

Student's Name/Initial:

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Date:

Teacher's Initials:

Date:

AUTOMOTIVE TECHNOLOGY 2 STUDENT PROFILE**COURSE CODE: 6031**

Directions: Evaluate the student using the applicable rating scales below and check the appropriate box to indicate the degree of competency. The ratings 3, 2, 1, and N are not intended to represent the traditional school grading system of A, B, C, and D. The description associated with each of the ratings focuses on the level of student performance or cognition for each of the competencies listed below.

PERFORMANCE RATING

- 3 - Skilled--can perform task independently with no supervision
 2 - Moderately skilled--can perform task completely with limited supervision
 1 - Limitedly skilled--requires instruction and close supervision
 N - No exposure--has no experience or knowledge of this task

COGNITIVE RATING

- 3 - Knowledgeable--can apply the concept to solve problems
 2 - Moderately knowledgeable--understands the concept
 1 - Limitedly knowledgeable--requires additional instruction
 N - No exposure--has not received instruction in this area

A. ENGINE REPAIR

3 2 1 N

- ___ ___ ___ 1. Inspect engine assembly for fuel, oil, coolant, and other leaks; determine necessary action.
- ___ ___ ___ 2. Inspect, replace, and adjust drive belts, tensioners, and pulleys; check pulley and belt alignment.
- ___ ___ ___ 3. Inspect and test coolant; drain and recover coolant; flush and refill cooling system with recommended coolant; bleed air as required.
- ___ ___ ___ 4. Inspect and replace accessory belt driven water pumps.
- ___ ___ ___ 5. Check for abnormal engine noises.

B. AUTOMATIC TRANSMISSION AND TRANSAXLE

3 2 1 N

- ___ ___ ___ 1. Drain and replace fluid and filter(s).

C. MANUAL DRIVE TRAIN AND AXLES

3 2 1 N

- ___ ___ ___ 1. Drain and refill manual transmission/transaxle and final drive unit.
- ___ ___ ___ 2. Clean and inspect differential housing; check for leaks; inspect housing vent.
- ___ ___ ___ 3. Drain and refill differential housing.

D. SUSPENSION AND STEERING

3 2 1 N

- ___ ___ ___ 1. Inspect rack and pinion steering gear inner tie rod ends (sockets) and bellows boots.
- ___ ___ ___ 2. Flush, fill, and bleed power steering system.
- ___ ___ ___ 3. Inspect for power steering fluid leakage; determine necessary action.
- ___ ___ ___ 4. Remove, inspect, replace, and adjust power steering pump drive belt.
- ___ ___ ___ 5. Inspect pitman arm, relay (center-link/intermediate) rod, idler arm and mountings, and steering linkage damper.

___ ___ ___ 6.

Inspect tie rod ends (sockets), tie rod sleeves, and clamps.

___ ___ ___ 7.

Inspect upper and lower control arms, bushings, and shafts.

___ ___ ___ 8.

Inspect and replace rebound and jounce bumpers.

___ ___ ___ 9.

Inspect track bar, strut rods/radius arms, and related mounts and bushings.

___ ___ ___ 10.

Inspect upper and lower ball joints (with or without wear indicators).

___ ___ ___ 11.

Inspect suspension system coil springs and spring insulators (silencers).

___ ___ ___ 12.

Inspect suspension system torsion bars and mounts.

___ ___ ___ 13.

Inspect and replace front stabilizer bar (sway bar) bushings, brackets, and links.

___ ___ ___ 14.

Inspect strut cartridge or assembly.

___ ___ ___ 15.

Inspect front strut bearing and mount.

- __ __ __ __16. Inspect rear suspension system lateral links/arms (track bars) and control (trailing) arms.
- __ __ __ __17. Inspect rear suspension system leaf spring(s), spring insulators (silencers), shackles, brackets, bushings, center pins/bolts, and mounts.
- __ __ __ __18. Identify power steering pump noises, vibration, and fluid leakage.

E. BRAKES

3 2 1 N

- __ __ __ __1. Replace brake lines, hoses, fittings, and supports.
- __ __ __ __2. Inspect brake lines, flexible hoses, and fittings for leaks, dents, kinks, rust, cracks, bulging, wear, loose fittings and supports; determine necessary action.
- __ __ __ __3. Fabricate brake lines using proper material and flaring procedures (double flare and ISO types).
- __ __ __ __4. Test brake fluid for contamination.
- __ __ __ __5. Check brake pad wear indicator; determine necessary action.
- __ __ __ __6. Check parking brake operation and parking brake indicator light system operation; determine necessary action.

F. ELECTRICAL

3 2 1 N

- __ __ __ __1. Perform battery state-of-charge test; determine necessary action.
- __ __ __ __2. Confirm proper battery capacity for vehicle application; perform battery capacity test; determine necessary action.
- __ __ __ __3. Identify hybrid vehicle auxiliary (12v) battery service, repair, and test procedures.

- __ __ __ __4. Perform starter current draw test; determine necessary action.
- __ __ __ __5. Perform charging system output test; determine necessary action.
- __ __ __ __6. Inspect, adjust, or replace generator (alternator) drive belts; check pulleys and tensioners for wear; check pulley and belt alignment.
- __ __ __ __7. Inspect interior and exterior lamps and sockets including headlights and auxiliary lights (fog lights/driving lights); replace as needed.
- __ __ __ __8. Aim headlights.

G. HVAC

3 2 1 N

- __ __ __ __1. Inspect and replace A/C compressor drive belts, pulleys, and tensioners; determine necessary action.
- __ __ __ __2. Inspect A/C condenser for airflow restrictions; determine necessary action.
- __ __ __ __3. Inspect A/C-heater ducts, doors, hoses, cabin filters, and outlets; perform necessary action.

H. ENGINE PERFORMANCE

3 2 1 N

- __ __ __ __1. Verify engine operating temperature.
- __ __ __ __2. Replace fuel filter(s).
- __ __ __ __3. Inspect, test, and service positive crankcase ventilation (PCV) filter/breather cap, valve, tubes, orifices, and hoses; perform necessary action.
- __ __ __ __4. Perform air induction/throttle body service.