

Student's Name/Initial:

/

Date:

Teacher's Initials:

Date:

## AUTOMOTIVE TECHNOLOGY 1 STUDENT PROFILE

COURSE CODE: 6030

**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. Research applicable vehicle and service information, vehicle service history, service precautions, and technical service bulletins.
- \_\_ \_\_ \_\_ \_\_2. Verify operation of the instrument panel engine warning indicators.
- \_\_ \_\_ \_\_ \_\_3. Identify hybrid vehicle internal combustion engine service precautions.
- \_\_ \_\_ \_\_ \_\_4. Perform cooling system pressure and dye tests to identify leaks; check coolant condition and level; inspect and test radiator, pressure cap, coolant recovery tank, and heater core and galley plugs; determine necessary action.
- \_\_ \_\_ \_\_ \_\_5. Perform engine oil and filter change.

#### B. AUTOMATIC TRANSMISSION AND TRANSAXLE

3 2 1 N

- \_\_ \_\_ \_\_ \_\_1. Research applicable vehicle and service information, fluid type, vehicle service history, service precautions, and technical service bulletins.
- \_\_ \_\_ \_\_ \_\_2. Check fluid level in a transmission or a transaxle equipped with a dipstick.
- \_\_ \_\_ \_\_ \_\_3. Check fluid level in a transmission or a transaxle not equipped with a dipstick.
- \_\_ \_\_ \_\_ \_\_4. Check transmission fluid condition; check for leaks.
- \_\_ \_\_ \_\_ \_\_5. Visually inspect condition of transmission cooling system, lines, and fittings.

#### C. MANUAL DRIVE TRAIN AND AXLES

3 2 1 N

- \_\_ \_\_ \_\_ \_\_1. Research applicable vehicle and service information, fluid type, vehicle service history, service precautions, and technical service bulletins.
- \_\_ \_\_ \_\_ \_\_2. Check fluid condition; check for leaks.
- \_\_ \_\_ \_\_ \_\_3. Check and adjust clutch master cylinder fluid level.
- \_\_ \_\_ \_\_ \_\_4. Check for system leaks.
- \_\_ \_\_ \_\_ \_\_5. Check and adjust differential housing fluid level.

#### D. SUSPENSION AND STEERING

3 2 1 N

- \_\_ \_\_ \_\_ \_\_1. Research applicable vehicle and service information, fluid type, vehicle service history, service precautions, and technical service bulletins.
- \_\_ \_\_ \_\_ \_\_2. Determine proper power steering fluid type; inspect fluid level and condition.

- \_\_ \_\_ \_\_ \_\_3. Identify hybrid vehicle power steering system electrical circuits and safety precautions.
- \_\_ \_\_ \_\_ \_\_4. Inspect tire condition; identify tire wear patterns; check for correct size and application (load and speed ratings) and adjust air pressure; determine necessary action.
- \_\_ \_\_ \_\_ \_\_5. Rotate tires according to manufacturer's recommendations.
- \_\_ \_\_ \_\_ \_\_6. Inspect tire and wheel assembly for air loss; perform necessary action.
- \_\_ \_\_ \_\_ \_\_7. Identify front suspension system noises, handling, ride height, and ride quality concerns; disable air suspension system.
- \_\_ \_\_ \_\_ \_\_8. Identify rear suspension system noises, handling, and ride height concerns; disable air suspension system.
- \_\_ \_\_ \_\_ \_\_9. Inspect front steering knuckle/spindle assemblies and steering arms.
- \_\_ \_\_ \_\_ \_\_10. Inspect rear knuckle/spindle assembly.

### E. BRAKES

3 2 1 N

- \_\_ \_\_ \_\_ \_\_1. Identify and interpret brake system concerns; determine necessary action.
- \_\_ \_\_ \_\_ \_\_2. Research applicable vehicle and service information, fluid type, vehicle service history, service precautions, and technical service bulletins.
- \_\_ \_\_ \_\_ \_\_3. Install wheel and torque lug nuts.
- \_\_ \_\_ \_\_ \_\_4. Select, handle, store, and fill brake fluids to proper level.
- \_\_ \_\_ \_\_ \_\_5. Check operation of brake stop light system.

### F. ELECTRICAL/ELECTRONIC SYSTEMS

3 2 1 N

- \_\_ \_\_ \_\_ \_\_1. Research applicable vehicle and service information, vehicle service history, service precautions, and technical service bulletins.
- \_\_ \_\_ \_\_ \_\_2. Inspect and test fusible links, circuit breakers, and fuses; determine necessary action.
- \_\_ \_\_ \_\_ \_\_3. Maintain or restore electronic memory functions.
- \_\_ \_\_ \_\_ \_\_4. Inspect and clean battery; fill battery cells; check battery cables, connectors, clamps, and hold-downs.
- \_\_ \_\_ \_\_ \_\_5. Perform slow/fast battery charge according to manufacturer's recommendations.
- \_\_ \_\_ \_\_ \_\_6. Jump-start vehicle using jumper cables and a booster battery or an auxiliary power supply.
- \_\_ \_\_ \_\_ \_\_7. Identify high-voltage circuits of electric or hybrid electric vehicle and related safety precautions.
- \_\_ \_\_ \_\_ \_\_8. Identify system voltage and safety precautions associated with high-intensity discharge headlights.
- \_\_ \_\_ \_\_ \_\_9. Verify operation of instrument panel gauges and warning/indicator lights; reset maintenance indicators.
- \_\_ \_\_ \_\_ \_\_10. Verify windshield wiper and washer operation; replace wiper blades.
- \_\_ \_\_ \_\_ \_\_11. Inspect lenses; determine needed repairs.
- \_\_ \_\_ \_\_ \_\_12. Confirm fan operation (both electrical and mechanical); inspect fan clutch, fan shroud, and air dams.

### G. HVAC

3 2 1 N

- \_\_ \_\_ \_\_ \_\_1. Research applicable vehicle and service information, vehicle service history, service precautions, and technical service bulletins.
- \_\_ \_\_ \_\_ \_\_2. Identify hybrid vehicle A/C system electrical circuits and service/safety precautions.
- \_\_ \_\_ \_\_ \_\_3. Inspect and clean evaporator drains.
- \_\_ \_\_ \_\_ \_\_4. Visually check A/C components for signs of leaks.

### H. ENGINE PERFORMANCE

3 2 1 N

- \_\_ \_\_ \_\_ \_\_1. Research applicable vehicle and service information, vehicle service history, service precautions, and technical service bulletins.
- \_\_ \_\_ \_\_ \_\_2. Inspect, service, or replace air filters, filter housings, and intake duct work.
- \_\_ \_\_ \_\_ \_\_3. Inspect integrity of the exhaust manifold, exhaust pipes, muffler(s), catalytic converter(s), resonator(s), tail pipe(s), and heat shields; determine necessary action.
- \_\_ \_\_ \_\_ \_\_4. Check and refill diesel exhaust fluid (DEF).
- \_\_ \_\_ \_\_ \_\_5. Inspect canister, lines/hoses, and mechanical and electrical components of the evaporative emissions control system (EVAP).