

AER 0299 - Automotive Automatic Transmissions and Transaxles

2013 NATEF JOB TASKS COMPLETION REQUIREMENT: **P1 - 95% P2 - 80% P3 - 50%**

Student Name: _____

DETAILED COURSE CONTENT

AUTOMATIC TRANSMISSION AND TRANSAXLE TECHNICIAN

DEMONSTRATE PROFICIENCY IN GENERAL TRANSMISSION AND TRANSAXLE DIAGNOSIS – The student will be able to:

		P1	P2	P3	Level	Date	Textbook Ch CDX Task
II-A-1	Identify and interpret transmission/transaxle concern; differentiate between engine performance and transmission/transaxle concerns; determine necessary action.						20: C599
II-A-2	Research applicable vehicle and service information fluid type, vehicle service history, service precautions, and technical service bulletins.						16: C681
II-A-3	Diagnose fluid loss and condition concerns; determine necessary action.						20: C682
II-A-4	Check fluid level in a transmission or a transaxle equipped with a dip-stick.						20: C902
II-A-5	Check fluid level in a transmission or a transaxle not equipped with a dip-stick.						20: C903
II-A-6	Perform stall test; determine necessary action.						20: C741
II-A-7	Perform lock-up converter system tests; determine necessary action.						20: C063
II-A-8	Diagnose transmission/transaxle gear reduction/multiplication concerns using driving, driven, and held member (power flow) principles.						17: C066
II-A-9	Diagnose pressure concerns in a transmission using hydraulic principles (Pascal's Law).						20: C747

DEMONSTRATE PROFICIENCY IN IN-VEHICLE TRANSMISSION/TRANSAXLE MAINTENANCE AND REPAIR - The student will be able to:

		P1	P2	P3	Level	Date	Textbook Ch CDX Task
II-B-1	Inspect, adjust, and replace manual valve shift linkage, transmission range sensor/switch, and park/neutral position switch.						8: C683
II-B-2	Inspect for leakage; replace external seals and gaskets, and bushings.						8: C748

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DEMONSTRATE PROFICIENCY IN IN-VEHICLE TRANSMISSION/TRANSAXLE

MAINTENANCE AND REPAIR - The student will be able to:

		P1	P2	P3	Level	Date	Textbook Ch CDX Task
II-B-3	Inspect, test, adjust, repair, or replace electrical/electronic components and circuits including computers, solenoids, sensors, relays, terminals, connectors, switches, and harnesses.						20: C601
II-B-4	Drain and replace fluid and filter(s).						20: C907
II-B-5	Inspect, replace and align powertrain mounts.						20: C602

DEMONSTRATE PROFICIENCY IN OFF-VEHICLE TRANSMISSION AND TRANSAXLE REPAIR - The student will be able to:

II-C-1	Remove and reinstall transmission/transaxle and torque converter; inspect engine core plugs, rear crankshaft seal, dowel pins, dowel pin holes, and mating surfaces.						20: C604
II-C-2	Inspect, leak test, and flush or replace transmission/transaxle oil cooler, lines, and fittings.						20: C749
II-C-3	Inspect converter flex (drive) plate, convertor attaching bolts, converter pilot, converter pump drive surfaces, converter end play, and crankshaft pilot bore.						20: C605
II-C-4	Describe the operation characteristics of a continuously variable transmission (CVT).						21: C606
II-C-5	Describe the operation characteristics of a hybrid vehicle drive train.						21: C607

	P1	P2	P3
Tasks Completed	0	0	0
Total Tasks	10	5	4
% of Total Tasks	0	0	0