



National Institute for
**AUTOMOTIVE
SERVICE
EXCELLENCE**

Military Tactical Wheeled Vehicle Technician Certification Program

Test Guide January 2021

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OVERVIEW

Introduction

This test guide is designed to help tactical wheeled vehicle technicians prepare for tests in the ASE Military Tactical Wheeled Vehicle Technician Certification Program. It includes detailed information for each test offered and should help you identify weak areas in your technical knowledge, making it easier to identify resources that will help you prepare.

ASE voluntary certification helps technicians prove their abilities to themselves, to their employers, and to their peers. By passing the tests and submitting appropriate work experience, you will earn a valuable credential targeted to tactical wheeled vehicle technicians. Because the tests are challenging, you'll have the satisfaction of knowing you are among the elite in your profession. What's more, these credentials are nationally recognized.

Certified technicians promote trust and improve the image of those who work on tactical wheeled vehicles. ASE encourages you to take the tests and to join the proven pros who wear the ASE Blue Seal of Excellence®.

Tactical Wheel Vehicles Tests

The tests in this series are open to any technician who wishes to take them. Test candidates who pass one or more tests and have at least two years of experience in vehicular service and repair will be an ASE Certified Military Technician.

The tests described in this guide cover technical service and repair topics in the context of the tactical wheeled vehicle program. Certain technologies will differ from those used on civilian

vehicles and key terms may also differ. The tests are offered at Pro-metric and ASE satellite test centers and are open to both military and civilian test candidates.

As of January 2021, two tests are available: MIL2 (Diesel Engines) and MIL6 (Electrical/Electronics). These tests are the initial offerings of a planned series that will encompass all major systems of tactical wheeled vehicles.

It is anticipated that other tests will be added in July 2021 and that all tests in this series will be available starting in January 2022. See the chart on page 5 for current details.

Who Writes the Questions?

Although ASE produces the tests and administers the testing program, the test questions are written by military and civilian personnel with expert-level knowledge of tactical wheeled vehicles. Questions are written in working meetings where military instructors, working technicians, and civilian OEM training staff collaborate to ensure that each question accurately covers the tasks that wheeled vehicle technicians do in their day-to-day job.

Getting Started

Registration information is available at www.ase.com. This site shows testing locations and provides other important information, including electronic versions of all ASE Study Guides.

While on the ASE website, create your own myASE account (if you do not already have one), which will allow you to register for tests, make test appointments, and have direct access to all your personal ASE certification information. Please let us know if you have questions! Reach out to our helpful customer service staff at contactus@ase.com or 800-390-6789.

Military Tactical Wheeled Vehicles Technician Certification Program Tests		Number of Questions	Testing Time
MIL2	Diesel Engines	40*	1 hour
MIL3	Drive Train	TBD	TBD
MIL4	Chassis	TBD	TBD
MIL5	Suspension, Steering, and Hydraulics	TBD	TBD
MIL6	Electrical/Electronics	40*	1 hour
MIL7	Heating, Ventilation, and Air Conditioning	TBD	TBD
MIL8	Preventive Maintenance Checks and Services (PMCS)	TBD	TBD

*Starting in January 2021, MIL2 and MIL6 will be offered to test candidates. The tests will initially contain 80 questions with a testing time of 120 minutes and results will not be available until ASE confirms the pass score for each test. Results will be available before the end of June. Tests will then revert to the length shown in the chart.

Other tests listed will become available later in 2021 or in 2022.

At the Test Center: Some Tips

- Arrive early to find parking and the Test Center office. Late arrivals may be turned away and may forfeit test fees.
- Bring your Admission Ticket and unexpired, government-issued photo ID. You will be assigned a locker to store any personal items.
- You will start with a short tutorial on using the testing platform. You can preview the platform at www.ase.com/asedemo before you arrive.
- During your test, the computer screen will display the amount of time left. If you finish early, either review your answers or end the test. **Once you end the test, you cannot go back.** Then, continue to the next test or to the survey, if you are finished with all tests.
- If you are taking several tests and need a short break, take it between tests, when you reach the screen that asks if you are taking additional tests.
- If you are unsure of an answer, mark your best guess and flag the question using the on-screen button. You may have time to review the question at the end. Don't leave questions blank--your score is based on the number of correct answers.

How To Use This Guide

The material in this booklet is designed to help technicians prepare for the Military Tactical Wheeled Vehicle Program tests.

Each section focuses on one test and begins with the Test Specifications, which lists the major content areas covered and the number of test questions in those areas, as well as the percentage of the test devoted to each topic. Some tests also list sub-content areas.

The Task List describes in detail the work activities a tactical wheeled vehicle technician should be able to perform. This list was developed by military instructors, practicing technicians, and civilian OEM training staff dedicated to tactical wheeled vehicles. The test candidate should use it as a valuable checklist covering knowledge required for test success.

The number of tasks listed does not equal the number of questions. Every question relates to at least one listed task, but some tasks may not appear on the test. The main goal of the list is to describe what is done on the job; any task on it may be covered on the test.

Sample questions follow the Task List. These specific questions will not appear on tests, but they are in the same format as actual test questions. The test candidate should become familiar with all the question types illustrated. The Military Tactical Wheeled Vehicle Program tests employ several types of multiple-choice questions. Note that some types of questions come with special instructions; the same instructions will appear with similar questions on the official tests. ■

TACTICAL WHEELED VEHICLES COVERED BY THE TESTS

The **High Mobility Multipurpose Wheeled Vehicle (HMMWV)** is a family of light, four-wheel drive, military trucks and utility vehicles produced by AM General. The HMMWV is no longer in production and eventually will be replaced by the JLTV. Technology specific to these vehicles will eventually be phased out of the ASE Tests.

The **Joint Light Tactical Vehicle (JLTV)** is a four-wheel drive vehicle manufactured by Oshkosh and designed in-part to replace the HMMWV with a family of more survivable vehicles with greater payload.

The **Family of Medium Tactical Vehicles (FMTV)** is a series of vehicles, built by Oshkosh, based on a common chassis, that vary by payload and mission requirements. The FMTV family consists of the LMTV (with a single rear axle) and MTV (with dual rear axles).

The **Mine-Resistant Ambush Protected (MRAP)** is a US Military light tactical vehicle produced by Navistar Defense that is designed specifically to withstand improvised explosive device (IED) attacks and ambushes. The MRAP is no longer in production. The Army intends to leave all of these vehicles in the Middle East, not returning them to the United States. Technology specific to these vehicles will eventually be phased out of the ASE Tests.

The **Heavy Expanded Mobility Tactical Truck (HEMTT)** is an eight-wheel drive, diesel-powered, 10-short-ton (9,100 kg), tactical truck manufactured by Oshkosh.

The **Palletized Load System (PLS)** is a truck-based logistics system that performs long and short distance freight transport, unit resupply, and other missions in the tactical environment to support modernized and highly mobile combat units. ■

SPECIFICATIONS & TASK LIST

DIESEL ENGINES TEST (MIL2)

Content Area	Questions in Test	Percent of Test
A. General Engine Diagnosis	9	22%
B. Cylinder Head and Valve Trainig Diagnosis and Repair	4	10%
C. Engine Block Inspection, Diagnosis, and Repair	3	8%
D. Lubrication and Cooling Systems Diagnosis and Repair	6	15%
E. Air Induction and Exhaust Systems Diagnosis and Repair	6	15%
F. Fuel System Diagnosis and Repair	6	15%
G. Starting and Charging Systems Diagnosis and Repair	5	12%
H. Engine Brakes	1	3%
Total	40	100%

A. General Engine Diagnosis (9 questions)

1. Verify all operator checks and services have been performed and documented; road test vehicle if required. Determine vehicle identification information and utilize to identify applicable technical manual, warnings, cautions, and notes; ensure that outstanding safety messages and alerts have been applied.
2. Inspect engine assembly and compartment for fuel, oil, coolant, exhaust, or other leaks; identify and classify leaks; determine needed action.
3. Inspect engine compartment wiring harness, connectors, seals, and locks; check for proper routing and condition; determine needed action.
4. Isolate and diagnose engine noises; determine needed action.
5. Check engine exhaust for odor, smoke color, and density; determine needed action.
6. Perform fuel supply and return system tests; check fuel for contamination, quality, and consumption; determine needed action.
7. Perform air intake system restriction and leakage tests; determine needed action.

8. Perform intake manifold and system pressure tests; determine needed action.
9. Visually inspect for crankcase ventilation/blow-by; determine needed action.
10. Diagnose no-cranking, cranks but fails to start, hard starting, and starts but does not continue to run problems; determine needed action.
11. Diagnose surging, rough operation, misfiring, low power, slow deceleration, slow acceleration, and shutdown problems; determine needed action.
12. Isolate and diagnose engine-related vibration problems; determine needed action.
13. Check engine coolant system for freeze point, level, contamination, coolant type, temperature, pressure, circulation, conditioner concentration, filtration, and fan operation; determine needed action.
14. Check lubrication system for contamination, oil level, temperature, pressure, filtration, and oil consumption; determine needed action.
15. Check and record electronic diagnostic codes and trip/operational data; monitor electronic data; verify programmable parameters; clear diagnostic trouble codes; verify the repair; determine if further diagnosis is needed.
16. Perform visual inspection for physical damage and missing, modified, or tampered with components; determine needed action.

B. Cylinder Head and Valve Train Diagnosis and Repair (4 questions)

1. Remove, inspect, disassemble, and clean cylinder head assembly(s).
2. Inspect threaded holes, studs, and bolts for serviceability; service/ replace as needed.
3. Visually inspect cylinder head and check mating surfaces for warpage and surface finish; visually inspect for cracks/damage; check condition of passages; inspect core and gallery plugs; determine serviceability and needed action.
4. Visually inspect valves, guides, seats, springs, retainers, rotators, locks, and seals; determine serviceability and needed actions.
5. Inspect and/or replace injector sleeves and seals; pressure test to verify repair (if applicable); measure injector tip or nozzle protrusion where specified by manufacturer.
6. Inspect, and/or replace valve bridges (crossheads) and guides; adjust bridges (crossheads) if applicable.
7. Clean components; reassemble, check, and install cylinder head assembly.
8. Inspect pushrods, rocker arms, rocker arm shafts, electronic wiring harness, and brackets for wear, bending, cracks, looseness, and blocked oil passages; repair/replace as needed.
9. Inspect, install, and adjust cam followers and retainers.
10. Adjust valve clearance and injector settings.
11. Inspect, measure, and replace/reinstall overhead camshaft and bearings; measure and adjust endplay and backlash.

C. Engine Block Inspection, Diagnosis and Repair (3 questions)

1. Remove, inspect, service, and install pans, covers, ventilation systems, gaskets, seals, and wear rings.
2. Visually inspect engine block for cracks or damage; check mating surfaces and related components for damage or warpage and surface finish; check condition of passages, core, and gallery plugs; inspect threaded holes, studs, dowel pins and bolts for serviceability; service/replace as needed.
3. Visually inspect cylinder walls or liners for wear and damage; determine needed action.
4. Inspect, reinstall, and time the drive gear train (includes checking engine position and speed indicator components; gear wear; backlash of crankshaft, camshaft, auxiliary, drive, and idler gears; and servicing shafts, bushings, and bearings); determine needed action.
5. Clean, inspect and measure crankshaft vibration damper; replace as needed.
6. Inspect, install, and align flywheel housing.
7. Inspect flywheel/flexplate (including ring gear) and mounting surfaces for cracks, wear, and runout; determine needed action.

D. Lubrication and Cooling Systems Diagnosis and Repair (6 questions)

1. Verify engine oil pressure and check operation of pressure sensor/switch and pressure gauge; verify engine oil temperature and check operation of temperature sensor.
2. Inspect, measure, and repair/replace oil pump, housing, drives, pipes, and screens.
3. Inspect and repair/replace oil pressure regulator valve(s) and bypass valve(s).
4. Inspect, clean, test, and reinstall/replace oil cooler, bypass valve, oil thermostat, lines and hoses.
5. Inspect turbocharger lubrication and cooling systems; determine needed action.
6. Perform engine oil and filter service; add proper type and quantity of oil.
7. Inspect and reinstall/replace pulleys, tensioners and drive belts; adjust drive belts and check alignment.
8. Verify coolant temperature, check operation of temperature and level sensors/switch, and temperature gauge.
9. Inspect and replace thermostat(s), bypasses, housing(s), seals, and coolant restrictors.
10. Flush and refill cooling system; bleed air from system; recover/recycle coolant.
11. Inspect and repair/replace coolant conditioner/filter, valves, lines, fittings, and housing (if applicable).
12. Inspect and repair/replace water pump, housing, hoses, and idler pulley or drive gear.

13. Inspect radiator, pressure cap(s), and tank(s); determine needed action.
14. Inspect and repair/replace fan, fan hub, fan clutch, fan controls, fan thermostat, fan shroud, and airflow management systems.
15. Pressure test cooling system and pressure cap(s); determine needed repairs. Inspect radiator, pressure cap(s), and tank(s); determine needed action.

E. Air Induction and Exhaust Systems Diagnosis and Repair (6 questions)

1. Inspect and service/replace air induction piping, air cleaner, and element; check for inlet air restriction.
2. Inspect, test, and replace fixed and variable turbocharger(s), pneumatic, hydraulic, and electronic controls and actuators.
3. Inspect and repair/replace intake manifold, gaskets, temperature and pressure sensors, and connections.
4. Inspect, test, clean, or replace charge air cooler and piping system.
5. Inspect, repair/replace, and service exhaust manifold, gaskets, piping, mufflers, and mounting hardware.
6. Inspect, test, and repair/replace preheater/inlet air heater, or glow plug system and controls.

F. Fuel System Diagnosis and Repair (6 questions)

1. Inspect, test, and repair/replace fuel system tanks, vents, caps, mounts, valves, single/dual supply and return lines, and fittings.
2. Inspect, clean, test, and repair/replace fuel transfer (supply) pump, pump drives, strainers and fuel/water separators, sensors, filters, heaters, coolers, ECM cooling plates, and mounting hardware.
3. Check fuel supply system for air; determine needed repairs; prime and bleed fuel system; check and repair/replace primer pump.
4. Inspect, test, and repair/replace low-pressure regulator systems (check valves, pressure regulator valves and restrictive fittings).
5. Inspect high-pressure injection lines, fittings, transfer tubes, seals and mounting hardware; determine needed action.
6. Perform on-engine inspections and tests; and replace high-pressure common rail (HPCR) fuel system components and electronic controls; determine needed action.
7. Perform on-engine inspections and tests on hydraulic electronic unit injectors (HEUI) and electronic controls (rail pressure control).
8. Perform on-engine inspections, tests, and adjustments on electronic unit injectors (EUI) and electronic controls.
9. Inspect, adjust, and repair/replace electronic throttle/engine speed control devices, circuits, and sensors.
10. Inspect, test, and repair/replace engine protection and automatic shutdown system components.

11. Inspect, test, and repair/replace electrical connector terminals, pins, harnesses, seals, and locks.
12. Connect Maintenance Support Device (MSD)/electronic service tool to vehicle/engine; access, verify, and update software calibration settings, injector calibration codes, programmable parameters; perform module re-learn procedures; determine needed action.
13. Connect Maintenance Support Device (MSD)/electronic service tool to vehicle; inspect and test electronic engine control system, sensors, actuators, electronic control modules, and circuits; determine needed action.
14. Measure and interpret voltage, voltage drop, amperage, and resistance readings using a digital multimeter (DMM) or appropriate test equipment.

G. Starting and Charging System Diagnosis and Repair (5 questions)

1. Perform battery state-of-charge and load or capacitance tests; determine needed action.
2. Charge battery using correct method for application.
3. Start a vehicle using jumper cables or a booster battery.
4. Inspect, clean, and repair/replace batteries, battery cables, and terminal connections.
5. Inspect, test, and reinstall/replace starter, relays, safety switch(s), and solenoids.
6. Perform alternator voltage and amperage output tests; determine needed action.
7. Perform starting and charging circuit voltage drop tests; determine needed action.

H. Engine Brakes (1 question)

1. Inspect, test, and adjust engine compression and exhaust brakes.
2. Inspect, test, adjust, and repair/replace engine compression and exhaust brake control circuits, switches, actuators, and solenoids; adjust control parameter settings.
3. Inspect and repair/replace engine compression and exhaust brake housing(s), valves, seals, springs, lines, and fittings.

SAMPLE QUESTIONS

DIESEL ENGINES TEST (MIL2)

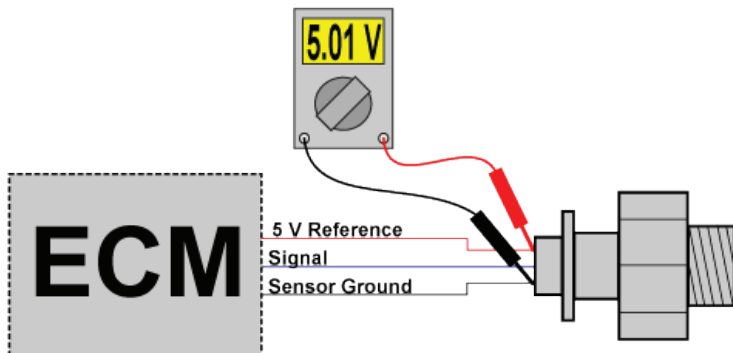
1. A military tactical wheeled vehicle equipped with a high-pressure common rail (HPCR) fuel system is being diagnosed for a crank no-start condition. During testing the fuel rail pressure is 225 psi. The cranking fuel pressure specification is 5000 psi. All other pressures and voltages are normal. Which of these could be the cause?
 - > (A) A stuck-open fuel rail pressure relief valve
 - (B) A stuck-closed fuel injector
 - (C) A leaking fuel tank vent
 - (D) A leaking fuel injector return line

2. Technician A says that debris in the cylinder head bolt holes can affect final head bolt torque.

Technician B says that using over-stretched cylinder bolts can lead to under torqued cylinder heads.

Who is right?

- (A) A only
- (B) B only
- > (C) Both A and B
- (D) Neither A nor B



3. A tactical wheeled vehicle has low engine power. A diagnostic trouble code (DTC) “Intake Manifold Sensor Out of Range” was retrieved. During testing the digital multimeter (DMM) reading shown was measured.

Technician A says that an open sensor 5V reference circuit could be the cause.

Technician B says that an open sensor ground circuit could be the cause.

Who is right?

- (A) A only (C) Both A and B
 (B) B only > (D) Neither A nor B
4. A JLTV has low power and produces a loud whistling sound while being driven. This could be caused by a:
- (A) restricted engine air filter.
 (B) leaking exhaust manifold gasket.
 (C) restricted engine oil filter.
 > (D) ruptured charge air cooler hose.

SPECIFICATIONS & TASK LIST

ELECTRICAL/ELECTRONICS

TEST (MIL6)

Content Area	Questions in Test	Percent of Test
A. General Electrical/Electronic System Diagnosis	9	22%
B. Battery and Starting System Diagnosis and Repair	9	22%
C. Charging System Diagnosis and Repair	8	20%
D. Lighting Systems Diagnosis and Repair	7	18%
E. Related Vehicle Systems Diagnosis and Repair	7	18%
Total	40	100%

A. General Electrical/Electronic System Diagnosis (9 questions)

1. Verify all operator checks and services have been performed and documented; road test vehicle if required. Determine vehicle identification information and utilize to identify applicable technical manual, warnings, cautions, and notes; ensure that outstanding safety messages and alerts have been applied.
2. Check applied voltages, circuit voltages, and voltage drops in electrical/electronic circuits using digital multimeter (DMM) or appropriate test equipment.
3. Check current flow in electrical/electronic circuits and components using digital multimeter (DMM), clamp-on ammeter, or appropriate test equipment.
4. Check continuity and resistance in electrical/electronic circuits and components using digital multimeter (DMM) - or appropriate test equipment.
5. Find shorts, grounds, and opens in electrical/electronic circuits.
6. Diagnose parasitic battery drain problems; determine needed repairs.
7. Inspect and test fusible links, circuit breakers, fuses, and other circuit protection devices; include reset when required.
8. Inspect and test diodes and resistors.
9. Inspect and test relays and solenoids (including solid state devices).
10. Read and interpret electrical schematic diagrams and symbols.
11. Diagnose failures in the multiplexed data communications bus network; determine needed repairs.

12. Diagnose vehicle electronic control systems using maintenance support device (MSD), onboard diagnostics, technical manuals, and software; check and record diagnostic codes; access and verify parameters and calibration settings; determine needed repairs

B. Battery and Starting System Diagnosis and Repair (9 questions)

1. Determine battery serviceability by physical/visual inspection prior to servicing.
2. Determine battery state-of-charge by measuring terminal post voltage using a digital multimeter (DMM).
3. Perform battery tests (load and capacitance), test and determine cold-cranking amperage; determine needed service.
4. Inspect, clean, service, or replace battery, cables, and terminal connections.
5. Inspect, clean, repair or replace battery boxes, mounts, and hold-downs.
6. Charge battery using appropriate method for battery type.
7. Jump-start a vehicle using NATO cables or appropriate auxiliary power supply.
8. Diagnose low voltage disconnect (LVD) systems; determine needed repairs.
9. Test/monitor battery and starting system voltage during cranking; determine needed repairs.
10. Perform starting circuit voltage drop tests; determine needed repairs.
11. Inspect, test, and replace starter control circuit switches, 12/24 VDC load battery control device (LBCD), combiner/isolator switches, solenoids, relays, connectors, terminals, and wires.
12. Inspect, clean, repair, or replace cranking control circuit wires, connectors, and terminals.
13. Verify starter solenoid and motor operation; remove and replace starter as needed; inspect flywheel ring gear or flex plate.
14. Differentiate among electrical and/or mechanical problems that cause a slow crank, intermittent crank, no-crank, extended cranking, or cranking noise condition.

C. Charging System Diagnosis and Repair (8 questions)

1. Verify operation of charging system circuit indicators; determine needed repairs.
2. Diagnose the cause of no-charge, low charge, or overcharge conditions; determine needed repairs.
3. Inspect, adjust, and replace alternator/generator, drive belts/gears, pulleys, fans, mounting brackets, and tensioners.
4. Test charging system voltage and amperage output tests; determine needed repairs.
5. Perform charging circuit voltage drop tests; determine needed repairs.

6. Inspect, repair, or replace charging circuit connectors, terminals, switches, 12/24 VDC load battery control device (LBCD), combiner/isolator switch, and wires.
7. Inspect and test alternator/generator and control components including control modules/regulators; determine needed action.

D. Lighting Systems Diagnosis and Repair (7 questions)

1. Diagnose the cause of brighter or dimmer than normal, intermittent or no operation of exterior lighting, including headlights, parking lights, blackout lights, and rear composite lights; determine needed repairs.
2. Inspect, repair, replace, and aim/adjust headlights and auxiliary/work lights.
3. Inspect, test, repair, or replace truck exterior lighting switches, control components, relays, sockets, connectors, terminals, bulbs, light emitting diodes (LEDs), and wires.
4. Inspect, test, repair, or replace truck-mounted trailer lighting wiring and connectors.
5. Inspect, test, repair, or replace instrumentation light circuit switches, bulbs, LEDs, sockets, circuit boards, connectors, terminals, and wires.
6. Inspect, test, repair, or replace interior cab light circuit switches, electronic control components, bulbs, LEDs, sockets, connectors, terminals, and wires.
7. Inspect, test, adjust, repair, or replace stoplight circuit switches, electronic control components, relays, bulbs, LEDs, sockets, connectors, terminals, and wires.
8. Diagnose, inspect, test, repair, or replace turn signal and hazard circuit flashers or electronic control components, switches, relays, bulbs, LEDs, sockets, connectors, terminals, and wires.
9. Inspect, test, adjust, repair, or replace backup light and warning devices, circuit switches, bulbs, LEDs, sockets, connectors, terminals, and wires.

E. Related Vehicle Systems Diagnosis and Repair (7 questions)

1. Diagnose the cause of intermittent, inaccurate, or no gauge readings; determine needed repairs.
2. Diagnose the cause of high, low, intermittent, or no readings on electronic instrument cluster gauges; determine needed repairs.
3. Inspect, test, adjust, repair, or replace gauge circuit sending units, sensors, gauges, connectors, terminals, and wires.
4. Inspect, test, repair, or replace warning devices (lights and audible) circuit sending units, sensors, circuit boards/control modules, bulbs, audible component, sockets, connectors, terminals, and wires.
5. Diagnose the cause of constant, intermittent, or no horn operation; determine needed repairs.

6. Diagnose the cause of constant, intermittent, or no windshield wiper operation, wiper speed control and/or park problems; determine needed repairs.
7. Inspect, test, and replace wiper motor and transmission mechanical linkage, arms, and blades, in addition to relays, switches, connectors, terminals, and wires.
8. Inspect, test, repair, or replace windshield washer motor or pump/relay assembly, switches, connectors, terminals, and wires.
9. Inspect, test, repair, or replace sideview mirror motors, de-icer, relays, switches, connectors, terminals, and wires.
10. Inspect, test, repair, or replace windshield de-icer system components.
11. Inspect, test, repair, or replace heater and A/C electrical components including: A/C clutches, motors, resistors, sensors, relays, switches, control modules, connectors, terminals, and wires.
12. Inspect, test, repair, or replace auxiliary power outlets, integral fuses, connectors, terminals, and wires.
13. Diagnose, remove, and replace 120 V inverter and 12 V converter.
14. Inspect, test, and replace engine cooling fan electrical control components.
15. Inspect, test, repair, or replace electronic control switches, proximity switches, motors, modules, and solenoids for auxiliary hydraulic systems.
16. Inspect, test, repair and replace automatic fire extinguishing system (AFES) components in accordance with technical manuals.
17. Inspect, test, repair, or replace electronic control switches, motors, modules, and solenoids for water fording systems.

SAMPLE QUESTIONS

ELECTRICAL/ELECTRONICS

TEST (MIL6)

1. The low air pressure indicator light and buzzer stay ON in a FMTV after the air pressure gauges reach 120 psi. Which of these could be the cause?

- (A) A failed brake light switch
- (B) A leaking spring brake chamber
- (C) A leaking parking brake control valve
- > (D) A failed low air pressure sensor

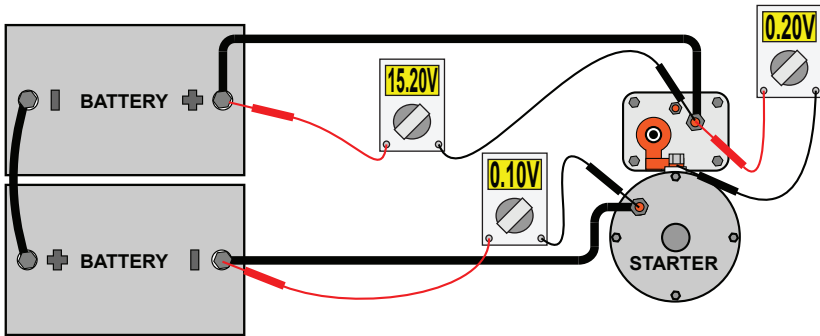
2. A HMMWV is being diagnosed for the taillight circuit breaker tripping repeatedly.

Technician A says that an open ground circuit to the taillights could be the cause.

Technician B says that an internally shorted taillight assembly could be the cause.

Who is right?

- (A) A only
- (B) B only
- (C) Both A and B
- (D) Neither A nor B



3. A HMMWV with the starting system shown is being tested for a report of slow engine cranking. During testing, with the master control switch in the start position, the meter readings were observed. Which of these could be the cause?
- (A) Low starter solenoid resistance
 - > (B) High positive battery cable resistance
 - (C) High negative battery cable resistance
 - (D) Low battery charge
4. The right front headlight of a HMMWV is noticeably dim. With the circuit energized, a reading of 24.5 volts is measured on the positive wire. A reading of 8.35 volts is measured on the ground wire. This could be caused by a:
- (A) weak circuit breaker.
 - > (B) poor ground connection.
 - (C) failed headlight assembly.
 - (D) loose positive terminal.