

# Manual Drive Train and Axles: Transmission/Transaxle Repair

## 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
• Inspect, adjust, and reinstall shift linkages, brackets, bushings, cables, pivots, and levers.	C768		3C1; P-2	3C1; P-2
• Disassemble, inspect, clean, and reassemble internal transmission/transaxle components.	C910			3C6; P-3

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

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

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

## Materials Required

- Vehicle/simulator
- Transmission/transaxle
- Parts trays
- Snap ring pliers
- Dial indicator
- Feeler blades
- Straightedge
- Approved air nozzle
- Manufacturer-specific tools

## 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 any particular type of lifting equipment.
- This procedure may require cleaning of the engine/transmission as part of the task. If so, use the proper equipment and procedures to carry this out safely. Also get your supervisor/instructor's permission prior to cleaning.
- Many transmission parts are round and can easily roll off of tables and carts. Be sure to place them in a secure manner to prevent component damage or personal injury from falling objects.
- Compressed air can be very dangerous if applied to broken skin or body cavities. Always use approved air nozzles, and never point them at yourself or another person.
- Transmissions, transaxles, and their component assemblies are heavy and can slip easily. Work safely, get help, and do not overextend your abilities.
- Castings and machined parts may have sharp edges. Handle these parts with care.
- 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