replacement . . . . .	0483 00-1
Locks	
Ramp	
Adjust (M1064A3 only) . . . . .	0523 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Adjust (M113A3, M901A3, M981A3, and M1059A3 only) . . . . .	0521 00-1
Adjust (M577A3 and M1068A3 only) . . . . .	0522 00-1
Loop and strap	
Water barrier	
M113A3, M577A3, and M1068A3 only	
Replacement . . . . .	0457 00-1
Loops	
Tool Box	
Replace . . . . .	0571 00-1
Low-Stow Stowage Bracket	
Launcher	
M901A3, Replace . . . . .	0595 00-1
<b>M</b>	
M114 NBC Hoses and Brackets	
Replace . . . . .	0783 00-1
M13 Air purifier and frame	
M1068A3 only	
Replace . . . . .	0779 00-1
M13 NBC Filter	
Mount Bracket (M577A3)	
Replace . . . . .	0803 00-1
Switch (M577A3)	
Replace . . . . .	0803 00-1
M13 NBC Filter switch	
M1068A3 only	
Replace . . . . .	0805 00-1
M13 NBC Filters and hoses	
M1068A3 only	
Replace . . . . .	0789 00-1
M13 NBC Filters and Hoses	
Replace . . . . .	0786 00-1
M13 NBC Heater	
Wiring Harness	
(M577A3)	
Replace . . . . .	0808 00-1
M13 NBC heater hoses	
M1068A3 only	
Replace . . . . .	0790 00-1
M13 NBC Heater wiring harness	
M1068A3 only	
Replace . . . . .	0809 00-1
M13 NBC Heaters	
M1068A3 only	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0798 00-1
M13 Orifice connector assembly, bracket, and quick coupling half	
M1068A3 only	
Replace . . . . .	0781 00-1
M14 NBC Cables and switch assembly	
M1059A3 only	
Replace . . . . .	0799 00-1
M14 NBC Heater	
Wiring Harness	
(M113A3 Ambulance)	
Replace . . . . .	0807 00-1
M26	
Periscope/Mount	
M901A3 and M981A3, Replace . . . . .	0583 00-1
M26 Periscope Mount	
M901A3 and M981A3, Repair . . . . .	0584 00-1
M3 NBC Heater	
Bracket (M113A3)	
Replace . . . . .	0791 00-1
Control box (M113A3)	
Replace . . . . .	0791 00-1
Control Box (M577A3 ONLY)	
Replace . . . . .	0792 00-1
Regulator (M113A3)	
Replace . . . . .	0791 00-1
Wiring Harness (M1059A3)	
Replace . . . . .	0806 00-1
M3 NBC Heater control box	
M1068A3 only	
Replace . . . . .	0793 00-1
M3 NBC Heater Hoses and Fittings (M113A3 Ambulance)	
Replace . . . . .	0784 00-1
M3 NBC Hoses and Fittings	
Replace . . . . .	0788 00-1
M8A3 NBC Hoses and Brackets	
Replace . . . . .	0785 00-1, 0787 00-1
M8A3/M14 Orifice connector assembly, support, and quick coupling half	
M113A3, M1059A3, and M577A3 only	
Replace . . . . .	0780 00-1
M8A3/M3 NBC Filter	
Switch Assembly (M1059A3)	
Replace . . . . .	0804 00-1
Machine gun mount	
Commander's cupola	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
M113A3, M1059A3, M58, and M1064A3 only	
Repair . . . . .	0498 00-1
Replacement . . . . .	0497 00-1
Machine gun mount stops	
Commander's cupola	
M1059A3 only	
Replacement . . . . .	0499 00-1
Main light switch	
Replacement . . . . .	0283 00-1
Maintenance Allocation Chart (MAC) . . . . .	0925 00-1
Map Board	
(M1068A3 Only)	
Replace . . . . .	0618 00-1
M577A3, Replace . . . . .	0580 00-1
Map Storage Box	
(M1068A3 (Only)	
Repair . . . . .	0620 00-1
(M1068A3 Only)	
Replace . . . . .	0619 00-1
Master switch	
M113A3, M901A3, M1059A3, M1064A3, and M58 only	
Replacement . . . . .	0262 00-1
Master switch on indicator doesn't light . . . . .	0048 00-1
Master switch panel	
M113A3, M901A3, M1059A3, M1064A3, and M58	
Replacement . . . . .	0260 00-1
M577A3 and M1068A3 only	
Replacement . . . . .	0261 00-1
Master switch panel dome lights lead assembly	
M577A3 and M1068A3 only	
Replacement . . . . .	0380 00-1
Master switch to auxiliary power receptacle lead (circuit 50)	
M113A3, M901A3, M1059A3, M1064A3, and M58	
Replacement . . . . .	0268 00-1
Master switch to distribution box lead (circuit 49)	
M113A3, M901A3, M1059A3, M1064A3, and M58 only	
Replacement . . . . .	0266 00-1
M577A3 and M1068A3 only	
Replacement . . . . .	0267 00-1
Materials and Expendable Supplies List . . . . .	0928 00-1
Meters	
AC AND DC	
Power Control Enclosure (M1068A3)	
Replace . . . . .	0827 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Missile Rack	
Replace . . . . .	0588 00-1
Missile Rack Retainers	
Replace . . . . .	0589 00-1
Mortar hatch covers	
M1064A3 only	
Replacement . . . . .	0482 00-1
Mortar hatch exterior catches and bumpers	
M1064A3 only	
Replacement . . . . .	0480 00-1
Mortar hatch interior release mechanisms	
M1064A3 only	
Replacement . . . . .	0481 00-1
Mount	
AC and DC power extension boxes A6 and A9	
M1068A, replace . . . . .	0834 00-1
Dome light	
M577A3 and M1068A3 only	
Repair . . . . .	0312 00-1
Fire Extinguisher	
M1059A3, Replace . . . . .	0896 00-1
Fire Extinguisher, Portable	
All Except M1068A3	
Replace . . . . .	0895 00-1
M1068A3	
Replace/Repair . . . . .	0897 00-1
M26 Periscope	
M901A3 and M981A3, Repair . . . . .	0584 00-1
Periscope	
M26	
M901A3 and M981A3, Replace . . . . .	0583 00-1
Radio Set	
M901A3	
Replace . . . . .	0890 00-1
Shock absorber	
Replacement . . . . .	0436 00-1
Track tension adjuster	
Replacement . . . . .	0419 00-1
Transmission	
Replace . . . . .	0385 00-1
Traversing Unit	
(M901A3)	
Replace . . . . .	0591 00-1
Mount and Bracket	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
APIU Rack (M1068A3)	
Replace . . . . .	0813 00-1
Mount Bracket	
M13 NBC Filter (M577A3)	
Replace . . . . .	0803 00-1
Water/Ration Heater (M113A3 Only)	
Replace . . . . .	0811 00-1
Mounting	
Pamphlet bag	
Repair . . . . .	0442 00-1
Mounting Blocks	
Fuel Valve (All Except M577A3 and M1068A3)	
Replace . . . . .	0199 00-1
Mounting bracket	
Periscope M901A3 and M981A3 only	
Replace . . . . .	0585 00-1
Mounting Bracket, and Switch	
NBC Orifice Connector Assembly	
Replace . . . . .	0916 00-1
Mounts and ground lead	
Instrument panel	
Replacement . . . . .	0295 00-1
Mounts, Engine	
Replace . . . . .	0158 00-1
Muffler	
Bracket	
Replace . . . . .	0224 00-1
Cap, replace . . . . .	0223 00-1
Extension, replace . . . . .	0223 00-1
Replace . . . . .	0224 00-1
<b>N</b>	
NATO Auxiliary power (slave) receptacle	
M577A3 and M1068A3 only	
Replacement . . . . .	0264 00-1
NBC	
Air Purifier and Frame	
M113A3	
Replace . . . . .	0775 00-1
M58	
Replace . . . . .	0914 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Cable Assembly	
M58	
Remove/Install . . . . .	0917 00-1
Cable to Heaters, Air Purifier, and Switch	
(M113A3)	
Replace . . . . .	0800 00-1
Hose Assemblies	
M58	
Remove/Install . . . . .	0915 00-1
NBC Filter	
Switch Assembly	
(M113A3 and M113A3 Ambulance)	
Replace . . . . .	0802 00-1
NBC Filter switch	
M13	
M1068A3 only	
Replace . . . . .	0805 00-1
NBC Filters and hoses	
M13	
M1068A3 only	
Replace . . . . .	0789 00-1
NBC Heater	
Hoses and Fittings	
Replace . . . . .	0782 00-1
NBC Heater control box	
M3	
M1068A3 only	
Replace . . . . .	0793 00-1
NBC Heater Hoses and Fittings	
Replace . . . . .	0782 00-1
NBC Heater wiring harness	
M13	
M1068A3 only	
Replace . . . . .	0809 00-1
NBC Heaters	
M13	
M1068A3 only	
Replace . . . . .	0798 00-1
NBC Heaters and Controllers	
Replace (M113A3) . . . . .	0794 00-1
NBC kit	
M14	
Air purifier and frame (M113A3)	
Replace . . . . .	0774 00-1



INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
NBC Kit	
M3	
NBC Kit Heaters and Controllers (M113A3 AMBULANCES)	
Replace . . . . .	0795 00-1
NBC kit	
M8A3	
Air purifier and frame with M3 heater kit (M1059A3)	
Replace . . . . .	0778 00-1
NBC Air purifier and frame (M1059A3)	
Replace . . . . .	0777 00-1
M8A3/M13	
Air purifier and frame (M577A3)	
Replace . . . . .	0776 00-1
NBC Kits	
M8A3	
NBC Cables, Switch Assembly, and Brackets (M577A3)	
Replace . . . . .	0801 00-1
NBC Heaters and Mounts (M1059A3)	
Replace . . . . .	0797 00-1
NBC Heaters and Mounts (M577A3)	
Replace . . . . .	0796 00-1
NBC Orifice Connector Assembly	
Mounting Bracket, and Switch	
Replace . . . . .	0916 00-1
NBC Orifice Connector Assembly, Mounting Bracket, and Switch	
Replace . . . . .	0916 00-1
No AC power from inverters	
M1068A3 only . . . . .	0109 00-1
No AC power from tent interface panel A5	
M1068A3 only . . . . .	0091 00-1
No AC/DC input to ATCCS UPS power box	
M1068A3 only . . . . .	0100 00-1
No data output from data panel A12	
M1068A3 only . . . . .	0110 00-1
No data output from data panel A13	
M1068A3 only . . . . .	0112 00-1
No DC output from DC power supply	
M1068A3 only . . . . .	0108 00-1
No DC power from tent interface panel A5	
M1068A3 only . . . . .	0092 00-1
No DC power to single point LAN ground box A15	
M1068A3 only . . . . .	0097 00-1
No exterior lights operate . . . . .	0029 00-1
No LAN output from data panel A12	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
M1068A3 only . . . . .	0111 00-1
No LAN output from data panel A13	
M1068A3 only . . . . .	0113 00-1
No power from curbside AC power extension box A7	
M1068A3 only . . . . .	0094 00-1
No power from curbside UPS power extension box A19	
M1068A3 only . . . . .	0099 00-1
No power from DC power extension box A9 (all except jack J23)	
M1068A3 only . . . . .	0095 00-1
No power from DC power extension box A9, jack J23 (JTIDS)	
M1068A3 only . . . . .	0096 00-1
No power from roadside AC power extension box A6	
M1068A3 only . . . . .	0093 00-1
No power from UPS power extension box A18	
M1068A3 only . . . . .	0098 00-1
No power to AC circuits	
M1068A3 only . . . . .	0107 00-1
No power to DC circuits	
M1068A3 only . . . . .	0106 00-1
Nomenclature Cross-Reference List . . . . .	0001 00-10
Non-skid plates (M1064A3)	
Replace . . . . .	0738 00-1
Nonskid surfaces (M981A3)	
Repair . . . . .	0605 00-1

**O**

Oil	
Cooler hoses, fittings, and mounting	
Transmission	
Replace . . . . .	0399 00-1
Filter Element	
Transmission	
Replace . . . . .	0398 00-1
Filter element, engine, replace . . . . .	0165 00-1
Gauge rod/tube, engine, replace . . . . .	0164 00-1
Tank Module	
Fog (M1059A3)	
Replace . . . . .	0753 00-1
Transmission	
Replace . . . . .	0398 00-1
Oil can bracket	
Replace . . . . .	0574 00-1
Oil drain tubes and bracket	
Transmission	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replacement . . . . .	0384 00-1
Oil high temperature switch	
Transmission	
Replacement . . . . .	0322 00-1
Oil low pressure transmitter and hardware	
Engine	
Replacement . . . . .	0320 00-1
Oil seal	
Differential	
Final drive	
Replacement . . . . .	0404 00-1
Final drive differential	
Replacement . . . . .	0404 00-1
On cargo hatch cover	
Spall liner	
M113A3 only	
Replacement . . . . .	0509 00-1
On ramp	
Spall liner	
M113A3 only	
Replacement . . . . .	0512 00-1
On ramp door	
Spall liner	
M113A3 only	
Replacement . . . . .	0511 00-1
On-off switches	
Instrument panel	
Replacement . . . . .	0282 00-1
Operator's Intercommunication Set Cable	
(M58)	
Replace . . . . .	0894 00-1
Operator's Seat	
Replace/Repair . . . . .	0567 00-1
Orifice connector assembly	
M8A3/M14	
M113A3, M1059A3, and M577A3 only	
Replace . . . . .	0780 00-1
VFM, M25/M25A1	
(M981A3)	
Replace . . . . .	0908 00-1
Orifice connector assembly, support, and quick coupling half	
M8A3/M14	
M113A3, M1059A3, and M577A3 only	
Replace . . . . .	0780 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Orifice connector support	
M8A3/M14	
M113A3, M1059A3, and M577A3 only	
Replace . . . . .	0780 00-1
Orifice support quick coupling half	
M8A3/M14	
M113A3, M1059A3, and M577A3 only	
Replace . . . . .	0780 00-1
<b>P</b>	
Pad	
Cushioning	
Replace . . . . .	0570 00-1
Track shoe	
Replacement . . . . .	0424 00-1
Pamphlet bag mounting	
Repair . . . . .	0442 00-1
Panel	
A13, Roadside Data, (M1068A3)	
Replace . . . . .	0835 00-1
Instrument	
Replacement . . . . .	0279 00-1
Instrument warning light	
Replacement . . . . .	0288 00-1
Master switch	
M113A3, M901A3, M1059A3, M1064A3, and M58	
Replacement . . . . .	0260 00-1
M577A3 and M1068A3 only	
Replacement . . . . .	0261 00-1
Power Distribution, VFM	
M981A3	
Replace/Repair . . . . .	0913 00-1
Warning light	
Replacement . . . . .	0292 00-1
Panel assembly	
Warning light	
Replacement . . . . .	0291 00-1
Panel lights	
Replacement . . . . .	0286 00-1
Parking brake	
Adjustment . . . . .	0408 00-1
Parking brake bracket	
Replacement . . . . .	0331 00-1
Parking brake control cable assembly	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replacement . . . . .	0411 00-1
Parking brake control lever assembly	
Replacement . . . . .	0412 00-1
Parking brake indicator malfunctions . . . . .	0052 00-1
Parking brake switch	
Replacement . . . . .	0331 00-1
Pedal	
Service brake	
Upper and lower	
Replacement . . . . .	0409 00-1
Periscope	
M26	
M901A3 and M981A3, Replace . . . . .	0583 00-1
Periscope mounting bracket	
M901A3 and M981A3 only	
Replace . . . . .	0585 00-1
Personnel heater	
Assembly	
All except M1064A3	
Replace . . . . .	0703 00-1
M1064A3 Only	
Replace . . . . .	0704 00-1
Repair . . . . .	0705 00-1
Control box	
Repair . . . . .	0702 00-1
Replace . . . . .	0701 00-1
Personnel Heater	
Control Box Bracket	
(M1068A3 Only)	
Replace . . . . .	0617 00-1
Personnel heater	
Duct	
Repair . . . . .	0707 00-1
Duct and hoses	
Replace . . . . .	0706 00-1
Fuel filter	
Bracket M113A3, M1059A3, and M58	
Replace . . . . .	0698 00-1
Bracket M981A3	
Replace . . . . .	0699 00-1
M113A3, M1059A3, and M58	
Replace . . . . .	0698 00-1
M981A3	
Replace . . . . .	0699 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Supply hoses (M113A3, M981A3, M1059A3, and M58)	
Replace . . . . .	0685 00-1
Fuel pump	
M1064A3 only	
Replace . . . . .	0697 00-1
M113A3, M1059A3, and M58 only	
Replace . . . . .	0695 00-1
M577A3 and M1068A3 only	
Replace . . . . .	0696 00-1
Fuel pump hose	
(M113A3, M981A3, M1059A3, and M58 only)	
Replace . . . . .	0689 00-1
Hose	
Fuel pump to bulkhead connection (M113A3, M981A3, M1059A3, AND M58)	
Replace . . . . .	0691 00-1
Fuel pump to bulkhead connection (M577A3 AND M1068A3)	
Replace . . . . .	0692 00-1
Fuel pump to bulkhead connection (M901A3)	
Replace . . . . .	0693 00-1
Fuel pump to fuel shutoff valve (M901A3 AND M1064A3)	
Replace . . . . .	0694 00-1
Fuel tank to fuel pump (M577A3 AND M1068A3)	
Replace . . . . .	0690 00-1
Personnel Heater	
Intercom Box Bracket	
(M1068A3 Only)	
Replace . . . . .	0617 00-1
Personnel heater	
Tube	
Bulkhead connection to heater	
M577A3 and M1068A3 replace . . . . .	0687 00-1
Fuel (All except M1064A3)	
Replace . . . . .	0686 00-1
Personnel Heater Fuel Filter	
Service . . . . .	0680 00-1
Personnel Heater Fuel Pump	
Service . . . . .	0681 00-1
Personnel heater malfunctions . . . . .	0086 00-1
Personnel Seats, backrests, cushions and belts	
M1059A3, Replace . . . . .	0549 00-1
M1064A3, Replace . . . . .	0550 00-1
M981A3, Replace . . . . .	0548 00-1
Personnel seats, cushions, and belts	
M113A3 only	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0546 00-1
M577A3 only	
Replace . . . . .	0547 00-1
Phone extension box A14 post(s) inoperative	
M1068A3 only . . . . .	0114 00-1
Pin	
Shock absorber	
Replacement . . . . .	0437 00-1
Pintle	
Towing	
Repair . . . . .	0434 00-1
Replacement . . . . .	0433 00-1
Pipes	
Coolant Heater Exhaust	
Replace . . . . .	0724 00-1
Front Bilge Pump	
Replace . . . . .	0631 00-1
Rear Bilge Pump	
Replace . . . . .	0634 00-1
Plate	
Smoke grenade launcher	
M113A3, M901A3, M981A3, and M1059A3 only	
Replacement . . . . .	0455 00-1
Plates	
Non-skid (M1064A3)	
Replace . . . . .	0738 00-1
Platform	
Commander's	
M113A3, M1059A3, M1064A3, and M58	
Replace/repair . . . . .	0559 00-1
Plug	
Hull drain	
Replacement . . . . .	0451 00-1
Portable Fire Extinguisher Mount	
All Except M1068A3	
Replace . . . . .	0895 00-1
M1068A3	
Replace/Repair . . . . .	0897 00-1
Post	
Commander's Platform (M577A3 and M1068A3)	
Replace/Repair . . . . .	0564 00-1
Commander's seat	
M1064A3	
Replace . . . . .	0561 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
M113A3, M1059A3, and M58	
Replace . . . . .	0560 00-1
Post assembly	
Driver's seat	
Repair . . . . .	0557 00-1
Replace . . . . .	0556 00-1
Post Assembly	
M113A3	
Replace . . . . .	0742 00-1, 0743 00-1
Power Cable	
Chemical Alarm	
M113A3	
Replace . . . . .	0919 00-1
Power cable	
Intervehicle	
M577A3 and M1068A3 only	
Replacement . . . . .	0381 00-1
Power Cable	
Water/Ration Heater	
(M113A3 Only)	
Replace . . . . .	0810 00-1
Power Control Enclosure	
AC AND DC Light Indicators	
(M1068A3)	
Replace . . . . .	0827 00-1
AC AND DC Meters	
(M1068A3)	
Replace . . . . .	0827 00-1
Bracket (M1068A3)	
Repair . . . . .	0828 00-1
Circuit 44A Lead (M1068A3)	
Replace . . . . .	0829 00-1
Faceplate (M1068A3)	
Repair . . . . .	0828 00-1
Power control enclosure A1 DC input/output inoperative	
M1068A3 only . . . . .	0090 00-1
Power Control Enclosure Assembly	
A1	
Replace . . . . .	0826 00-1
Power Distribution	
Panel Assembly, VFM	
M981A3	
Replace/Repair . . . . .	0913 00-1
Power Distribution Box A3	



INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace/Repair . . . . .	0831 00-1
Power Distribution Cable (W3) (M1068A3)	
Replace . . . . .	0837 00-1
Power Entry Box Assembly A4	
Replace . . . . .	0832 00-1
Power Extension	
Box A18, AC (M1068A3)	
Replace . . . . .	0836 00-1
Power Extension Box A18 and Bracket	
(M1068A3)	
Replace . . . . .	0836 00-1
Power Plant	
Block . . . . .	0157 00-1
Hydraulic Hoses	
Replace . . . . .	0668 00-1
Power plant access panel	
Driver's	
Replacement . . . . .	0441 00-1
Power plant assembly	
Removal/Installation . . . . .	0156 00-1
Power plant bottom access cover	
Replacement . . . . .	0450 00-1
Power plant door	
All except M113A3	
Replacement . . . . .	0471 00-1
M113A3 only	
Replacement . . . . .	0470 00-1
Repair . . . . .	0472 00-1
Power plant door combat lock	
Replacement . . . . .	0473 00-1
Power plant grill screen	
Replacement . . . . .	0468 00-1
Power plant grill support arm	
Replacement . . . . .	0467 00-1
Power plant grille	
Raise and lower . . . . .	0464 00-1
Removal/installation . . . . .	0465 00-1
Power plant rear access panels	
Repair/replacement . . . . .	0439 00-1
Power Plant Sling	
Inspect . . . . .	0673 00-1
Power supply	
Solid state infrared	
Replacement . . . . .	0297 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Power Supply	
Storage Box Assembly	
Replace/Repair . . . . .	0824 00-1
Power supply cable assembly	
Driver's night vision (DNV) (AN/VVS-2)	
All except M58	
Replacement . . . . .	0368 00-1
Precleaner/particulate filter assembly	
(M981A3)	
Replace . . . . .	0909 00-1
Pressure switch	
Differential	
Bypass plug	
Replace . . . . .	0401 00-1
Oil sampling valve	
Transmission	
Replace . . . . .	0400 00-1
Transmission oil	
Replace . . . . .	0400 00-1
Preventive Maintenance Checks and Services (PMCS), Including Lubrication Instructions	
Annual . . . . .	0155 00-1
Semi-Annual . . . . .	0155 00-1
Principles of Operation	
Auxiliary Automotive System . . . . .	0003 00-2
Special Equipment . . . . .	0003 00-3
Winterization Equipment . . . . .	0003 00-3
Printer Mount	
Replace/Repair . . . . .	0823 00-1
Propeller shaft and universal joints	
Replacement . . . . .	0405 00-1
Pulse Tachometer	
STE/ICE	
Replace . . . . .	0867 00-1
Pump	
Coolant Heater	
Replace . . . . .	0731 00-1
Engine Coolant	
Replace . . . . .	0241 00-1
Hydraulic	
Ramp	
Replace . . . . .	0655 00-1
Pump Assembly	
Fog Oil	
(M1059A3 Only)	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0763 00-1
Pump Unit	
Coolant Heater	
Replace . . . . .	0728 00-1
Push-pull control assembly, bracket, links, and pins (cable-activated lock)	
Replacement . . . . .	0429 00-1
<b>Q</b>	
Quick coupling half	
M13 Orifice	
M1068A3 only	
Replace . . . . .	0781 00-1
M8A3/M14 Orifice support	
M113A3, M1059A3, and M577A3 only	
Replace . . . . .	0780 00-1
Quick release pin and lanyard	
Replacement . . . . .	0431 00-1
Quick release pins and plates	
Spall liner	
M113A3 only	
Repair . . . . .	0506 00-1
<b>R</b>	
Rack	
Ammunition Stowage	
M901A3, Replace . . . . .	0587 00-1
Backpack stowage (M981A3)	
Replace . . . . .	0599 00-1
Radio	
M58	
Replace . . . . .	0891 00-1
Radio Stowage	
Right Front	
M577A3, Replace . . . . .	0579 00-1
Radio stowage (M1064A3), replace . . . . .	0609 00-1
Rack Assembly	
Electrical Equipment	
M981A3, Replace/Repair . . . . .	0597 00-1
Rack Base	
Right Side	
(M1068A3 Only)	
Replace . . . . .	0622 00-1
Racks	
Radio stowage	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Left bulkhead (M577A3 and M1068A3)	
Replace . . . . .	0577 00-1
Radiac wire harness	
M113A3, M577A3, and M1068A3 only	
Replacement . . . . .	0376 00-1
Radiator	
Clean . . . . .	0228 00-1
Outlet tube and hoses, replace . . . . .	0233 00-1
Parts	
Replace . . . . .	0229 00-1
Radiator access door	
Replacement . . . . .	0469 00-1
Radio Operator's Seat	
M981A3, M1068A3, and M58	
Replace/Repair . . . . .	0568 00-1
Radio Rack	
M58	
Replace . . . . .	0891 00-1
Radio Set and Mount	
M901A3	
Replace . . . . .	0890 00-1
Radio stowage rack	
Left bulkhead	
(M577A3 and M1068A3)	
Replace . . . . .	0577 00-1
Radio Stowage Rack	
Right Front	
M577A3, Replace . . . . .	0579 00-1
Radio(s) don't work . . . . .	0044 00-1
Ramp	
Bracket	
(M113A3, M577A3, and M1068A3 Only)	
Replace . . . . .	0516 00-1
Control Valve	
Elbow	
Replace . . . . .	0663 00-1
Hose	
Replace . . . . .	0663 00-1
Replace . . . . .	0660 00-1
Control Valve (with Internal Relief Valve) and Fittings	
Replace . . . . .	0661 00-1
Control Valve and Fittings (with External Relief Valve)	
Replace . . . . .	0659 00-1
Cylinder	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0656 00-1
Cylinder Breather Hose	
(All Except M1064A3)	
Replace . . . . .	0666 00-1
(M1064A3 Only)	
Replace . . . . .	0667 00-1
Door	
Stop Bracket	
Replace . . . . .	0517 00-1
External Relief Valve	
Replace . . . . .	0660 00-1
Fittings with Ramp Control Valve (Internal Relief Valve)	
Replace . . . . .	0660 00-1
Hose	
Bulkhead to Cylinder	
Replace . . . . .	0665 00-1
Hydraulic Pump	
Replace . . . . .	0655 00-1
Linkage	
(M1064A3 only)	
Replace . . . . .	0528 00-1
(M113A3, M901A3, M981A3, and M1059A3)	
Replace . . . . .	0526 00-1
(M577A3 and M1068A3 only)	
Repace . . . . .	0527 00-1
Lock	
Adjust (M1064A3 only) . . . . .	0523 00-1
Adjust (M113A3, M901A3, M981A3, and M1059A3 only) . . . . .	0521 00-1
Adjust (M577A3 and M1068A3 only) . . . . .	0522 00-1
Vision Port and Shield	
M901A3, M981A3, and M58, Replace/Repair . . . . .	0586 00-1
Ramp Door	
Handles	
Replace . . . . .	0519 00-1
Hook	
Replace . . . . .	0518 00-1
Seal	
Replace . . . . .	0520 00-1
Shaft	
Replace . . . . .	0519 00-1
Spring	
Replace . . . . .	0518 00-1
Ramp door switch and mount	
M577A3 and M1068A3 only	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replacement . . . . .	0335 00-1
Ramp drain plugs	
Replacement . . . . .	0515 00-1
Ramp Lock	
Handle and Arms	
(All Except M577A3 and M1068A3)	
Replace . . . . .	0524 00-1
Lever and Cable	
(M577A3 and M1068A3 only)	
Replace . . . . .	0525 00-1
Ramp operation is slow or sluggish . . . . .	0083 00-1
Ramp seal	
Replacement . . . . .	0514 00-1
Ramp will not lower . . . . .	0082 00-1
Ramp will not raise or free falls . . . . .	0084 00-1
Range controller	
Bracket	
Replace	
Used with cable-activated steering lock . . . . .	0387 00-1
Used with solenoid-activated steering lock . . . . .	0386 00-1
Transmission	
Used with cable-activated steering lock	
Replace . . . . .	0387 00-1
Used with solenoid-activated steering lock	
Replace . . . . .	0386 00-1
Range controller lamp	
Transmission	
Replace . . . . .	0388 00-1
Range controller switch	
Transmission	
Replace . . . . .	0389 00-1
Rear access panels	
Power plant	
Repair/replacement . . . . .	0439 00-1
Rear Armor	
(M113A3)	
Replace . . . . .	0751 00-1
Rear Bilge Pump	
Pipes	
Replace . . . . .	0634 00-1
Replace . . . . .	0635 00-1
Strainer	
Replace . . . . .	0635 00-1
Rear compartment air ventilator	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replacement . . . . .	0454 00-1
Rear dome light switch	
M577A3 and M1068A3 only	
Replacement . . . . .	0315 00-1
Rear external stowage frame	
M1068A3 only	
Replace . . . . .	0626 00-1
Rear main wiring harness	
M1064A3 only	
Replacement . . . . .	0364 00-1
M1068A3 only	
Replacement . . . . .	0365 00-1
M113A3, M901A3, M981A3, M1059A3, and M58	
Replacement . . . . .	0362 00-1
M577A3 only	
Replacement . . . . .	0363 00-1
Rear tiedown plates	
Replacement . . . . .	0445 00-1
Rear upper hull spill liner	
M113A3 only	
Replacement . . . . .	0510 00-1
Rear utility outlet receptacles	
M577A3 and M1068A3 only	
Replacement . . . . .	0378 00-1
Rear utility receptacle circuit breakers	
M577A3 and M1068A3 only	
Replacement . . . . .	0276 00-1
Receptacle	
Auxiliary power (slave)	
M113A3, M901A3, M1059A3, M1064A3, and M58 only	
Replacement . . . . .	0263 00-1
NATO Auxiliary power (slave)	
M577A3 and M1068A3 only	
Replacement . . . . .	0264 00-1
Utility outlet	
All except M981A3	
Replacement . . . . .	0265 00-1
Receptacles	
Rear utility outlet	
M577A3 and M1068A3 only	
Replacement . . . . .	0378 00-1
Reel holder assembly	
Cable (M981A3 and M1064A3)	
Repair . . . . .	0604 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Reel holder assembly, cable (M981A3 and M1064A3)	
Replace . . . . .	0603 00-1
Refill Tray Bracket	
Chemical Alarm, M113A3	
Replace . . . . .	0922 00-1
Regulator	
Voltage	
Adjustment . . . . .	0256 00-1
Regulator assembly	
Replacement . . . . .	0257 00-1
Release	
Trim vane	
Repair . . . . .	0463 00-1
Replacement . . . . .	0462 00-1
Release mechanisms	
Mortar hatch interior	
M1064A3 only	
Replacement . . . . .	0481 00-1
Restriction indicator	
Air cleaner	
Replace . . . . .	0171 00-1
Rifle Brackets	
Replace . . . . .	0573 00-1
Rifle Rack	
(M1064A3), Replace . . . . .	0612 00-1
Right Equipment Rack	
Brackets and Mounts (M1068A3)	
Replace . . . . .	0814 00-1
Right front armor plate	
Replacement . . . . .	0448 00-1
Right headlight wiring harness	
Replacement . . . . .	0373 00-1
Right rear utility outlet/admittance buzzer works improperly	
M577A3 and M1068A3 only . . . . .	0042 00-1
Right Side Base Extension M1068A3	
Replace . . . . .	0623 00-1
Right side spall liners	
M113A3 only	
Replacement . . . . .	0504 00-1
Right stop light - tail light	
M577A3 only	
Replacement . . . . .	0301 00-1
Repair . . . . .	0302 00-1
Road wheel	



INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replacement . . . . .	0426 00-1
Road wheel hub	
Replacement . . . . .	0416 00-1
Road wheel support arm, bearings, and seals	
Replacement . . . . .	0415 00-1
Roadside Data Panel A13	
M1068A3	
Replace . . . . .	0835 00-1
<b>S</b>	
Safety pin stowage block	
Commander's cupola	
M113A3, M1059A3, M58, and M1064A3 only	
Replacement . . . . .	0495 00-1
Safety Relief Valve	
Fittings	
Replace . . . . .	0662 00-1
Hose	
Replace . . . . .	0662 00-1
Replace . . . . .	0662 00-1
Tube	
Replace . . . . .	0662 00-1
Sampling valve	
Transmission oil	
Replace . . . . .	0400 00-1
Schematic	
All except M577A3 and M1068A3	
Engine fuel system . . . . .	0009 00-1
All except M981A3	
Bilge pump . . . . .	0078 00-1
Coolant heater . . . . .	0087 00-1
Engine charging system . . . . .	0007 00-1
Engine starter circuit . . . . .	0011 00-1
Indicators . . . . .	0046 00-1
STE/ICE . . . . .	0136 00-1
All except M981A3)	
Electrica . . . . .	0027 00-1
(cable-activated lock)	
Steering lock . . . . .	0075 00-1
Engine air box heater . . . . .	0013 00-1
M577A3 and M1068A3 only	
Engine fuel system . . . . .	0010 00-1
M981A3 only	
Bilge pump . . . . .	0079 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Coolant heater . . . . .	0088 00-1
Electrical . . . . .	0028 00-1
Engine charging system . . . . .	0008 00-1
Engine starter circuit . . . . .	0012 00-1
Indicators . . . . .	0047 00-1
STE/ICE . . . . .	0137 00-1
Personnel heater . . . . .	0085 00-1
Ramp . . . . .	0081 00-1
(solenoid-activated lock)	
Steering lock . . . . .	0074 00-1
Transmission . . . . .	0060 00-1
Seal	
Ramp	
Replacement . . . . .	0514 00-1
Ramp Door	
Replace . . . . .	0520 00-1
Seals	
Cargo hatch	
M113A3, M901A3, M981A3, and M1059A3 only	
Replacement . . . . .	0478 00-1
Idler wheel arm	
Replacement . . . . .	0418 00-1
Road wheel support	
Replacement . . . . .	0415 00-1
Seat	
Commander's	
Jump	
Replace, M113A3 . . . . .	0563 00-1
M1064A3	
Replace . . . . .	0561 00-1
M113A3, M1059A3, and M58	
Replace . . . . .	0560 00-1
M113A3, M1059A3, M1064A3, and M58	
Repair . . . . .	0562 00-1
Driver's	
Back Assembly	
Repair . . . . .	0554 00-1
Replace . . . . .	0553 00-1
Impact absorber	
Replace . . . . .	0555 00-1
Post assembly	
Repair . . . . .	0557 00-1
Repair . . . . .	0552 00-1
Replace . . . . .	0551 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Personnel	
M1059A3, Replace . . . . .	0549 00-1
M1064A3, Replace . . . . .	0550 00-1
M981A3, Replace . . . . .	0548 00-1
Radio Operator's M981A3, M1068A3, and M58	
Replace/Repair . . . . .	0568 00-1
Seats	
Personnel	
M113A3 only	
Replace . . . . .	0546 00-1
M577A3 only	
Replace . . . . .	0547 00-1
Service and infrared headlights	
Repair . . . . .	0304 00-1
Replacement . . . . .	0303 00-1
Service and/or black out stop lights malfunction . . . . .	0033 00-1
Service and/or parking brake won't hold carrier . . . . .	0064 00-1
Service brake control linkage	
Adjustment . . . . .	0407 00-1
Replacement . . . . .	0410 00-1
Service brake pedal	
Upper and lower	
Replacement . . . . .	0409 00-1
Service headlights don't work . . . . .	0031 00-1
Service tallight doesn't work . . . . .	0035 00-1
Service Upon Receipt . . . . .	0154 00-1
Shaft	
Fuel Control	
Replace . . . . .	0217 00-1
Shelf Assembly	
Right Side	
(M1068A3 Only)	
Replace . . . . .	0621 00-1
Shield	
External Handle	
M1064A3	
Replace . . . . .	0903 00-1
M113A3, M901A3, M981A3, and M1059A3	
Replace . . . . .	0901 00-1
M577A3 and M1068A3	
Replace . . . . .	0902 00-1
Ramp Vision Port	
M901A3, M981A3, and M58, Replace/Repair . . . . .	0586 00-1
Shields, Armor, Commander's Cupola (M113A3 and M1064A3)	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0747 00-1
Shock absorber	
Replacement . . . . .	0435 00-1
Shock absorber mount	
Replacement . . . . .	0436 00-1
Shock absorber pin	
Replacement . . . . .	0437 00-1
Shunt	
STE/ICE (M113A3, M901A3, and M1059A3)	
Replace . . . . .	0870 00-1
STE/ICE (M577A3 and M1068A3)	
Replace . . . . .	0871 00-1
STE/ICE (M981A3)	
Replace . . . . .	0872 00-1
STE/ICE, M1064A3	
Replace . . . . .	0873 00-1
Shunt Guard	
STE/ICE (M113A3, M901A3, and M1059A3)	
Replace . . . . .	0868 00-1
STE/ICE (M981A3)	
Replace . . . . .	0869 00-1
Side Armor	
(M113A3)	
Replace . . . . .	0750 00-1
Sighting Materiel (M901A3 and M981A3) . . . . .	0812 00-1
Signal Patch Panel Box A10	
Replace . . . . .	0816 00-1
Sling	
Power Plant	
Inspect . . . . .	0673 00-1
Small items storage drawer (M981A3)	
Repair . . . . .	0598 00-1
Smoke Generator	
Electrical Cable Assembly	
(Adapter Access Plate to Generator) (M1059A3 Only)	
Replace . . . . .	0761 00-1
Internal Cable Assembly	
(M1059A3 Only)	
Replace . . . . .	0760 00-1
Smoke Generator (M1059A3)	
Adapter Access Plate	
Gasket	
Replace . . . . .	0766 00-1
Replace . . . . .	0766 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Adapter Access Plate to Cover Assembly Air Hose	
Replace . . . . .	0768 00-1
Air Hose	
Compressor Reservoir to Access Plate	
Replace . . . . .	0767 00-1
Armor	
Replace . . . . .	0771 00-1
Breather Hose Assembly	
Replace . . . . .	0754 00-1
Control Panel Assembly	
Replace . . . . .	0756 00-1
Fuel Can Lid Assembly	
Replace . . . . .	0764 00-1
Fuel Filter	
Replace . . . . .	0773 00-1
Fuel Lines and Guards	
Replace . . . . .	0765 00-1
Glow Plug Cable Assembly	
Replace . . . . .	0772 00-1
Power Supply Cable Assembly	
Replace . . . . .	0757 00-1
Replace . . . . .	0755 00-1
Support Bracket	
Replace . . . . .	0755 00-1
Water Separator	
Replace . . . . .	0773 00-1
Smoke grenade launcher guard, plate, and base	
M113A3, M901A3, M981A3, and M1059A3 only	
Replacement . . . . .	0455 00-1
Smoke grenade launcher wiring harness	
M113A3, M901A3, M981A3, M1059A3, and M58 only	
Replacement . . . . .	0366 00-1
Smoke grenade launcher(s) malfunction	
M113A3, M901A3, M981A3, and M1059A3 only . . . . .	0045 00-1
Solenoid, bracket, links, and pins (solenoid-activated lock)	
Steering lock	
Replacement . . . . .	0428 00-1
Solenoid-activated steering lock malfunctions . . . . .	0076 00-1
Solid state infrared power supply	
Replacement . . . . .	0297 00-1
Spacer	
Traversing unit mount	
(M901A3)	
Replace . . . . .	0591 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Spall liner	
Rear upper hull	
M113A3 only	
Replacement . . . . .	0510 00-1
Spall liner and bracket	
Forward	
M113A3 only	
Replacement . . . . .	0507 00-1
Spall liner on cargo hatch cover	
M113A3 only	
Replacement . . . . .	0509 00-1
Spall liner on ramp	
M113A3 only	
Replacement . . . . .	0512 00-1
Spall liner on ramp door	
M113A3 only	
Replacement . . . . .	0511 00-1
Spall liner quick release pins and plates	
M113A3 only	
Repair . . . . .	0506 00-1
Spall liners	
Forward upper right and left side	
M113A3 only	
Replacement . . . . .	0508 00-1
Left side	
M113A3 only	
Replacement . . . . .	0505 00-1
Right side	
M113A3 only	
Replacement . . . . .	0504 00-1
Special purpose cable	
Instrument panel	
Replacement . . . . .	0290 00-1
Speedometer	
Cable	
Adapter	
Replace . . . . .	0860 00-1
Replace . . . . .	0860 00-1
Service . . . . .	0858 00-1
Replace . . . . .	0859 00-1
Speedometer Cable	
Repair . . . . .	0861 00-1
Speedometer malfunctions . . . . .	0115 00-1
Spring Tensioner	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Idler Arm	
Replacement . . . . .	0246 00-1
Start switch	
Engine	
Replacement . . . . .	0284 00-1
Starter	
Replace . . . . .	0259 00-1
Starter relay switch	
Replacement . . . . .	0258 00-1
STE/ICE	
Pulse Tachometer	
Replace . . . . .	0867 00-1
Shunt (M113A3, M901A3, and M1059A3)	
Replace . . . . .	0870 00-1
Shunt (M577A3 and M1068A3)	
Replace . . . . .	0871 00-1
Shunt (M981A3)	
Replace . . . . .	0872 00-1
Shunt Guard (M113A3, M901A3, and M1059A3)	
Replace . . . . .	0868 00-1
Shunt Guard (M981A3)	
Replace . . . . .	0869 00-1
STE/ICE Crew Wiring Harness	
M1064A3	
Replace . . . . .	0881 00-1
M113A3, M901A3, and M1059A3	
Replace . . . . .	0878 00-1
M577A3 and M1068A3	
Replace . . . . .	0879 00-1
M981A3	
Replace . . . . .	0880 00-1
STE/ICE Distribution Box	
M1064A3	
Replace . . . . .	0877 00-1
M113A3, M901A3, and M1059A3	
Replace . . . . .	0874 00-1
M577A3 and M1068A3	
Replace . . . . .	0875 00-1
STE/ICE Distribution Box M981A3	
Replace . . . . .	0876 00-1
STE/ICE Engine Wiring Harness	
Replace . . . . .	0882 00-1
STE/ICE shunt M1064A3	
Replace . . . . .	0873 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
STE/ICE test set to DCA 6	
Hook up . . . . .	0117 00-1
Remove . . . . .	0117 00-1
Steering	
Transmission	
Adjust . . . . .	0393 00-1
Steering lock solenoid, bracket, links, and pins (solenoid-activated lock)	
Replacement . . . . .	0428 00-1
Steering lock switch	
Replacement . . . . .	0330 00-1
Steering lock switch wiring harness	
Replacement . . . . .	0367 00-1
Steering locked indicator malfunctions . . . . .	0054 00-1
Steering support, brackets, and shaft	
Replacement . . . . .	0432 00-1
Steering wheel linkage	
Adjustment . . . . .	0427 00-1
Replacement . . . . .	0430 00-1
Stencils	
M1059A3 . . . . .	0640 00-1
M1064A3 . . . . .	0641 00-1
M1068A3 Only . . . . .	0642 00-1
M113A3 . . . . .	0636 00-1
M577A3 . . . . .	0637 00-1
M58 . . . . .	0643 00-1
M901A3 . . . . .	0638 00-1
M981A3 . . . . .	0639 00-1
Stop light - tail light	
Left	
M577A3 and M1068A3 only	
Replacement . . . . .	0299 00-1
Repair . . . . .	0300 00-1
Right	
M577A3 only	
Replacement . . . . .	0301 00-1
Repair . . . . .	0302 00-1
Stop light - tail light and guards	
All except M577A3 and M1068A3	
Replacement . . . . .	0298 00-1
Stop switch	
Replacement . . . . .	0332 00-1
Storage Box Assembly	
Power Supply	
Replace/Repair . . . . .	0824 00-1



INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Storage drawer	
Small items (M981A3)	
Repair . . . . .	0598 00-1
Stowage box	
Grenade (M1064A3), replace . . . . .	0610 00-1
Stowage Box	
(M113A3)	
Replace . . . . .	0750 00-1
Stowage box	
Periscope (M1064A3), replace . . . . .	0611 00-1
Stowage Bracket	
Launcher Low-Stow	
M901A3, Replace . . . . .	0595 00-1
Launcher Tube, Replace	
M901A3 . . . . .	0590 00-1
Sight Extension Arm (M1064A3), Replace . . . . .	0613 00-1
Stowage brackets	
Tripod (M901A3)	
Replace . . . . .	0592 00-1
Stowage frame	
Rear external	
M1068A3 only	
Replace . . . . .	0626 00-1
Stowage Rack	
Ammunition	
M901A3, Replace . . . . .	0587 00-1
Stowage rack	
Backpack (M981A3)	
Replace . . . . .	0599 00-1
Radio	
Left bulkhead (M577A3 and M1068A3)	
Replace . . . . .	0577 00-1
Stowage Rack	
Radio	
Right Front	
M577A3, Replace . . . . .	0579 00-1
Strainer	
Front Bilge Pump	
Replace . . . . .	0632 00-1
Rear Bilge Pump	
Replace . . . . .	0635 00-1
Strainer Parts	
Filler Cap	
(All Except M577A3 and M1068A3)	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0184 00-1
(M577A3 AND M1068A3), Replace . . . . .	0185 00-1
Straps	
Webbing	
Replace . . . . .	0569 00-1
Support	
Antenna (M981A3 and M58), replace . . . . .	0602 00-1
Cargo hatch	
M901A3 only	
Replacement . . . . .	0477 00-1
M8A3/M14 Orifice connector	
M113A3, M1059A3, and M577A3 only	
Replace . . . . .	0780 00-1
Support, brackets, and shaft	
Steering	
Replacement . . . . .	0432 00-1
Suppressor	
Transient	
M901A3	
Replace . . . . .	0889 00-1
Surfaces, nonskid (M981A3)	
Repair . . . . .	0605 00-1
Switch	
Blower	
M577A3 and M1068A3 only	
Replacement . . . . .	0278 00-1
Dome blackout light bypass	
M577A3 and M1068A3 only	
Replacement . . . . .	0317 00-1
Engine start	
Replacement . . . . .	0284 00-1
Flame Detector	
Adjust . . . . .	0727 00-1
Flame Detetor	
Coolant Heater	
Replace . . . . .	0734 00-1
Front dome light	
M577A3 and M1068A3 only	
Replacement . . . . .	0314 00-1
Fuel filter differential pressure	
Replacement . . . . .	0328 00-1
Fuel selector	
M577A3 and M1068A3 only	
Replacement . . . . .	0277 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Generator field pressure	
Replacement . . . . .	0323 00-1
Headlight high beam selector	
Replacement . . . . .	0333 00-1
Horn	
Replacement . . . . .	0293 00-1
Light	
Main	
Replacement . . . . .	0283 00-1
M13 NBC Filter (M577A3)	
Replace . . . . .	0803 00-1
Parking brake	
Replacement . . . . .	0331 00-1
Rear dome Light	
M577A3 and M1068A3 only	
Replacement . . . . .	0315 00-1
Rear dome light	
M577A3 and M1068A3 only	
Replacement . . . . .	0315 00-1
Starter relay	
Replacement . . . . .	0258 00-1
Steering lock	
Replacement . . . . .	0330 00-1
Stop	
Replacement . . . . .	0332 00-1
Transmission oil high temperature	
Replacement . . . . .	0322 00-1
Transmission range controller	
Replace . . . . .	0389 00-1
Switch and buzzer	
Admittance	
M577A3 and M1068A3 only	
Replacement . . . . .	0334 00-1
Switch and mount	
Ramp door	
M577A3 and M1068A3 only	
Replacement . . . . .	0335 00-1
Switch Assembly	
M8A3/M3 NBC Filter (M1049A3)	
Replace . . . . .	0804 00-1
NBC Filter	
(M113A3 and M113A3 Ambulance)	
Replace . . . . .	0802 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
<b>T</b>	
Table	
Right forward	
(M577A3), Replace . . . . .	0581 00-1
Right Rearward	
M577A3, Replace . . . . .	0582 00-1
Table, Left	
M577A3, Replace . . . . .	0578 00-1
Tachometer	
Cable	
Repair . . . . .	0865 00-1
Replace . . . . .	0864 00-1
Service . . . . .	0858 00-1
Engine adapter	
Replace . . . . .	0863 00-1
Pulse	
STE/ICE	
Replace . . . . .	0867 00-1
Replace . . . . .	0862 00-1
Tachometer malfunctions . . . . .	0116 00-1
Taillight	
Bracket	
(M1068A3 Only)	
Repair . . . . .	0625 00-1
Replace . . . . .	0625 00-1
Wiring Harness	
(M1068A3 Only)	
Repair . . . . .	0625 00-1
Replace . . . . .	0625 00-1
Tank	
Auxiliary	
Replace . . . . .	0230 00-1
Module	
Fog Oil (M1059A3)	
Replace . . . . .	0753 00-1
Teleposts and cover	
Replacement . . . . .	0296 00-1
Tent	
Frame mounts, (M577A3)	
Replace . . . . .	0628 00-1
Replace, (M577A3) . . . . .	0627 00-1
Tent Interface Panel	
Box Assembly A5 (M1068A3)	
Replace . . . . .	0833 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Tent light	
M577A3 and M1068A3 only	
Replacement . . . . .	0318 00-1
Terminal Blocks TB1 and TB2	
Inverter Housing A2 (M1068A3)	
Replace . . . . .	0830 00-1
Terminals and leads	
Battery	
M113A3, M901A3, and M1059A3 only	
Replacement . . . . .	0340 00-1
M577A3 and M1068A3 only	
Replacement . . . . .	0341 00-1
M58 only	
Replacement . . . . .	0345 00-1
M981A3 only	
Replacement . . . . .	0342 00-1
Terminals and leads (left side)	
Battery	
M1064A3 only	
Replacement . . . . .	0343 00-1
Terminals and leads (right side)	
Battery	
M1064A3 only	
Replacement . . . . .	0344 00-1
Test 10 diagnostic troubleshooting	
STE/ICE . . . . .	0140 00-1
Test 10 engine RPM	
STE/ICE . . . . .	0118 00-1
Test 11 diagnostic troubleshooting	
STE/ICE . . . . .	0140 00-1
Test 12 diagnostic troubleshooting	
STE/ICE . . . . .	0140 00-1
Test 13 diagnostic troubleshooting	
STE/ICE . . . . .	0140 00-1
Test 24 fuel supply pressure	
STE/ICE . . . . .	0119 00-1
Test 24 fuel supply pressure diagnostic troubleshooting	
STE/ICE . . . . .	0143 00-1
Test 25 fuel return pressure	
STE/ICE . . . . .	0120 00-1
Test 25 fuel return pressure diagnostic troubleshooting	
STE/ICE . . . . .	0144 00-1
Test 26 fuel filter pressure drop	
STE/ICE . . . . .	0121 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Test 26 fuel filter pressure drop diagnostic troubleshooting	
STE/ICE . . . . .	0145 00-1
Test 30 turbocharger outlet pressure	
STE/ICE . . . . .	0122 00-1
Test 30 turbocharger outlet pressure diagnostic troubleshooting	
STE/ICE . . . . .	0146 00-1
Test 32 air box pressure	
STE/ICE . . . . .	0123 00-1
Test 32 air box pressure diagnostic troubleshooting	
STE/ICE . . . . .	0147 00-1
Test 67 battery voltage	
STE/ICE . . . . .	0124 00-1
Test 68 starter motor voltage	
STE/ICE . . . . .	0125 00-1
Test 68 starter motor voltage diagnostic troubleshooting	
STE/ICE . . . . .	0148 00-1
Test 69 starter negative cable voltage drop	
STE/ICE . . . . .	0126 00-1
Test 69 starter negative cable voltage drop diagnostic troubleshooting	
STE/ICE . . . . .	0149 00-1
Test 70 starter solenoid voltage	
STE/ICE . . . . .	0127 00-1
Test 70 starter solenoid voltage diagnostic troubleshooting	
STE/ICE . . . . .	0150 00-1
Test 71 starter current (average)	
STE/ICE . . . . .	0128 00-1
Test 72 starter current (first peak)	
STE/ICE . . . . .	0129 00-1
Test 73 battery resistance	
STE/ICE . . . . .	0130 00-1
Test 74 starter circuit resistance	
STE/ICE . . . . .	0131 00-1
Test 75 battery resistance change (pack)	
STE/ICE . . . . .	0130 00-1
Test 80 battery current	
STE/ICE . . . . .	0132 00-1
Test 82 generator output voltage	
STE/ICE . . . . .	0133 00-1
Test 82 generator output voltage diagnostic troubleshooting	
STE/ICE . . . . .	0151 00-1
Test 83 generator field voltage	
STE/ICE . . . . .	0134 00-1
Test 83 generator field voltage diagnostic troubleshooting	
STE/ICE . . . . .	0152 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Test 84 generator negative cable voltage drop	
STE/ICE . . . . .	0135 00-1
Test 84 generator negative cable voltage drop diagnostic troubleshooting	
STE/ICE . . . . .	0153 00-1
Theory of Operation . . . . .	0003 00-1
Thermostat	
Hoses	
Replace . . . . .	0238 00-1
Replace . . . . .	0237 00-1
Tube	
Replace . . . . .	0238 00-1
Thermostat Cover	
Replace . . . . .	0237 00-1
Thermostatic fan speed switch, replace . . . . .	0231 00-1
Throttle valve (TV)	
Lever	
Replace . . . . .	0218 00-1
Modulator	
Replace . . . . .	0218 00-1
Throttle Valve (TV) Modulator	
Adust . . . . .	0213 00-1
Tiedown plates	
Rear	
Replacement . . . . .	0445 00-1
Tool Box Loops	
Replace . . . . .	0571 00-1
Torsion bar	
Replacement . . . . .	0413 00-1
Torsion bar anchor	
Replacement . . . . .	0414 00-1
Tow Start Control	
Bearing	
Replace . . . . .	0391 00-1
Cable	
Adjust . . . . .	0390 00-1
Cover	
Replace . . . . .	0392 00-1
Tow Start Control Assembly	
Replace . . . . .	0391 00-1
Towing hook and eye	
Replacement . . . . .	0443 00-1
Towing pintle	
Repair . . . . .	0434 00-1
Replacement . . . . .	0433 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Track	
Replacement . . . . .	0422 00-1
Track shoe assembly	
Replacement . . . . .	0423 00-1
Track shoe pad	
Replacement . . . . .	0424 00-1
Track shroud and covers	
Replacement . . . . .	0438 00-1
Track tension adjuster and mount	
Replacement . . . . .	0419 00-1
Trailer harness	
Replacement . . . . .	0375 00-1
Trailer lights don't work . . . . .	0036 00-1
Trans filter clogged indicator malfunctions . . . . .	0059 00-1
Trans oil hi temp indicator malfunctions . . . . .	0057 00-1
Transducer	
Air box pressure	
Replacement . . . . .	0327 00-1
Fuel return pressure	
Replacement . . . . .	0325 00-1
Fuel supply pressure	
Replacement . . . . .	0324 00-1
Turbo outlet pressure	
Replacement . . . . .	0326 00-1
Transient Suppressor	
M901A3	
Replace . . . . .	0889 00-1
Transmission	
Mounts	
Replace . . . . .	0385 00-1
Transmission brake adjustment	
Check . . . . .	0406 00-1
Transmission brakes	
Adjust . . . . .	0394 00-1
Transmission controller wiring harness	
Replacement . . . . .	0361 00-1
Transmission does not downshift in 1-4 position . . . . .	0066 00-1
Transmission does not hold 1st position . . . . .	0067 00-1
Transmission does not hold 2nd position . . . . .	0068 00-1
Transmission does not hold 3rd position . . . . .	0069 00-1
Transmission does not pivot steer . . . . .	0071 00-1
Transmission does not reverse . . . . .	0070 00-1
Transmission high temp indicator comes on . . . . .	0072 00-1
Transmission low lube indicator comes on . . . . .	0073 00-1



INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Transmission oil	
Cooler hoses, fittings, and mounting	
Replace . . . . .	0399 00-1
Filter Element	
Replace . . . . .	0398 00-1
Level dipstick, filler tube, and adapter	
(X200-4 only)	
Replace . . . . .	0395 00-1
(X200-4A only)	
Replace . . . . .	0396 00-1
Sampling valve and pressure switch	
Replace . . . . .	0400 00-1
Transmission oil and oil filter element	
Replace . . . . .	0398 00-1
Transmission oil drain tubes and bracket	
Replacement . . . . .	0384 00-1
Transmission oil high temperature switch	
Replacement . . . . .	0322 00-1
Transmission oil low pressure indicator malfunctions . . . . .	0056 00-1
Transmission oil sampling valve and pressure switch	
Replace . . . . .	0400 00-1
Transmission oil supply and return hoses	
Replacement . . . . .	0251 00-1
Transmission range controller lamp	
Replace . . . . .	0388 00-1
Transmission range controller switch	
Replace . . . . .	0389 00-1
Transmission range controller/bracket	
Used with cable-activated steering lock	
Replace . . . . .	0387 00-1
Used with solenoid-activated steering lock	
Replace . . . . .	0386 00-1
Transmission steering	
Adjust . . . . .	0393 00-1
Transmission wiring harness	
Replacement . . . . .	0360 00-1
Transmission won't upshift or shifts erratically in 1-4 position . . . . .	0065 00-1
Transmitter	
Coolant temperature	
Replacement . . . . .	0321 00-1
Fuel quantity	
All except M577A3 and M1068A3, replace . . . . .	0190 00-1
M577A3A and M1068A3, replace . . . . .	0191 00-1
Traversing unit mount and spacer	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
(M901A3)	
Replace . . . . .	0591 00-1
Trim vane	
All except M58	
Repair . . . . .	0459 00-1
M58 only	
Repair . . . . .	0460 00-1
Trim Vane	
Replacement . . . . .	0458 00-1
Trim vane control linkage	
Repair . . . . .	0461 00-1
Trim vane release	
Repair . . . . .	0463 00-1
Replacement . . . . .	0462 00-1
Tripod stowage brackets (M901A3)	
Replace . . . . .	0592 00-1
Tube	
Fire Extinguisher Cylinder Discharge	
Replace . . . . .	0899 00-1, 0905 00-1
Fire Extinguisher Turbine Cylinder Discharge	
Replace . . . . .	0900 00-1
From ramp control valve to bulkhead	
Replace . . . . .	0664 00-1
Fuel return	
M1064A3	
Replace . . . . .	0197 00-1
M113A3, M901A3, M981A3, M1059A3, and M58	
Replace . . . . .	0195 00-1
M577A3 and M1068A3	
Replace . . . . .	0196 00-1
Fuel Vent (M577A3 and M1068A3)	
Replace . . . . .	0198 00-1
Personnel heater	
M577A3, M901A3, and M1068A3 only	
Replace . . . . .	0700 00-1
Turbine access door	
M58 only	
Replacement . . . . .	0485 00-1
Turbine access door gasket	
M58 only	
Replacement . . . . .	0486 00-1
Turbine access dor hinges	
M58 only	
Replacement . . . . .	0487 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Turbo outlet pressure transducer	
Replacement . . . . .	0326 00-1
Turnbuckle parts generator	
Replacement . . . . .	0254 00-1
<b>U</b>	
Unsafe ramp	
Lower . . . . .	0513 00-1
Raise . . . . .	0513 00-1
Upper and lower service brake pedal	
Replacement . . . . .	0409 00-1
Utility light	
M981A3 only	
Replacement . . . . .	0319 00-1
Utility outlet lead assembly	
M577A3 and M1068A3 only	
Replacement . . . . .	0377 00-1
Utility outlet receptacle	
All except M981A3	
Replacement . . . . .	0265 00-1
Utility outlet receptacles	
Rear	
M577A3 and M1068A3 only	
Replacement . . . . .	0378 00-1
<b>V</b>	
Valve	
Front Bilge	
Replace . . . . .	0633 00-1
Fuel shut-off assembly (M113A3, M981A3, M1059A3, and M58)	
Personnel heater	
Replace . . . . .	0684 00-1
Fuel Shutoff	
Coolant Heater, Replace . . . . .	0720 00-1
Variable speed drive	
Fan	
Replacement . . . . .	0249 00-1
Generator	
Replacement . . . . .	0249 00-1
Vehicle Access Box	
M901A3 and M981A3	
Replace . . . . .	0593 00-1
Vehicle batteries discharge with external AC power applied	
M1068A3 only . . . . .	0103 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Vehicle will not accept external AC power	
M1068A3 only . . . . .	0104 00-1
Vehicle will not accept inverter AC power	
M1068A3 only . . . . .	0105 00-1
Vent fitting	
Battery box	
M981A3 and M58 only	
Replacement . . . . .	0355 00-1
Ventilating Fan	
Drive Belt	
Adjustment . . . . .	0242 00-1
Ventilating fan	
Drive pulley	
Replace . . . . .	0244 00-1
Ventilating Fan	
M901A3 and M981A3	
Replace . . . . .	0866 00-1
Ventilating Fan Assembly	
Replace . . . . .	0247 00-1
Ventilating Fan Drive Belt	
Replace . . . . .	0243 00-1
Ventilation fan	
M577A3 and M1068A3 only	
Replacement . . . . .	0383 00-1
VFM	
Gas filter, M25/M25A1	
(M981A3)	
Replace . . . . .	0906 00-1
Power Distribution Panel Assembly	
M981A3	
Replace/Repair . . . . .	0913 00-1
VFM (M981A3)	
Hose assembly	
Replace . . . . .	0907 00-1
M25/M25A1 heater	
Replace . . . . .	0911 00-1
M25/M25A1 heater brackets	
Replace . . . . .	0912 00-1
Orifice connector assembly	
M25/M25A1	
Replace . . . . .	0908 00-1
VFM coupling	
(M981A3)	
Replace . . . . .	0910 00-1

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Vision block locks and seals	
Commander's cupola	
M1064A3 only	
Replacement . . . . .	0491 00-1
M113A3 and M1059A3, M58 only	
Replacement . . . . .	0490 00-1
Vision Port	
Ramp	
M901A3, M981A3, and M58, Replace/Repair . . . . .	0586 00-1
Voltage regulator	
Adjustment . . . . .	0256 00-1
<b>W</b>	
Wait indicator flashes during start attempts (preglow or afterglow) . . . . .	0018 00-1
Wait indicator light doesn't light . . . . .	0019 00-1
Warning light panel	
Instrument	
Replacement . . . . .	0288 00-1
Replacement . . . . .	0292 00-1
Warning light panel assembly	
Replacement . . . . .	0291 00-1
Warning lights	
Instrument panel	
Replacement . . . . .	0287 00-1
Warning panel lights	
Replacement . . . . .	0294 00-1
Warning panel wiring harness	
Replacement . . . . .	0374 00-1
Water barrier	
M113A3, M577A3, and M1068A3 only	
Replacement . . . . .	0456 00-1
Water barrier loop and strap	
M113A3, M577A3, and M1068A3 only	
Replacement . . . . .	0457 00-1
Water/Ration Heater	
Mount Bracket	
(M113A3 Only)	
Replace . . . . .	0811 00-1
Power Cable	
(M113A3 Only)	
Replace . . . . .	0810 00-1
Webbing straps	
Replace . . . . .	0569 00-1
Wheel	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Idler	
Replacement . . . . .	0425 00-1
Road	
Replacement . . . . .	0426 00-1
Windshield	
Driver's	
Replace . . . . .	0739 00-1
Stowage bag, straps, and decal	
Replace . . . . .	0740 00-1
Stowage Bracket	
(M1064A3 Only)	
Replace . . . . .	0614 00-1
Wire harness	
Radiac	
M113A3, M577A3, and M1068A3 only	
Replacement . . . . .	0376 00-1
Wire rope and pulleys	
All except M1064A3	
Replace . . . . .	0657 00-1
Wire Rope and Pulleys	
M1064A3	
Replace . . . . .	0658 00-1
Wiring Harness	
Coolant Heater	
Replace . . . . .	0735 00-1
Coolant Pump to Heater	
Replace . . . . .	0733 00-1
Wiring harness	
Engine	
Replacement . . . . .	0359 00-1
Instrument panel battery-generator gauge	
All except M981A3	
Replacement . . . . .	0289 00-1
M13 NBC Heater	
M1068A3 only	
Replace . . . . .	0809 00-1
Wiring Harness	
M13 NBC Heater	
(M577A3)	
Replace . . . . .	0808 00-1
M14 NBC Heater	
(M113A3 Ambulance)	
Replace . . . . .	0807 00-1
M3 NBC Heater (M1059A3)	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replace . . . . .	0806 00-1
Wiring harness	
Rear main	
M1064A3 only	
Replacement . . . . .	0364 00-1
M1068A3 only	
Replacement . . . . .	0365 00-1
M113A3, M901A3, M981A3, M1059A3, and M58	
Replacement . . . . .	0362 00-1
M577A3 only	
Replacement . . . . .	0363 00-1
Repair . . . . .	0382 00-1
Right headlight	
Replacement . . . . .	0373 00-1
Smoke grenade launcher	
M113A3, M901A3, M981A3, M1059A3, and M58 only	
Replacement . . . . .	0366 00-1
Wiring Harness	
STE/ICE Crew, M1064A3	
Replace . . . . .	0881 00-1
STE/ICE Crew, M113A3, M901A3, and M1059A3	
Replace . . . . .	0878 00-1
STE/ICE Crew, M577A3 and M1068A3	
Replace . . . . .	0879 00-1
STE/ICE Crew, M981A3	
Replace . . . . .	0880 00-1
STE/ICE Engine	
Replace . . . . .	0882 00-1
Wiring harness	
Steering lock switch	
Replacement . . . . .	0367 00-1
Transmission	
Replacement . . . . .	0360 00-1
Transmission controller	
Replacement . . . . .	0361 00-1
Warning panel	
Replacement . . . . .	0374 00-1
Wiring harness (ckt 48)	
Battery-to-radio	
M981A3 only	
Replacement . . . . .	0371 00-1
Wiring harness (left side)	
Battery-to-radio	
M113A3, M901A3, and M1059A3 only	

INDEX, cont'd

<u>Subject</u>	<u>WP Sequence No.-Page No.</u>
Replacement . . . . .	0369 00-1
Wiring harness (right side)	
Battery-to-radio	
M113A3 only	
Replacement . . . . .	0370 00-1
Wiring Harnesses, Cables, Leads	
Chemical Alarm Interface, M113A3	
Replace . . . . .	0923 00-1
Leads	
Circuit 44A, Power Control Enclosure M1068A3)	
Replace . . . . .	0829 00-1
Wiring harnesses, cables, leads	
W124 (M1068A3)	
Replace . . . . .	0855 00-1
Wiring Harnesses, cables, leads	
W251 (M1068A3)	
Replace . . . . .	0852 00-1
W42, (M1068A3)	
Replace . . . . .	0852 00-1
W43, (M1068A3)	
Replace . . . . .	0852 00-1
Wiring Harnesses, cables, leads:	
W103/W104	
LAN A or B (M1068A3)	
Replace . . . . .	0854 00-1
Wiring harnesses, cables, leads:	
W126, (M1068A3)	
Replace . . . . .	0856 00-1
Wiring Harnesses, cables, leads:	
W45, (M1068A3)	
Replace . . . . .	0853 00-1



By Order of the Secretary of the Army:

Official:



JOEL B. HUDSON


*Administrative Assistant to the  
Secretary of the Army*

9913202

ERIC K. SHINSEKI  
*General, United States Army  
Chief of Staff*



RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



## SOMETHING WRONG WITH THIS PUBLICATION?

THEN ... JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)

COMMANDER  
COMPANY A, 216 CAV  
FORT KNOX, KY 40121

DATE SENT

23 July 99

<p style="font-size: x-small;">PUBLICATION NUMBER</p> <p style="text-align: center; margin: 0;">TM 9-2350-277-20-1</p>	<p style="font-size: x-small;">PUBLICATION DATE</p> <p style="text-align: center; margin: 0;">15 SEP 00</p>	<p style="font-size: x-small;">PUBLICATION TITLE</p> <p style="text-align: center; margin: 0;">UNIT MAINTENANCE MANUAL FOR M113A3 FOV</p>
--	---	---

BE EXACT PIN-POINT WHERE IT IS				IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:
PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.	
001400 - 2				<p style="font-size: x-small;">STEP 6. THE SCREWS (4) ON BRACKET (1) MUST BE TORQUED. PLEASE ADD TORQUE INFORMATION.</p>
002300 - 34		5 (SH15)		

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER


JOHN DOE, PFC 66N 344- 1776

SIGN HERE

*John Doe*



RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



## SOMETHING WRONG WITH THIS PUBLICATION?

*THEN . . . JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.*

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)

---

DATE SENT

PUBLICATION NUMBER

**TM 9-2350-277-20-1**

PUBLICATION DATE

**15 SEP 00**

PUBLICATION TITLE

**UNIT MAINTENANCE MANUAL FOR M113A3 FOV**

BE EXACT PIN-POINT WHERE IT IS				IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:
PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.	

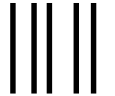
PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE

FILL IN YOUR  
UNIT'S ADDRESS  
↓

FOLD BACK

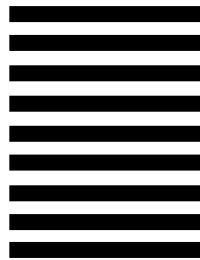
DEPARTMENT OF THE ARMY



OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE. \$300

NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

**BUSINESS REPLY MAIL**  
FIRST CLASS      PERMIT NO. 82      ROCK ISLAND, IL




POSTAGE WILL BE PAID BY ROCK ISLAND ARSENAL

**COMMANDER**  
**U.S. Army Tank-automotive and Armaments Command**  
**ATTN: AMSTA-LC-CIP-WT (Tech Pubs Control Point)**  
**Rock Island, IL 61299-7630**

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



## SOMETHING WRONG WITH THIS PUBLICATION?

*THEN ... JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.*

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)

---

DATE SENT

PUBLICATION NUMBER

**TM 9-2350-277-20-1**

PUBLICATION DATE

**15 SEP 00**

PUBLICATION TITLE

**UNIT MAINTENANCE MANUAL FOR M113A3 FOV**

BE EXACT PIN-POINT WHERE IT IS				IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:
PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.	

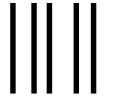
PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE

FILL IN YOUR  
UNIT'S ADDRESS  
↓

FOLD BACK

DEPARTMENT OF THE ARMY



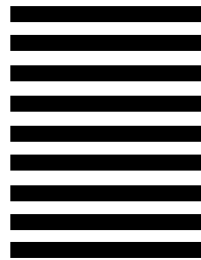
OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE. \$300

NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

**BUSINESS REPLY MAIL**  
FIRST CLASS      PERMIT NO. 82      ROCK ISLAND, IL

POSTAGE WILL BE PAID BY ROCK ISLAND ARSENAL


**COMMANDER**  
**U.S. Army Tank-automotive and Armaments Command**  
**ATTN: AMSTA-LC-CIP-WT (Tech Pubs Control Point)**  
**Rock Island, IL 61299-7630**



TEAR ALONG PERFORATED LINE



RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



## SOMETHING WRONG WITH THIS PUBLICATION?

*THEN . . . JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.*

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)

---

DATE SENT

PUBLICATION NUMBER

**TM 9-2350-277-20-1**

PUBLICATION DATE

**15 SEP 00**

PUBLICATION TITLE

**UNIT MAINTENANCE MANUAL FOR M113A3 FOV**

BE EXACT PIN-POINT WHERE IT IS				IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:
PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.	

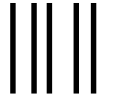
PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE

FILL IN YOUR  
UNIT'S ADDRESS  
↓

FOLD BACK

DEPARTMENT OF THE ARMY



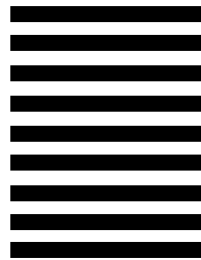
OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE. \$300

NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

**BUSINESS REPLY MAIL**  
FIRST CLASS      PERMIT NO. 82      ROCK ISLAND, IL

POSTAGE WILL BE PAID BY ROCK ISLAND ARSENAL

**COMMANDER**  
**U.S. Army Tank-automotive and Armaments Command**  
**ATTN: AMSTA-LC-CIP-WT (Tech Pubs Control Point)**  
**Rock Island, IL 61299-7630**



TEAR ALONG PERFORATED LINE

# METRIC CONVERSION CHART

## APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
Pints	Liters	0.473
Quarts	Liters	0.946
Gallons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Centimeters	Cubic Inches	0.060
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
Liters	Gallons	0.264
Grams	Ounces	0.035
Kilograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pound-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
Kilometers per Liter	Miles per Gallon	2.354
Kilometers per Hour	Miles per Hour	0.621

## TEMPERATURE CONVERSIONS

$$5/9 (^{\circ}\text{F} - 32) = ^{\circ}\text{C}$$

212° Fahrenheit is equivalent to 100° Celsius

90° Fahrenheit is equivalent to 32.2° Celsius

32° Fahrenheit is equivalent to 0° Celsius

$$9/5 \text{ C}^{\circ} + 32 = \text{F}^{\circ}$$

**PIN: 062444-000**