

NATEF TASK SHEET --- SECTION A.1, D.7 (P-1)

CS 1B: COOLANT CONDUCTIVITY TEST (FOR DISSOLVED METALS)

Student: _____ Date: _____ Period: _____

Vehicle 1: VIN: _____ Year: _____ Make: _____ Model: _____

Vehicle 2: VIN: _____ Year: _____ Make: _____ Model: _____

OBJECTIVE: Student will test coolant for conductivity indicating dissolved metal content, and determine needed action on two vehicles.

- MATERIALS:**
1. **EYE PROTECTION**
 2. Digital-Volt-Ohm-Meter (DVOM)
 3. Vehicle (see instructor)

PROCEDURE: WATCH POWER POINT CS 1B

Always wear **EYE PROTECTION**. **DO NOT** open cooling system while hot!
 Carefully remove radiator cap. Set DVOM to 2 Volt DC scale (*or auto-range*).
 Connect DVOM negative lead to negative battery terminal. Take positive lead and place into coolant using care not to touch sides of radiator neck. Test for voltage present under the conditions listed below.

0.000v-0.150v = Pass 0.150v-0.400v = Questionable 0.400v-Above = Fail	DC Volts 0. _ _ _	Pass/Questionable/Fail		
<i>Note: If any voltage readings indicate failure, coolant must be flushed</i>				
<i>Your voltage readings:</i>	Vehicle 1	<i>P/Q/F</i>	Vehicle 2	<i>P/Q/F</i>
Engine Off	-.- _ _ _		-.- _ _ _	
Engine Running	-.- _ _ _		-.- _ _ _	
Engine Running w/Lights	-.- _ _ _		-.- _ _ _	
Engine Running w/Lights & A/C	-.- _ _ _		-.- _ _ _	
Engine Running w/Lights & A/C @ 2000RPM	-.- _ _ _		-.- _ _ _	

Your Recommendation: Vehicle 1 (Circle) Flush Coolant No Service Required

Your Recommendation: Vehicle 2 (Circle) Flush Coolant No Service Required

Note: If any voltage readings indicate failure, coolant must be flushed

Explain Why You Chose Your Answer: _____

Problems Encountered: _____

INSTRUCTORS SIGN OFF _____

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: _____			