NOCTI

Teacher Credential Blueprint

Collision Repair and Refinishing Technology

Code: 5366 / Version: 01

General Assessment Information

Blueprint Contents

Test Type: The Collision Repair and Refinishing Technology assessment is included in NOCTI's Teacher assessment battery. Teacher assessments measure an individual's technical knowledge and skills in a proctored proficiency examination format. These assessments are used in a large number of states as part of the teacher licensing and/or certification process, assessing competency in all aspects of a particular industry. NOCTI Teacher tests typically offer both a written and performance component that must be administered at a NOCTI-approved Area Test Center. Teacher assessments can be delivered in an online or paper/pencil format.

Revision Team: The assessment content is based on input from subject matter experts representing the following states: Michigan, New York, Pennsylvania, and Virginia.

CIP Code

47.0603- Autobody/Collision and Repair Technology/Technician

Learning that works for America CTE™

Career Cluster - Transportation, Distribution, and Logistics

O*NET™ in*it

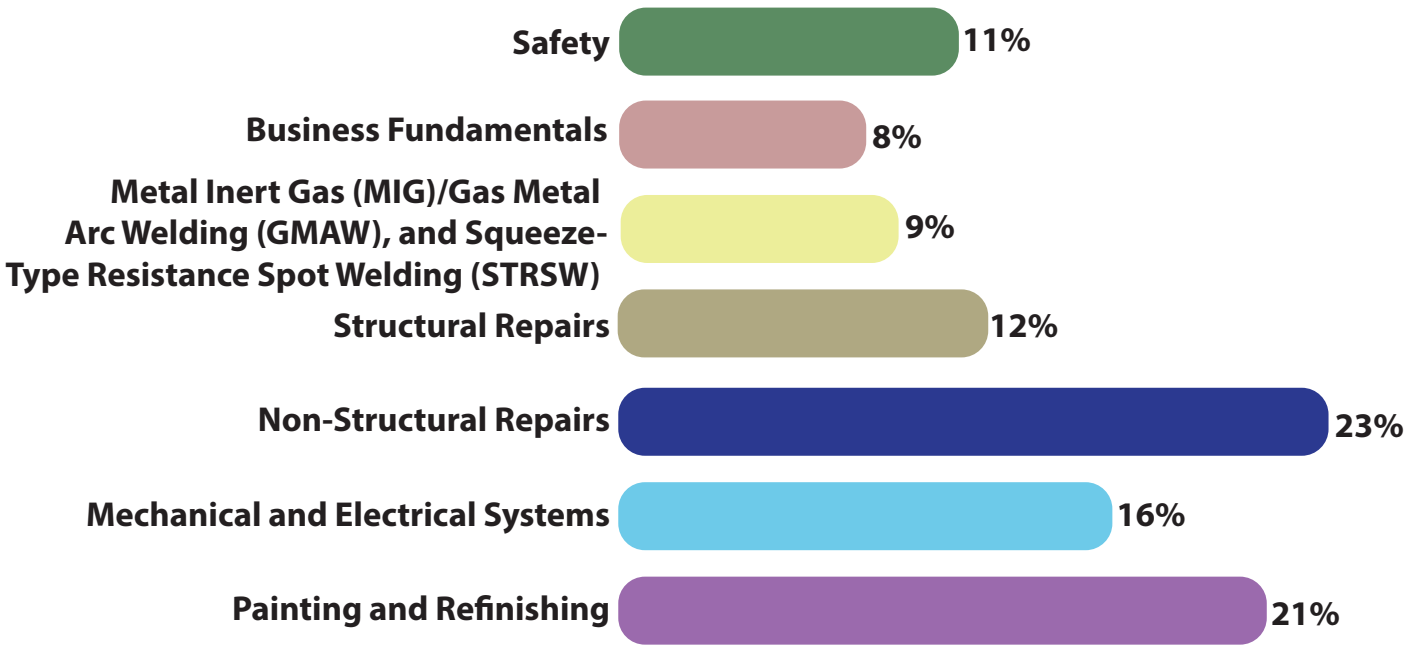
49-3021.00- Automotive Body and Related Repairers

Written Assessment

NOCTI written assessments consist of questions to measure an individual's factual theoretical knowledge.

Administration Time: 3 hours
Number of Questions: 179
Number of Sessions: This assessment may be administered in one, two, or three sessions.

Areas Covered



Specific Standards and Competencies Included in this Assessment

Safety

- Demonstrate knowledge of workplace safety and environmental practices
- Demonstrate appropriate care and maintenance of shop tools and equipment
- Identify proper use of Personal Protective Equipment (PPE)

Business Fundamentals

- Demonstrate knowledge of estimating terminology
- Identify employability skills within the collision repair industry
- Calculate estimates and costs related to repair procedures

Metal Inert Gas (MIG)/Gas Metal Arc Welding (GMAW), and Squeeze-Type Resistance Spot Welding (STRSW)

- Demonstrate vehicle protection procedures
- Demonstrate understanding of welder set-up and maintenance
- Describe various welding and removal processes
- Describe and differentiate various types and uses of welding processes

Structural Repairs

- Replace and/or repair structural components
- Select, set up, and utilize manual measuring systems
- Explain and identify computerized 3-D measuring systems
- Explain and identify the operation of various pulling systems
- Diagnose direct and indirect structural damage
- Demonstrate knowledge of working with various strengths of metals

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Specific Standards and Competencies (continued)

Non-Structural Repairs

- Demonstrate understanding of metal straightening and finishing
- Identify automotive plastics and proper repair procedures
- Diagnose primary and secondary non-structural damage
- Demonstrate knowledge of movable and stationary glass
- Utilize basic corrosion protection procedures
- Use adhesive bonding procedures
- Remove and replace automotive trim
- Remove, install, replace, align, or repair non-structural panels
- Remove, install, and replace ancillary components (e.g., headlamps, under-hood fuse boxes)

Mechanical and Electrical Systems

- Identify basic steering and suspension components
- Verify functions of electrical systems and basic wiring repair
- Identify service and operation of air conditioning (AC) and cooling systems
- Identify a basic safety restraint system (SRS)
- Perform basic mechanical and electrical operations

Painting and Refinishing

- Identify and demonstrate surface preparation techniques
- Demonstrate masking and taping application techniques
- Identify and demonstrate paint material preparation techniques
- Identify causes and remedies for paint defects
- Identify and demonstrate paint materials, applications, and techniques

Sample Questions

Clogged spray booth filters will cause

A. runs in the finish
B. orange peel in the finish
C. shorter flash times
D. malfunction of the spray booth

What information does the eighth digit from the right of a VIN provide?

A. assembly plant
B. body type
C. model year
D. engine type

Bird-nesting occurs on a MIG/GMAW welder

A. between the drive rollers and liner
B. at the contact tip
C. on the work being welded
D. inside the liner

When making a vertical butt weld, start from the

A. top
B. bottom
C. center
D. left

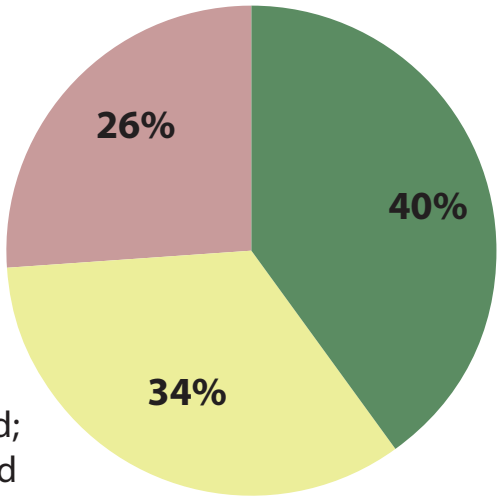
When a door intrusion beam is severely damaged in an accident,

A. replace the door shell
B. straighten the beam
C. repair the door skin
D. heat the beam

Performance Assessment

NOCTI performance assessments allow individuals to demonstrate their acquired skills by completing actual jobs using the tools, materials, machines, and equipment related to the technical area.

Administration Time: 2hours and 30 minutes
Number of Jobs: 3



Areas Covered:

40% Welding
Participant will use 18-gauge coupons to practice and tune equipment. Participant will perform a horizontal lap weld, horizontal butt weld, and horizontal plug weld; presenting the best one for scoring to the evaluator, and clean work area and shut down equipment.

34% Sheet Metal Repair
Participant will obtain required tools, equipment, and materials, repair dent in the panel, and clean work area.

26% Refinishing
Participant will safely clean, tack and refinish panel, apply basecoat and clearcoat, and clean work area.

Sample Job

Sheet Metal Repair

Maximum Time: 1 hour

Participant Activity: Participant will obtain required tools, equipment, and materials, and clean panel, rough finish the damaged area, apply filler, finish contour, put away tools, and clean work area.