

NATEF TASK SHEET --- SECTION A8, A15 (P-1)

EP-LAB 7: COOLING SYSTEM INSPECTION, PRESSURE TEST

Student: _____ Date: _____ Period: _____

VIN: _____ Year: _____ Make: _____ Model: _____

Engine: _____ Transmission: _____ Production Date: _____

OBJECTIVE: Student will inspect, remove spark plugs, pressure test, determine location of leaks including head gasket and/or cylinder head cracks, and determine needed repairs of the cooling system.

- MATERIALS:**
1. **EYE PROTECTION**
 2. Hand Tools (for removing spark plugs)
 3. Radiator pressure tester
 4. Flashlight (Indoors)
 5. Approved coolant
 6. Vehicle (see instructor)

PROCEDURE: **WATCH POWER POINT CS2 AND TUNE3**

Always wear your **EYE PROTECTION**. **Do not** open cooling system while hot! Inspect **all** components of the cooling system. Look for leakage, wear, weak spots, cracking, fraying, looseness and bulging. Remove all spark plugs. Remove radiator cap and top up cooling system. Attach pressure tester according to manufacturer's specs. Pump up pressure to PSI rating on radiator cap.* Allow to set for 5 minutes while continuing system inspection. **Note** any loss in pressure. **Note** any leaks found. Is any coolant coming out of the spark plug holes? **Note** condition of belts, hoses, and fan. **Note** water pump play. Pressure test radiator cap. (* Some caps are rated in Bars. 1Bar = 14.7 psi)

INSPECTION FINDINGS: BELTS:	HOSES:	FAN:	RADIATOR:
LOCATION OF LEAKS: _____			
ANY COOLANT COMING OUT OF SPARK PLUG HOLES? YES NO <i>CIRCLE ONE</i>			
PRESSURE TESTED SYSTEM TO: _____ PSI. PRESSURE READING AFTER 5 MIN: PSI.			
SYSTEM RESULTS: <i>CIRCLE ONE</i> PASS FAIL			
PRESSURE TEST RADIATOR CAP:		PRESSURE RATING ON CAP: _____ (PSI)	
RADIATOR CAP RESULTS: <i>CIRCLE ONE</i> PASS FAIL			

YOUR RECOMMENDATIONS/PROBLEMS: _____

(WHAT NEEDS TO BE REPAIRED / REPLACED?)

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:			