

# Drum Brake Inspection, Maintenance, and Service

## 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 poor stopping, noise, vibration, pulling, grabbing, dragging, or pedal pulsation concerns; determine needed action.	C706	5C1; P-1
• Remove, clean, and inspect brake drum; measure brake drum diameter; determine serviceability.	C800	5C2; P-1
• Refinish brake drum and measure final drum diameter; compare to specification.	C626	5C3; P-1
• Remove, clean, inspect, and/or replace brake shoes, springs, pins, clips, levers, adjusters/self-adjusters, other related brake hardware, and backing support plates; lubricate and reassemble.	C248	5C4; P-1
• Inspect wheel cylinders for leaks and proper operation; remove and replace as needed.	C707	5C5; P-2
• Pre-adjust brake shoes and parking brake; install brake drums or drum/hub assemblies and wheel bearings; make final checks and adjustments.	C801	5C6; P-1
• Install wheel and torque lug nuts.	C251	5A4; P-1

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

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

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

## Materials Required

- Vehicle or simulator with drum brakes
- Vehicle lifting equipment
- Asbestos removal equipment
- Drum brake micrometer
- Brake Lathe
- Brake spring tools
- Micrometer or dial caliper
- Flare nut wrench to fit brake line fitting
- Brake spoon
- Lubriplate

### Some Safety Issues to Consider

- 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.
- **Caution:** Brake dust may contain asbestos, which has been determined to cause cancer when inhaled or ingested. Treat all brake dust as if it contains asbestos and use OSHA-approved asbestos removal equipment. Do not allow brake dust to become airborne by using anything that would disturb the dust. Also, wear protective gloves during this procedure and dispose of or clean them in an approved manner.
- Brake springs can fly off with much force. Always wear safety glasses, and grip the springs firmly when removing and installing them.
- Brake lathes are very powerful. Follow all manufacturer instructions when setting up and operating a brake lathe.
- Lifting equipment such as vehicle jacks and stands, vehicle hoists, and engine 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 manufacturer's operation procedures. Also make sure you have your supervisor's/instructor's permission to use any particular type of lifting equipment.
- 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