

**NATEF AUTOMOTIVE TASK LIST**  
**AUT 153 – AUTOMATIC TRANSMISSION DIAGNOSIS**

TERM: \_\_\_\_\_

SID: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

NAME: \_\_\_\_\_

**For every task in Automatic Transmission Diagnosis, the following safety requirement must be strictly enforced: 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.**

<b><u>Task Code</u></b>	<b><u>Task</u></b>	<b><u>Priority</u></b>
<b><u>C. Off-Vehicle Transmission and Transaxle Repair</u></b>		
2.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.	P2
2.C.2	Disassemble, clean, and inspect transmission/transaxle.	P1
2.C.3	Inspect, measure clean, and replace valve body (includes surfaces, bores, springs, valves, sleeves, retainers, brackets, check-valves/balls, screens, spacers, and gaskets).	P2
2.C.4	Inspect servo and accumulator bores, pistons, seals, pins, springs, and retainers; determine necessary action.	P2
2.C.5	Assemble transmission/transaxle.	P1
2.C.6	Inspect; leak test, and flush or replace transmission/transaxle oil cooler, lines, and fittings.	P1
2.C.7	Inspect converter flex(drive)plate, converter attaching bolts, converter pilot, converter pump Drive surfaces, converter end play and crankshaft pilot bore.	P2
2.C.8	Install and seat torque converter to engage drive/splines	P1
2.C.9	Inspect, measure, and reseal oil pump assembly and components.	P2
2.C.10	Measure transmission/transaxle end play or preload; determine necessary action	P1
2.C.11	Inspect, measure, and replace thrust washers and bearings.	P2
2.C.12	Inspect oil delivery circuits, including seal rings, ring groove, and sealing surface area. Feed pipes, orifices and check valves/balls.	P2
2.C.13	Inspect bushings; determine necessary action.	P2
2.C.14	Inspect and measure planetary gear assembly components; determine necessary action.	P2
2.C.15	Inspect cases, bores, passages, bushings, vents, and mating surfaces; determine necessary action.	P2
2.C.16	Inspect transaxle drive, link chains, sprockets, gears, bearings, and bushings; perform necessary action.	P2

2.C.17	Inspect, measure, repair, adjust or replace transaxle final drive components.	P2
2.C.18	Inspect clutch drum, piston, check-balls, springs, retainers, seals, and friction and pressure plates; determine necessary action.	P2
2.C.19	Measure clutch pack clearance; determine necessary action.	P1
2.C.20	Air test the operation of clutch pack and servo assemblies.	P1
2.C.21	Inspect roller and sprag clutch, races, rollers, sprags, springs, cages, and retainers; determine necessary action.	P1
2.C.22	Inspect bands and drums; determine necessary action.	P2
2.C.23	Describe operational characteristics of a continuously variable transmission (CVT)	P3
2.C.24	Describe the operational characteristics of a hybrid vehicle drive train.	P3