

# Automatic Transmission and Transaxle: Diagnosis

## Student/intern information:

Name \_\_\_\_\_ Date \_\_\_\_\_ Class \_\_\_\_\_

## Vehicle used for this activity:

Year \_\_\_\_\_ Make \_\_\_\_\_ Model \_\_\_\_\_

Odometer \_\_\_\_\_ VIN \_\_\_\_\_

Learning Objective/Task	CDX Tasksheet Number	2013 MLR NATEF Reference Number; Priority Level	2013 AST NATEF Reference Number; Priority Level	2013 MAST NATEF Reference Number; Priority Level
• Diagnose electronic transmission/transaxle control systems using appropriate test equipment and service information.	C600			2A11; P-1
• Inspect, test, adjust, repair, or replace electrical/electronic components and circuits including computers, solenoids, sensors, relays, terminals, connectors, switches, and harnesses.	C601		2B3; P-1	2B3; P-1
• Diagnose transmission/transaxle gear reduction/multiplication concerns using driving, driven, and held-member (power flow) principles.	C066		2A8; P-1	2A10; P-1
• Diagnose pressure concerns in a transmission using hydraulic principles (Pascal's Law).	C747		2A9; P-2	2A12; P-2
• Diagnose noise and vibration concerns; determine necessary action.	C743			2A7; P-2

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

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

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

## Materials Required

- Vehicle with automatic transmission/transaxle
- Vehicle hoist
- Transmission pressure gauge set
- Tachometer
- Scan tool
- DVOM/DMM

## 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 manufacturer's operation procedures. Also, make sure you have your supervisor's/instructor's permission to use a hoist.

- 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. Attempt this task only with full permission from your instructor and follow all the guidelines exactly.
- Always wear the correct protective eyewear and clothing, and use the appropriate safety equipment, as well as fender covers, seat protectors, and floor mat protectors.
- 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