

**NATEF AUTOMOTIVE TASK LIST**  
**AUT 133 – ELECTRICAL FUNDAMENTALS**

TERM: \_\_\_\_\_

SID: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

NAME: \_\_\_\_\_

**For every task in Electrical Fundamentals the following safety requirement must be strictly enforced:  
Comply with personal and environmental safety practices associated with clothing; eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals/materials in accordance with local, state and federal safety and environmental regulations.**

<b><u>Task Code</u></b>	<b><u>Task</u></b>	<b><u>Priority</u></b>
<b><u>A. General Electrical System Diagnosis</u></b>		
6.A.1	Complete work order to include customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.	P1
6.A.2	Identify and interpret electrical/electronic system concern; determine necessary action.	P1
6.A.3	Research applicable vehicle and service information, such as electrical/electronic system operation, vehicle service history, service precautions, and technical service bulletins.	
6.A.4	Locate and interpret vehicle and major component identification numbers	P1
6.A.5	Diagnose electrical/electronic integrity of series, parallel and series-parallel circuits using principles of electricity (Ohm's Law).	P1
6.A.6	Use wiring diagrams during diagnosis of electrical circuit problems.	P1
6.A.7	Demonstrate the proper use of a digital multimeter (DMM) during diagnosis of electrical circuit problems, including source voltage, voltage drop, current flow and resistance.	P1
6.A.8	Check electrical circuits with a test light; determine necessary action.	P2
6.A.9	Check electrical/electronic circuit waveforms, interpret readings and determine needed repairs.	P2
6.A.10	Check electrical circuits using fused jumper wires; determine necessary action.	P2
6.A.11	Locate shorts, grounds, opens, and resistance problems in electrical/electronic circuits; determine necessary action.	P1
6.A.12	Measure and diagnose the cause(s) of excessive parasitic draw; determine necessary action.	P1
6.A.13	Inspect and test fusible links, circuits breakers, and fuses; determine necessary action.	P1
6.A.14	Inspect and test switches, connectors, relays, solenoid solid state devices, and wires of electrical/electronic circuits; perform necessary action.	P1
6.A.15	Remove and replace terminal end from connector, replace connectors and terminal ends	P1
6.A.16	Repair wiring harness (including CAN/BUS systems)	P1
6.A.17	Perform solder repair of electrical wiring.	P1
6.A.18	Identify location of hybrid vehicle high voltage circuit disconnect (service plug) location and safety procedures	P2