

NATEF TASK SHEET --- SECTION A1 D.3, 7 P-1

CS6: INSPECT, TEST, AND FLUSH COOLING SYSTEM

Student: _____ Date: _____ Period _____

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

Engine: _____ Transmission: _____ Production Date: _____

OBJECTIVE: Student will inspect, test, and flush cooling system.

- MATERIALS:**
1. **EYE PROTECTION.**
 2. Hand tools and Coolant Testers
 3. Anti-Freeze
 4. Funnel and Drain Pan
 5. Vehicle (see instructor)

PROCEDURE: **WEAR EYE PROTECTION!** **With engine cool !** Remove radiator cap. Test coolant. Note temperatures and appearance on skill sheet. Inspect radiator cap. Note appearance. Loosen drain plug & drain cooling system. Tighten drain plug. Fill cooling system with water. Run engine till thermostat opens. Drain cooling system. Note appearance of fluid drained. Refill and repeat until clean water comes out of engine. Tighten drain plug. With 100% coolant, add 1/2 volume of cooling system capacity. Fill the balance of system with water. Run engine until warm and top off with 50/50 mix of coolant & water. Do not forget to clean and refill overflow reservoir with 50/50 coolant mix.

Pressure test system for leaks. Note Location of Leaks: _____					
***Look-up and Write Total Cooling System Capacity Here: _____ quarts.					
How much pure coolant did you use? _____ quarts.					
Test coolant :	Before	After	Inspect radiator cap:		
Appearance			Appearance		
Boiling Point			Recommendation	Keep	Replace
Freezing Point			Why?		

Item Inspected	<i>Need Replacement?</i>	<i>Need Adjustment?</i>
Belts	<i>Circle One: Yes / No</i>	<i>Circle One: Yes / No</i>
Hoses	<i>Circle One: Yes / No</i>	<i>Circle One: Yes / No</i>
Fan Blades	<i>Circle One: Yes / No</i>	<i>Circle One: Yes / No</i>

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	

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