



# Scan Tool Diagnosis

**Meets NATEF Task:** (A8-B-3) Diagnose driveability and emissions problems resulting from malfunctions of interrelated systems; determine necessary action. (P-2)

Name \_\_\_\_\_ Date \_\_\_\_\_ Time on Task \_\_\_\_\_

Make/Model/Year \_\_\_\_\_ VIN \_\_\_\_\_ Evaluation: 4 3 2 1

(Not all of this data will be available on all vehicles or scan tools - if not available, put N.A.)

- \_\_\_\_ 1. DTCs: \_\_\_\_\_ Pending DTC: \_\_\_\_\_
- \_\_\_\_ 2. Engine coolant temperature (ECT): cold \_\_\_\_\_ warm \_\_\_\_\_
- \_\_\_\_ 3. Intake air temperature (IAT): cold \_\_\_\_\_ warm \_\_\_\_\_
- \_\_\_\_ 4. Upstream O2S1: lowest voltage observed \_\_\_\_\_ highest voltage observed \_\_\_\_\_
- \_\_\_\_ 5. Upstream O2S2: lowest voltage observed \_\_\_\_\_ highest voltage observed \_\_\_\_\_
- \_\_\_\_ 6. Downstream O2S: lowest voltage observed \_\_\_\_\_ highest voltage observed \_\_\_\_\_
- \_\_\_\_ 7. O<sub>2</sub> cross counts: @ idle \_\_\_\_\_ @ 2,000 RPM \_\_\_\_\_
- \_\_\_\_ 8. Injector pulse width: @ idle (park) \_\_\_\_\_ @ idle (drive) \_\_\_\_\_  
 @ 2,000 RPM (park) \_\_\_\_\_ @ 3,000 RPM (park) \_\_\_\_\_
- \_\_\_\_ 9. Spark advance: @ idle (park) \_\_\_\_\_ @ idle (drive) \_\_\_\_\_  
 @ 2,000 RPM (park) \_\_\_\_\_ @ 3,000 RPM (park) \_\_\_\_\_
- \_\_\_\_ 10. Short term fuel trim (integrator): @ idle (park) \_\_\_\_\_  
 @ idle (drive) \_\_\_\_\_ @ 2,000 RPM (park) \_\_\_\_\_
- \_\_\_\_ 11. Long term fuel trim (block learn): @ idle (park) \_\_\_\_\_ @ idle (drive) \_\_\_\_\_
- \_\_\_\_ 12. P/S switch: OK \_\_\_\_\_ NOT OK \_\_\_\_\_
- \_\_\_\_ 13. MAP: @ idle (park) \_\_\_\_\_ @ idle (drive) \_\_\_\_\_
- \_\_\_\_ 14. MAF (grams/sec): @ idle (park) \_\_\_\_\_ @ idle (drive) \_\_\_\_\_  
 @ 2,000 RPM (park) \_\_\_\_\_ @ key on (engine off) \_\_\_\_\_
- \_\_\_\_ 15. IAC counts: @ idle (park) \_\_\_\_\_ @ idle (drive) \_\_\_\_\_  
 @ A/C on (drive) \_\_\_\_\_ @ 2,000 RPM (park) \_\_\_\_\_
- \_\_\_\_ 16. Throttle position (TP) sensor: @ idle \_\_\_\_\_ @ W.O.T. engine off, ignition "on" \_\_\_\_\_
- \_\_\_\_ 17. Battery voltage: \_\_\_\_\_
- \_\_\_\_ 18. Troubles with the vehicle? (if any) \_\_\_\_\_