Electronic Brake Control Systems

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
• Identify and inspect electronic brake control system components (ABS, TCS, ESC); determine needed action.	C634	5G1; P-1
Describe the operation of a regenerative braking system.	C950	5G2; P-3

Time off
Time on
Total time

Materials Required

- · Vehicle with electronic brake control
- · Vehicle with traction control
- Vehicle hoist to see some of the components that are located under the vehicle
- DMM/DVOM
- Lab scope

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.
- Anti-lock brake systems store brake fluid under tremendous pressure that can cause severe injury, even when the engine is not running. Always refer to the service manual to determine how to depressurize the system safely whenever working on it.
- **Caution:** Most types of brake fluid are harmful to painted surfaces. Be sure to prevent brake fluid from coming into contact with a vehicle's paint. Use fender covers to minimize this risk and be sure to wipe up any spilled brake fluid immediately with a wet rag.
- 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.

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Performance Standard

- **O-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