



(SCHOOL NAME HERE)

NAME _____

AUTOMOTIVE TECHNOLOGY

TITLE: Electric Cooling Fan Circuit

TASK TYPE	NATEF TASK NUMBER	ACTION
Primary	NATEF Automotive Repair Task A7-C-8	Inspect and test electric cooling fan, fan control system and circuits; determine necessary action.
Secondary	Automotive Repair Task A6-A-2	Identify and interpret electrical/electronic system concern; determine necessary action.
Secondary	NATEF Automotive Repair Task A6-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.
Secondary	NATEF Automotive Repair Task A6-A-8	Check electrical circuits with a test light; determine necessary action.
Secondary	NATEF Automotive Repair Task A6-A-10	Check electrical circuits using fused jumper wires; determine necessary action.
Secondary	NATEF Automotive Repair Task A6-A-11	Locate shorts, grounds, opens, and resistance problems in electrical/electronic circuits; determine necessary action.
Secondary	NATEF Automotive Repair Task A6-A-13	Inspect and test fusible links, circuit breakers, and fuses; determine necessary action.
Secondary	NATEF Automotive Repair Task A6-A-14	Inspect and test switches, connectors, relays, solenoid solid state devices, and wires of electrical/electronic circuits; perform necessary action.

PURPOSE: To develop through repetition, a mastery of diagnosing electrical faults in a typical cooling fan circuit.

ACTIVITY: Using the Automotive Electrical Diagnostic Trainer supplied by United Concept Trainers, have your instructor install a "fault(s)" in the cooling fan circuit. Determine fault(s) location with instructor approved electrical diagnostic tools. Record your diagnosis and conclusions below:

1st fault activity
Circuit symptom _____ fault location _____ diagnosis _____

2nd fault activity
Circuit symptom _____ fault location _____ diagnosis _____

3rd fault activity
Circuit symptom _____ fault location _____ diagnosis _____

4th fault activity
Circuit symptom _____ fault location _____ diagnosis _____

5th fault activity
Circuit symptom _____ fault location _____ diagnosis _____

6th fault activity
Circuit symptom _____ fault location _____ diagnosis _____



Results: Based on the above activity, what can you determine from diagnosing faulty electric cooling fan circuits?

