

Automotive Service Technology

Career Competition

Career Cluster: Transportation, Distribution and Logistics

State Qualifying Exam: No National Contest: Yes Participation: Individual

Competition Description

Competitors demonstrate their ability to perform jobs and skills based on the task list outlined by the National Institute for Automotive Service Excellence and the National Automotive Technicians Education Foundation.

Tasks To Be Evaluated

- 1. Basic electrical circuit be able to wire a basic series circuit and parallel and use of multimeter
- 2. Electrical testing of injector circuit and ignition coil use of wiring diagram and multimeter
- 3. Advanced electrical circuit diagnosis using multimeter
- 4. Scanner be able to use scanner to retrieve data from a vehicle
- 5. MSDS be able to answer question with info given and sample chemicals
- 6. Interview station be able to answer question on a interview
- 7. Safety inspection be able to do a safety inspection on a vehicle
- 8. Alignment station be able to identify parts and interpret readings from alignment machine
- 9. Balance station basic understanding of tires and balancing

- 10. Disc brake disassembly and reassembly and measurements will be taken
- 11. ALLDATA look up car info
- 12. Pico Oscilloscope
- Measurements be able to use a ruler, micrometer, dial gauge, feeler gauge torque wrench and other measuring tools
- 14. ASE type questions written
- 15. Components I.D. various auto parts to be identified
- 16. Electude interactive computer program on engine performance (https://simulator.electude.com) site for students to get familiar with the simulator
- 17. Atech Interactive computer program on relays
- 18. Drive Belts Installing on a trainer and inspection
- 19. Manual transmission parts & gear ratios test
- 20. Be able to answer safety questions from CCARe safety site in handout.
- 21. Soldering wires and terminal crimping on wires

Provided by Competitor

- Multimeter CAT III equivalent
- Competitors will need to create a onepage resume

Provided by Technical Committee

• All tools needed for competition

Additional Resources

To prepare for the safety test, please review the following pages.

If competitors would like to practice the car simulator on Electude, contact Orie Brown at orie.brown@electude.com for access.

STATE CAREER COMPETITION INFORMATION



Career Competition

Clothing Requirement

National Requirement:

Class D: Competition Specific: Blue Attire

- Official SkillsUSA light blue work shirt
- Navy pants
- Black, brown, or tan leather work safety shoes (with protective toe cap).

State Requirement:

National Requirement OR

- Light blue work shirt
- Work pants of any kind are acceptable dress (no jeans)
- Black, brown, or tan leather work safety shoes (with protective toe cap).
- Any embroidered names or school patches must be covered if applicable.