AUTO G046N: SMOG LEVEL 2 SMOG CHECK INSPECTOR TRAINING

Item	Value
Curriculum Committee Approval Date	09/17/2019
Top Code	094800 - Automotive Technology
Units	0 Total Units
Hours	45 Total Hours (Lecture Hours 18; Lab Hours 27)
Total Outside of Class Hours	0
Course Credit Status	Noncredit (N)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	Yes; Repeat Limit 3
Grading Policy	P/NP/SP Non-Credit (D)

Course Description

This noncredit course provides students the procedural knowledge, skills, and abilities needed to perform Smog Check inspections. Course content includes safety, customer awareness, program administration, equipment maintenance and inspection and testing procedures for On-Board Diagnostic Inspection System (OIS) and Acceleration Simulation Mode (ASM) Smog tests. Students who complete and pass this training will have met the Bureau's training requirements to qualify to take the Smog Check Inspector state licensing examination. NOT DEGREE APPLICABLE. Not Transferable.

Course Level Student Learning Outcome(s)

1. Course Outcomes
2. Apply the laws, regulations, and procedures associated with consumer authorization of inspections and the overall administration of the Smog Check Program.
3. Describe the standards of practice expected of Smog Check Inspectors.
4. Demonstrate performing Smog Check emission tests on various vehicle designs.
5. Demonstrate performing smog check functional tests on live vehicles with various emission system designs.

Course Objectives

- 1. Describe and demonstrate personal, shop, equipment, and vehicle safety practices.
- 2. Describe the laws, regulations, and procedures associated with consumer authorization of inspections and the overall administration of the Smog Check Program.
- 3. Describe the catalytic converter performance standards of practice expected of Smog Check Inspectors.
- 4. Demonstrate ability to calibrate OIS, ASM and BAR 97 emission inspection equipment.
- 5. Demonstrate their knowledge, skills and abilities in performing Smog Check visual inspections on various vehicle designs.
- 6. Describe and demonstrate they have the knowledge, skills and abilities to perform Smog Check functional tests on various vehicle designs.

Lecture Content

Safety Basic Auto Technology shop safety instruction and demonstrations. BAR 97 dyno safety OIS Gas Safety Administrative overview, Inspector or Repair BAR 97 and OIS regulation Star Test Only Star Test and Repair Test Only Test and Repair Repair only Referee Requirements Smog Check and Consumer Estimate Work on vehicles Write it right Smog Check Visual Smoke Test and failure consumer information Smog check repairs during inspections Smog check repairs for failed vehicles Vehicle Inspection Report Consumer Assistance Program (CAP) Repair Cost Waiver State Referee Services Emissions Testing Acceleration Simulation Mode (ASM) 1976-1999 50/15 and 25/25 Emissions Testing Automatic/Manual, TSI 2500rpm 30 secs Functional Checks Technician Performance Evaluation Inspection Quality LPFET Ignition Timing Light Operation and Testing Fuel Cap Test Deviations Catalytic Converter Inspection varication Labeling Aftermarket/ arb.ca Executive Order (EO) Emissions Related Components category Input Catalytic Converter Replacement criteria OBD II Monitors and Mode 6 OIS Emissions Control inspections PCV/ TAC/ Spark Controls/ AIR/ EVAP/ Smoke Test

Lab Content

Using available service information, locate emission control systems and timing specifications for selected vehicles and record results. Conduct complete visual inspections on four selected vehicles and record results. Perform a functional smog inspection on four vehicles and record results. Perform a two-speed idle test on three vehicles and record results. Retrieve diagnostic Mode 6 and inspect emission components. Inspect catalytic converter performance and operation. Conduct the Low Fuel Pressure Evaporative Test (LPFET) on two vehicles.

Method(s) of Instruction

- Enhanced NC Lect (NC1)
- Enhanced NC Lab (NC2)

Instructional Techniques

Lecture Presentations Discussion Guided Practice Physical Demonstration

Reading Assignments

Smog Check Manual

Writing Assignments

Create vehicle repair orders which include, industry accepted documentation of repairs (Complaint, Cause, and Correction). Repair orders should also include mathmatical computation of part costs and labor totals.

Out-of-class Assignments

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Demonstration of Critical Thinking

Analyze and trouble shoot smog machine, LPFET, CAP, BAR 97 and OIS. Analyze vehicle emission control devices, test and monitor devices. Inspect and test catalytic converters

Required Writing, Problem Solving, Skills Demonstration

Use on-line service and repair information to compare factory specifications with actual readings and measurements acquired during smog inspections. Create vehicle repair orders, perform math exercises for flat rate labor, parts and materials totals. Demonstrate their knowledge, skills, and abilities in performing Smog Check emission tests on various vehicle designs Use information and concepts learned in class to successfully pass a practicum exam or written test or assignment.

Eligible Disciplines

Automotive technology: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

Manuals Resources

1. Bureau of Automotive Repair (BAR). Department of Consumer Affairs Bureau of Automotive Repair Smog Check Inspector Smog Check Repair Technician Licensing Examinations, Bureau of Automotive Repair (BAR) , 03-01-2017 2. Department of Consumer Affairs Bureau of Automotive Repair Standards Training Unit. Smog Check Reference Guide, Bureau of Automotive Repair (BAR) , 05-15-2019 3. Bureau of Automotive Repair (BAR). Write it Right, Bureau of Automotive Repair (BAR) , 02-01-2019 4. California Department of Consumer Affairs Bureau of Automotive Repair. State of California Laws and Regulations Pertaining to Automotive Repair Dealers, Smog Check Stations and Technicians, Official Lamp and Brake Adjusting Stations and Adjusters, California Department of Consumer Affairs Bureau of Automotive Repair , 03-14-2019