

EP-LAB 6

NATEF TASK SHEET --- SECTION A.1, A.8 P-1

EP-LAB 6 : Engine Cylinder Leakage Test

Where is your compression going?

Student: _____ Date: _____ Period: _____

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

Engine: _____ Transmission: _____ Production Date: _____

OBJECTIVE: Student will perform a cylinder leakage test and evaluate results.

- MATERIALS:**
1. **EYE PROTECTION**
 2. Hand Tools
 3. Cylinder Leakage Tester
 4. Running Vehicle (see instructor)

PROCEDURE: **WEAR EYE PROTECTION!** . Watch EP-LAB 6 PPT/video. Locate and mark spark plug wires to ease reinstallation. Locate and remove spark plugs. Screw cylinder leakage tester into #1 spark plug hole. Turn engine by hand to TDC. Pressurize cylinder. Note cylinder leakage tester reading and write down on skill sheet. Listen for hissing sounds at crankcase, tailpipe, and intake. Release pressure on tester and repeat procedure for each consecutive cylinder. Document all % leakage readings. Reinstall spark plugs and wires. Start vehicle to assure correct plug wire installation and smooth idle. Determine if leakage is within factory specifications. Document leakage specifications.

| #CYL. | %LEAKAGE | #CYL. | %LEAKAGE |
|-------|----------|-------|----------|
| 1. | | 5. | |
| 2. | | 6. | |
| 3. | | 7. | |
| 4. | | 8. | |

FACTORY SPECIFICATIONS: _____

CAN YOU HEAR LEAKAGE FROM: TAILPIPE? CRANKCASE? INTAKE? RADIATOR?

RECOMMENDATIONS: _____

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: _____ | | | |

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