Electronic Brake Control 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 poor stopping, wheel lock-up, abnormal pedal feel, unwanted application, and noise concerns associated with the electronic brake control system; determine needed action.	C635	5G3; P-2
• Diagnose electronic brake control system electronic control(s) and components by retrieving diagnostic trouble codes, and/or using recommended test equipment; determine needed action.	C636	5G4; P-2
• Test, diagnose, and service electronic brake control system speed sensors (digital and analog), toothed ring (tone wheel), and circuits using a graphing multimeter (GMM)/digital storage oscilloscope (DSO) (includes output signal, resistance, shorts to voltage/ground, and frequency data).	C639	5G7; P-2
• Diagnose electronic brake control system braking concerns caused by vehicle modifications (tire size, curb height, final drive ratio, etc.).	C813	5G8; P-1

Time off _____

Time on _____

Total time _____

Materials Required

- Vehicle or simulator with electronic brake control
- DVOM/DMM
- GMM/DSO
- Scan Tool
- Depending on the type of concern, special diagnostic tools may be required. See your supervisor/instructor for instructions to identify what tools may be required.

Some Safety Issues to Consider

- If you need to start the vehicle, you should ensure that the parking brake is firmly applied; if necessary, use wheel chocks to prevent the vehicle from moving when the vehicle is started to verify the completion of this task.
- 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 these tasks 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