

NATEF AUTOMOTIVE TASK LIST
AUT 115 - MANUAL DRIVE TRAIN AND AXLE

TERM: _____

SID: _____

INSTRUCTOR: _____

NAME: _____

For every task in Manual Drive Train and Axle, 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.

<u>Task Code</u>	<u>Task</u>	<u>Priority</u>
<u>A. General Drive Train Diagnosis</u>		
3.A.1	Identify and interpret drive train concern; determine necessary action.	P-1
3.A.2	Research applicable vehicle and service information, fluid type, vehicle service history, service precautions and technical service bulletins.	P-1
3.A.3	Check fluid condition; check for leaks; determine necessary action.	P-1
3.A.4	Drain and refill manual transmission/transaxle and final drive unit.	P-1
<u>B. Clutch Diagnosis and Repair</u>		
3.B.1	Diagnose clutch noise, binding, slippage, pulsation, and chatter; determine necessary action.	P-1
3.B.2	Inspect clutch pedal linkage, cables, automatic adjuster mechanisms, brackets, bushings, pivots, and springs; perform necessary action.	P-1
3.B.3	Inspect and replace clutch pressure plate assembly, clutch disc, release (throw-out) bearing and linkage, and pilot bearing/bushing (as applicable).	P-1
3.B.4	Bleed clutch hydraulic system.	P-1
3.B.5	Check and adjust clutch master cylinder fluid level; check for leaks.	P-1
3.B.6	Inspect flywheel and ring gear for wear and cracks; determine necessary action.	P-1
3.B.7	Measure flywheel run-out and crankshaft endplay; determine necessary action.	P-2
<u>D. Drive Shaft and Half Shaft, Universal and Constant Velocity (CV) Joint Diagnosis and Repair</u>		
3.D.1	Diagnose constant-velocity (CV) joint noise and vibration concerns; determine necessary action.	P-1
3.D.2	Diagnose universal joint noise and vibration concern; perform necessary action.	P-2
3.D.3	Inspect, remove and replace front wheel drive (FWD) bearings, hubs and seals.	P-1
3.D.4	Inspect, service, and replace shafts, yokes, boots and universal/CV joints.	P-1
3.D.5	Check shaft balance and phasing; measure shaft runout; measure and adjust driveline angles.	P-2