Automotive Service Technician Program Competency Profile - Automatic Transmission/Transaxle-A2

Student Information

Last Name
First Name
Telephone
Directions: Evaluate the student according to the rating scale to indicate the degree of competency. The rating for each competency should indicate employability readiness, rather than the grades given in class.

2012 NATEF Standards for Automotive Service Technology

Student Rating Scale:

1 = NO EXPOSURE - no experience or knowledge in this area

2 = KNOWLEDGE - can recall, explain, or has been exposed to this information

3 = LIMITED SKILLED - requires instruction and close supervision

4 = MODERATELY SKILLED - can perform job completely with limited supervision

5 = SKILLED - can work independently with no supervision

Score A. General: Transmission and Transaxle Diagnosis Date Completed 1. Identify and interpret transmission/transaxle concern, differentiate between engine performance and transmission/transaxle concerns; determine necessary action. P1 2. Research applicable vehicle and service information fluid type, vehicle service history, service precautions, and technical service bulletins. P1 3. Diagnose fluid loss and condition concerns; determine necessary action. P1 4. Check fluid level in a transmission or a transaxle equipped with a dip-stick. P1 5. Check fluid level in a transmission or a transaxle not equipped with a dip-stick. P1 6. Perform stall test; determine necessary action. P1 7. Perform lock-up converter system tests; determine necessary action. P1 8. Diagnose transmission/transaxle gear reduction/multiplication concerns using driving, driven, and held member (power flow) principles. P1 9. Diagnose pressure concerns in a transmission using hydraulic principles (Pascal's Law). P1

B. In-Vehicle Transmission/Transaxle Maintenance and Repair

1	 Inspect, adjust, and replace external manual valve shift linkage, transmission range sensor/switch, and park/neutral position switch. P-2 	
2	Inspect for leakage; replace external seals, gaskets, and bushings. P2	
3	3. Inspect, test, adjust, repair, or replace electrical/electronic components and circuits including computers, solenoids, sensors, relays, terminals, connectors, switches, and harnesses. P1	
4	 Drain and replace fluid and filter(s). P1 	
5	5. Inspect powertrain mounts. P2	

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C. Off-Vehicle Transmission and Transaxle Repair

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1. Remove and reinstall transmission/transaxle and torque converter; inspect engine core	
plugs, rear crankshaft seal, dowel pins, dowel pin holes, and mating surfaces. P-1	
2. Inspect, leak test, and flush or replace transmission/transaxle oil cooler, lines, and	
fittings. P1	
3. Inspect converter flex (drive) plate, converter attaching bolts, converter pilot, converter	
pump drive surfaces, converter end play, and crankshaft pilot bore. P1	
4. Describe the operational characteristics of a continuously variable transmission (CVT).	
P-3	
5. Describe the operational characteristics of a hybrid vehicle drive train. P-3	