

Blueprints

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Job Ready Assessment Blueprint

Test Code: 3083 / Version: 01

Collision Repair & Refinishing Technology

**Enhancing today's workforce
through tailored performance solutions**

Specific Competencies and Skills Tested in this Assessment:

Safety and Fundamentals

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



Structural

- Select, setup, and adjust MIG/GMAW, STRSW, and/or TIG welders
- Describe various types and uses of welding processes
- Use adhesive bonding procedures
- Diagnose primary and secondary structural damage, including stationary glass
- Replace and/or repair structural components

Non-Structural

- Identify automotive plastics and proper repair procedures
- Diagnose primary and secondary non-structural damage
- Identify types of non-structural automotive glass
- Remove and replace automotive trim
- Remove, install, replace, and align non-structural panels
- Remove, install, and replace ancillary components (headlamps, under-hood fuse boxes, etc.)

Mechanical and Electrical Systems

- Identify basic steering and suspension components (tie rod ends, ball joints, steering racks, etc.)
- Identify how collision damage affects basic suspension geometry
- Verify functions of electrical system and basic wiring repair (soldering, quick connectors, etc.)
- Perform basic electrical diagnostic operations

Specific Competencies and Skills continued:

Painting and Refinishing

- Identify painting and refinishing safety and environmental requirements
- Identify and demonstrate surface preparation techniques
- Identify and demonstrate paint materials preparation techniques
- Identify and demonstrate paint materials application techniques

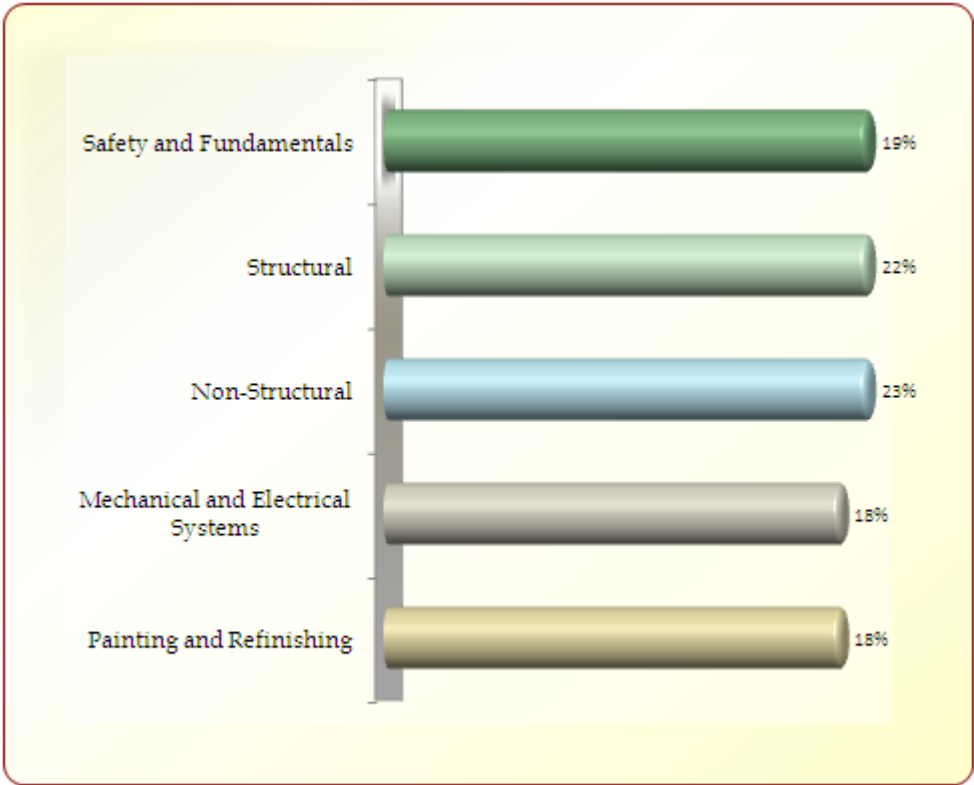


Written Assessment:

Administration Time: 3 hours

Number of Questions: 182

Areas Covered:



Sample Questions:

To avoid burns, use caution when opening the

- A. radiator cap
- B. gas cap
- C. brake fluid reservoir
- D. washer reservoir

Insufficient shielding gas flow can cause

- A. excessive penetration
- B. low weld bead
- C. porosity
- D. density

Damage that occurs at the point of impact is called

- A. sidesway
- B. primary
- C. secondary
- D. twist

The rack and pinion steering system is

- A. only found on large trucks
- B. complex and rarely used today
- C. the simplest system used
- D. used with parallelogram system

Technicians can reduce harmful vapors in the air by

- A. painting outside
- B. closing lids on cans
- C. mixing extra paint
- D. spraying extra coats

Performance Assessment:

Administration Time: 3 hours and 45 minutes

Number of Jobs: 5

Areas Covered:

30% **Welding**

Safety, welder adjustment, lap weld (1 inch to 1-1/2 inches) in vertical position, butt weld vertical with backing, plug weld vertical, welder shut-down, time to complete Job 1.

26% **Sheet Metal Repair**

Safety, clean panel, straighten damaged area, prepare panel for filler, mix and apply body filler, sand and shape filler, and time to complete Job 2.

9% **Vehicle Measurement**

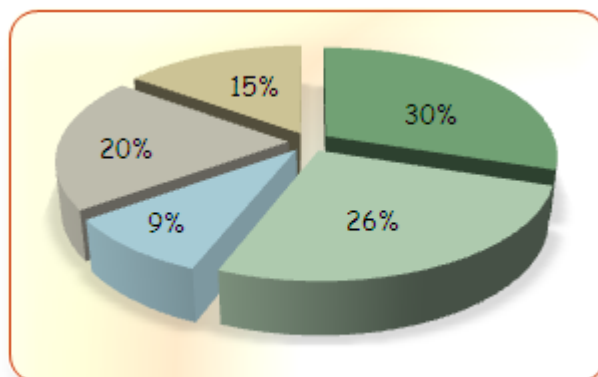
Safety, measure wheel base, x-measurement of engine compartment, time to complete Job 3.

20% **Refinishing**

Safety, panel cleaning, tack rag, base coat application, clearcoat application, and time to complete Job 4.

15% **Masking**

Safety, panel cleaning, masking, masking removal, clean up and prepare, and time to complete Job 5.



Sample Job: Vehicle Measurement

Maximum Time: 15 minutes

Participant Activity: The participant will obtain tram gauge from storage area, measure vehicle wheel base (hub to hub) with tram gauge, and record results in metric measurement on the chart provided.

