

NATEF AUTOMOTIVE TASK LIST
AUT 141 - INTRODUCTION TO HEATING AND AIR CONDITIONING

TERM: _____

SID: _____

INSTRUCTOR: _____

NAME: _____

For every task in Heating and Air Conditioning, 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>C. Heating and Engine Cooling Systems Diagnosis and Repair</u>		
7.C.1	Diagnose temperature control problems in the heater/ventilation system; determine necessary action.	P2
7.C.2	Perform cooling system pressure tests; check coolant condition, inspect and test radiator cap (pressure/vacuum), coolant recovery tank and hoses; perform necessary action.	P1
7.C.3	Inspect engine cooling and heater system hoses and belts; perform necessary action.	P1
7.C.4	Inspect, test and replace thermostat and gasket/seal.	P1
7.C.5	Determine coolant condition and type for vehicle application; drain and recover coolant.	P1
7.C.6	Flush system and refill with recommended coolant; bleed system.	P2
7.C.7	Inspect and test cooling fan, fan clutch fan shroud, and air dams: Perform necessary action..	P1
7.C.8	Inspect and test electric cooling fan (s), fan control system and circuits; determine necessary action	P1
7.C.9	Inspect and test heater control valve(s); perform necessary action.	P2
7.C.10	Remove, inspect, and reinstall heater core.	P3
<u>D. Operating Systems and Related Controls Diagnosis and Repair</u>		
7.D.1	Diagnose malfunctions in the electrical controls of heating ventilation and A/C (HVAC) systems; determine necessary action.	P2
7.D.2	Inspect and test A/C heater blower, motors, resistors, switches, relays, wiring, and protection devices: perform necessary action.	P1
7.D.3	Test and diagnose A/C compressor clutch (load cut-off) control systems; determine necessary action..	P1
7.D.4	Diagnose malfunctions in the vacuum, mechanical, and electrical components and controls of the heating, ventilation, and A/C (HVAC) system; determine necessary action.	P2
7.D.5	Inspect and test A/C/heater control panel assembly; determine necessary action.	P3

7.D.6	Inspect and test A/C heater control cables, motors, and linkages; perform necessary action	P3
7.D.7	Inspect and test A/C heater ducts, doors, hoses, cabin filters and outlets; perform necessary action.	P2
7.D.8	Identify the source of A/C system odors.	P2
7.D.9	Check operation of automatic or semi-automatic heating ventilation, and air-conditioning (HVAC) control systems; determine necessary actions..	P3