EP-LAB 11-ECTS

NATEF TASK SHEET --- SECTION A8 A.14 B.2,4,6 D.1 P-1

ENGINE PERFORMANCE ECTS: TEST AND EVALUATE ENGINE COOLANT TEMPERATURE SENSOR

Student: _____ Date: _____Period: _____

Year: _____ Make: _____ Model: _____ Engine: _____

OBJECTIVE: **Student will test Engine Coolant Temperature Sensor (ECTS) with a DVOM and Scan Tool, compare to specifications, and evaluate sensor.**

MATERIALS:
1. **EYE PROTECTION**
2. DVOM and Scan Tool
3. Mitchell On Demand or All-Data
4. Vehicle (see instructor)

PROCEDURE: **WEAR EYE PROTECTION! Look up, print out, and attach directions for removing, installing, and testing Engine Coolant Temperature Sensor using All-Data or Equivalent.**

BRIEFLY DECRIBE THE PROCEDURE FOR TESTING THE SENSOR WITH A DVOM:

_____

_____

BRIEFLY DECRIBE THE PROCEDURE FOR TESTING THE SENSOR WITH A SCAN TOOL:

_____

_____

WITH DVOM	Measured	Temperature	Specifications
SENSOR READING COLD:	Ohms_____	_____F°/ C°	Ohms_____
SENSOR READING WARM:	Ohms_____	_____F°/ C°	Ohms_____
Attach the resistance specifications chart			
WITH SCAN TOOL	**Temp According to Scan Tool**		**Actual Temperature**
SENSOR READING COLD:	_____F°/ C°		Actual Coolant Temperature _____F°/ C°
SENSOR READING WARM:	_____F°/ C°		Coolant Operating Temperature _____F°/ C°
SENSOR LOCATION:			
WHICH TESTING METHOD IS MORE ACCURATE? *CIRCLE ONE:* **SCAN TOOL DVOM**			
WHICH TESTING METHOD IS FASTER? *CIRCLE ONE:* **SCAN TOOL DVOM**			
DOES THE SENSOR NEED TO BE REPLACED? *CIRCLE ONE:* **YES NO**			
WHAT WOULD HAVE MADE THIS TASK EASIER?			

INSTRUCTORS EVALUATION

LEVEL OF SKILL ATTAINED	*Initial*	OVERALL SKILL EVALUATION	*Points*
DEMONSTRATES MASTERY (5)		DOCUMENTATION COMPLETENESS (1)	
PERFORMS SATISFACTORILY (4)		SAFETY COMPLIANCE (1)	
CAPABLE, NEEDS PRACTICE (3)		WORK PROFESSIONALISM (3)	
ASSISTED IN PERFORMING (2)		**LEVEL OF SKILL ATTAINED (1-5)**	
EXPOSURE, OBSERVATION (1)		**TOTAL SCORE**	
INSTRUCTOR'S SIGNATURE:			