

NATEF AUTOMOTIVE TASK LIST
AUT 131 – ELECTRICAL SYSTEMS

TERM: _____

SID: _____

INSTRUCTOR: _____

NAME: _____

**For every task in Electrical Systems, 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.**

<u>Task Code</u>	<u>Task</u>	<u>Priority</u>
<u>B. Battery Diagnosis and Service</u>		
6.B.1	Perform battery state-of-charge test; determine necessary action.	P1
6.B.2	Perform battery capacity test ; confirm proper battery capacity for vehicle application; determine necessary action.	P1
6.B.3	Maintain or restore electronics memory functions	P1
6.B.4	Inspect, clean, fill and/or and replace battery, battery cables, connectors, clamps and hold-downs.	P1
6.B.5	Perform battery charge.	P1
6.B.6	Start a vehicle using jumper cables and or an auxiliary power supply.	P1
6.B.7	Identify high voltage circuits of electric or hybrid electric vehicle and related safety precautions.	P3
6.B.8	Identify electronic modules, security systems radios , and other accessories that require reinitialization or code entry following battery disconnect.	P1
6.B.9	Identify hybrid vehicle auxiliary (12v) battery service, repair and test procedures.	P3
<u>C. Starting System Diagnosis and Repair</u>		
6.C.1	Perform starter current draw tests; determine necessary action.	P1
6.C.2	Perform starter circuit voltage drop tests; determine necessary action.	P1
6.C.3	Inspect and test starter relays and solenoids; determine necessary action	P2
6.C.4	Remove and install starter in a vehicle.	P1
6.C.5	Inspect and test switches, connectors, and wires of starter control circuits; perform necessary action.	P2
6.C.6	Differentiate between electrical and engine mechanical problem that cause a slow-crank or no-crank condition.	P2
<u>D. Charging System Diagnosis and Repair</u>		
6.D.1	Perform charging system output test; determine necessary action.	P1
6.D.2	Diagnose charging system for the cause of undercharge, no-charge, and overcharge conditions.	P1

6.D.3	Inspect, adjust, or replace generator (alternator) drive belts, pulleys, and tensioners; check pulley and belt alignment.	P1
6.D.4	Remove, inspect, and install generator (alternator)	P1
6.D.5	Perform charging circuit voltage drop tests; determine necessary action.	P1