

General Driveability and Emission Diagnosis

Student/Intern information:

Name _____ Date _____ Class _____

Vehicle used for this activity:

Year _____ Make _____ Model _____

Odometer _____ VIN _____

| Learning Objective/Task | CDX Tasksheet Number | 2017 MAST NATEF Reference Number; Priority Level |
|--|----------------------------|--|
| • Diagnose engine mechanical, electrical, electronic, fuel, and ignition concerns; determine needed action. | C710 | 8A9; P-2 |
| • Diagnose the causes of emissions or driveability concerns with stored or active diagnostic trouble codes (DTC); obtain, graph, and interpret scan tool data. | C660 | 8B5; P-1 |
| • Diagnose emissions or driveability concerns without stored or active diagnostic trouble codes; determine needed action. | C711 | 8B6; P-1 |
| • Interpret diagnostic trouble codes (DTCs) and scan tool data related to the emissions control systems; determine needed action. | C668 | 8E7; P-2 |
| • Diagnose driveability and emissions problems resulting from malfunctions of interrelated systems (cruise control, security alarms, suspension controls, traction controls, HVAC, automatic transmissions, non-OEM-installed accessories, or similar systems); determine needed action. | C409 | 8B8; P-2 |

Time off _____

Time on _____

Total time _____

Materials Required

- Vehicle or simulator with related fault
- DMM/DVOM
- Problem-specific tools and equipment such as: scan tool, lab scope, etc.

Some Safety Issues to Consider

- You will be working under the hood of a running vehicle. Keep your hands and fingers away from moving belts, fans, and other parts.
- When running any vehicles in the shop, make sure you use the shop's exhaust ventilation system to discharge all exhaust gas safely outside.
- Only students who have their supervisor/instructor's direct permission should perform this task due to the safety concerns involved.
- Diagnosis of this fault may require test driving the vehicle on the school grounds. Attempt this task only with full permission from your instructor and follow all the guidelines exactly.
- Comply with personal and environmental safety practices associated with clothing; eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals/materials in accordance with local, state, and federal safety and environmental regulations.

Performance Standard

0–No exposure: No information or practice provided during the program; complete training required

1–Exposure only: General information provided with no practice time; close supervision needed; additional training required

2–Limited practice: Has practiced job during training program; additional training required to develop skill

3–Moderately skilled: Has performed job independently during training program; limited additional training may be required

4–Skilled: Can perform job independently with no additional training