

# Exhaust System Testing

## 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
• Inspect condition of exhaust system hangers, brackets, clamps, and heat shields; determine needed action.	C963	8D10; P-1
• Inspect the integrity of the exhaust manifold, exhaust pipes, muffler(s), catalytic converter(s), resonator(s), tail pipe(s), and heat shields; perform needed action.	C428	8D9; P-1
• Check and refill diesel exhaust fluid (DEF).	C965	8D12; P-2
• Perform exhaust system back-pressure test; determine needed action.	C429	8D11; P-2
• Test the operation of turbocharger/supercharger systems; determine needed action.	C869	8D13; P-2

Time off \_\_\_\_\_

Time on \_\_\_\_\_

Total time \_\_\_\_\_

## Materials Required

- Vehicle
- Large Channellock® (arc joint) pliers
- Exhaust back-pressure gauge
- Tachometer (if the vehicle is not equipped with one)
- Diesel Exhaust Fluid refractometer or hydrometer
- Problem-specific tools and equipment such as: scan tool, lab scope, etc.

## Some Safety Issues to Consider

- Vehicle hoists are important tools that increase productivity and make the job easier. However, they can also cause severe injury or death if used improperly. Make sure you follow the hoist and vehicle manufacturer's operation procedures. Also make sure you have your supervisor's/instructor's permission to use a vehicle hoist.
- 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.
- Diagnosis of this fault may require test-driving the vehicle on the school grounds or on a hoist, both of which carry severe risks. Attempt this task only with full permission from your supervisor/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