

Specific Competencies and Skills Tested in this Assessment:

Structural

- Select, setup, and adjust welders
- Describe various types and uses of welding processes
- Use adhesive bonding procedures
- Analyze primary and secondary damage
- Replace and/or repair structural components



Non-Structural

- Identify automotive plastics and proper repair procedures
- Remove and replace automotive glass and trim
- Remove, repair, install, replace, and align non-structural panels
- Remove, repair, install, and replace components

Mechanical and Electrical Systems

- Identify, remove, and install/replace components
- Identify basic suspension geometry
- Describe the terms voltage, current, and resistance (fundamental electrical theory)
- Perform basic and advanced electrical diagnostic operations

Safety and Environmental Issues

- Demonstrate knowledge of safety/environmental requirements in the collision repair industry
- Identify proper safety techniques for the use of shop equipment

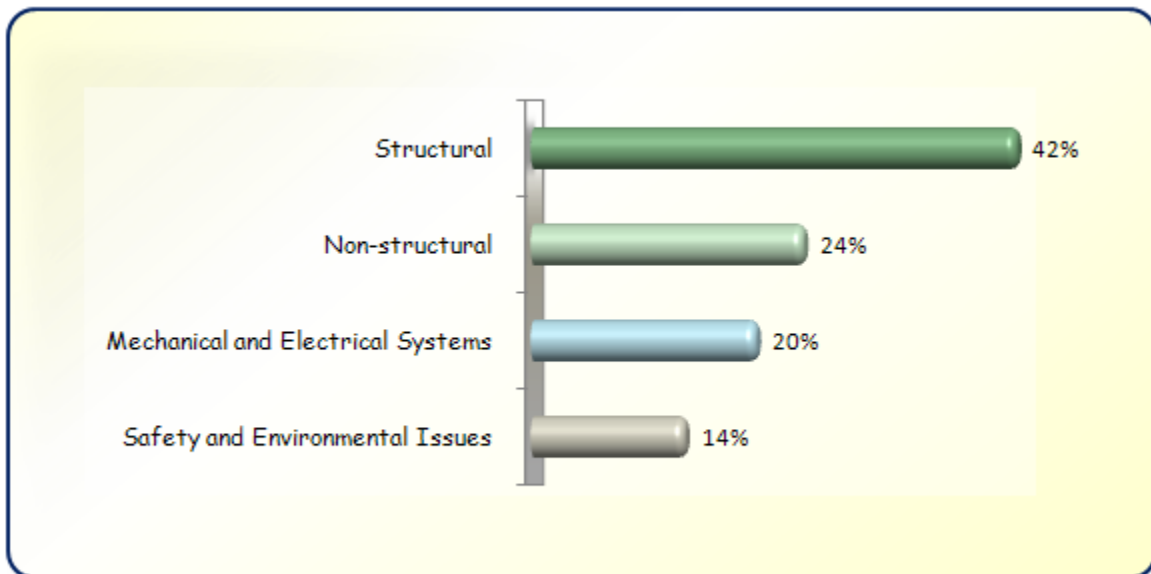


Written Assessment:

Administration Time: 3 hours

Number of Questions: 123

Areas Covered:



Sample Questions:

Installing a larger diameter contact tip in the squeeze type resistance spot welder will _____ of the spot weld.

- A. decrease the diameter
- B. increase the diameter
- C. decrease the penetration
- D. increase the penetration

Bumper reinforcements may be straightened if

- A. no kinks are present
- B. no cracks are present
- C. the manufacturer recommends straightening
- D. the manufacturer recommendations are unclear

Removing adhesive attached body side moldings requires the use of a/an

- A. heat gun and razor knife
- B. air saw and liquid soap
- C. piano wire
- D. putty blade

In a unibody structure, what provides the critical mounting positions for the suspension and steering systems?

- A. body panels
- B. drivetrain
- C. upper and lower control arms
- D. cradle assembly mounting bushings

Flammable materials should be stored in

- A. boxes
- B. plastic bags
- C. metal containers
- D. milk crates



Performance Assessment:

Administration Time: 2 hours and 45 minutes

Number of Jobs: 5

Areas Covered:

8% **Component Identification**

Identification of components, and timeliness of job.

16% **Door Striker Repair**

Safety, adjustment of striker and door depth, and timeliness of job.

40% **Welding**

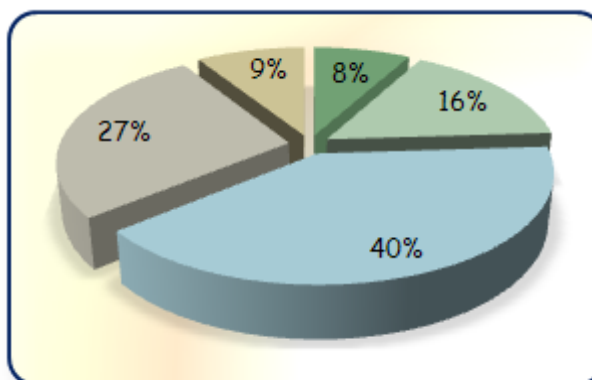
Safety, welder adjustment, lap weld in vertical position, butt weld vertical with backing, plug weld - vertical, welder shut-down, and timeliness of job.

27% **Sheet Metal Repair**

Safety, clean panel, straighten damaged area, prepare panel for filler, mix and apply panel filler, sand and shape filler, and timeliness of job.

9% **Vehicle Measurement**

Safety, measure wheel base, x-measurement of engine compartment, and timeliness of job.



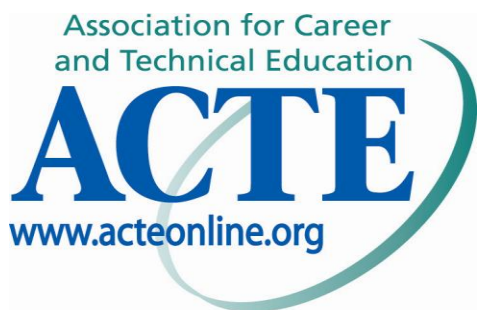
Sample Job: Sheet Metal Repair

Maximum Time: 45 minutes

Participant Activity: The participant will obtain required tools, equipment, and materials. They will repair the dent in the panel while observing safety and environmental precautions: rough finishing damaged area to acceptable level, apply body filler, and finish with 180 grit sandpaper.



The Association for Career and Technical Education (ACTE), the leading professional



organization for career and technical educators, commends all students who participate in career and technical education programs and choose to validate their educational attainment through rigorous technical assessments. In taking this assessment you demonstrate to your school, your parents and guardians, your future employers and yourself that you understand the concepts and knowledge needed to succeed in the workplace. Good Luck!