AUTOMOTIVE REFINISHING TECHNOLOGY
CONTEST DESCRIPTION

PURPOSE
To evaluate each contestant's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of automotive and refinishing technology.

First, refer to General Regulations, Page 9.

CLOTHING REQUIREMENT
Safe and presentable clothing. (Official SKILL/USA uniform not required). Safety glasses with side shields or goggles. (Prescription glasses can be used only if they are equipped with side shields. If not, they must be covered with goggles.)

ELGIBILITY
Open to active SkillsUSA members enrolled in programs with automotive refinishing technology as the occupational objective.

EQUIPMENT AND MATERIALS

1. Supplied by the technical committee: Basic equipment of an automotive refinishing laboratory

   a. Clean-up thinner
   b. Color (Basecoat)
   c. Strainers
   d. Reducer
   e. Primer sealer
   f. Clear Coats
   g. Paint Guns
   h. 3M PPS cups and liners
   i. Wooden paint paddles
   j. Masking materials
   k. Masking paper tree
   l. Cleaning towels
   m. Tack clothes
   n. Painters gloves
   o. Solvent cleaner
   p. Scotch Brites
   q. Tablets to write estimate with. (CCCOne estimating software)

2. Supplied by the contestant:
    a. 6” DA sander & backing pad
    b. Cartridge-type respirator (charcoal-filtered)
    c. Air tool fittings (high profile 1/4 fnpt and 1/4 mnpt)
    d. 9/16” and 5/8” wrenches
    e. Paint suit
    f. Appropriate grits & types of sand paper for DA and/or hand sanding
    g. Sanding pads
    h. One-page, typewritten résumé
    i. Safety Glasses

SCOPE OF THE CONTEST

The contest is defined by the current industry technical standards. The contest is divided into three portions: an interview, a manually written estimate and a series of workstations. Contestants will demonstrate their abilities to perform tasks selected from the following list of competencies as determined by the SkillsUSA Illinois Championships technical committee.

Skill Performance

The contest includes a series of workstations and an interview process designed to assess skills in the following areas: surface preparation, spray gun operation and related equipment, paint mixing, matching and applying, solving paint application problems, finish defects, causes and cures and safety precautions.

Standards and Competencies

ART 2.0 – Prepare a panel surface for sealer application (full panel) in relationship to the tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing (B2) Technical Standards for Painting and Refinishing

2.1 Demonstrate proper safety procedures.
2.2 Dry sand the areas to be refinished.
2.3 Clean the area to be refinished using a final cleaning solution.
2.4 Remove dust from area to be refinished including cracks or moldings of adjacent areas.
2.5 Remove, with a tack rag, any dust or lint particles from the area to be refinished.
2.6 Apply Sealer using appropriate spray techniques (gun arc, gun angle, gun distance, gun speed and spray pattern overlap) for the finish being applied.

ART 3.0 – Prepare a panel surface for basecoat application in relationship to the tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing (B2) Technical Standards for Painting and Refinishing

3.1 Demonstrate proper safety procedures.
3.2 Remove, with a tack rag, any dust or lint particles from the area to be refinished.
3.3 Check and adjust spray gun operation.
3.4 Apply finish using appropriate spray techniques (gun arc, gun angle, gun distance, gun speed and spray pattern overlap) for the finish being applied.

ART 4.0 – Prepare a panel surface for full panel clear coat application in relationship to the tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing (B2) Technical Standards for Painting and Refinishing

4.1 Demonstrate proper safety procedures.
4.2 Remove, with a tack rag, any dust or lint particles from the area to be refinished.
4.3 Check and adjust spray gun operation.
4.4 Apply finish using appropriate spray techniques (gun arc, gun angle, gun distance, gun speed and spray pattern overlap) for the finish being applied.

Color Tinting

ART 5.0 – Complete color assessment in relationship to the tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing (B2) Technical Standards for Painting and Refinishing

5.1 Determine the type of mismatch problem encountered while evaluating the color sample.
5.2 Determine adjustment that must be made to correct the hue/color, value/lightness or darkness, chroma/saturation/purity and flop.

ART 6.0 – Select the correct toner for color adjustment (toner within the formula) application in relationship to the tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing (B2) Technical Standards for Painting and Refinishing

6.1 Demonstrate the ability to select the correct toner to correct predetermined mismatch problems while selecting the correct toner.
6.2 Demonstrate the ability to select the correct toner to correct the hue/color value/lightness or darkness, chroma/saturation/purity and flop.

ART 9.0 – Surface cleaning application in relationship to the tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing (B2) Technical Standards for Painting and Refinishing

9.1 Apply surface cleaner to remove contaminants.

ART 10.0 – Repair damaged area in preparation for primers in relationship to the tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing (B2) Technical Standards for Painting and Refinishing

10.1 Sand area using dual action sander
10.2 Sand areas to show appropriate removal of material for good featheredge technique.
10.3 Sand beyond the repair area for adhesion of primer.

ART 11.0 – Mix and apply 2-K primers application in relationship to the tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing (B2) Technical Standards for Painting and Refinishing

11.1 Check and adjust spray gun operation.
11.2 Apply primer onto surface of repaired area.
11.3 Apply finish using appropriate spray techniques (gun arc, gun angle, gun distance, gun speed and spray pattern overlap) for the finish being applied.

Paint Code ID and Masking

ART 13.0 – Locate and document vehicle manufacturer's paint code application in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing (B2) Technical Standards for Painting and Refinishing

13.1 Determine the type and color of paint already on the vehicle by vehicle manufacturer's information label.
13.2 Identify the code using paint manufacturer manuals to determine paint code location.

ART 14.0 – Select the correct variant if applicable application in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing (B2) Technical Standards for Painting and Refinishing

14.1 Identify variant swatches / chips.
14.2 Match variant to vehicle using color correcting lighting.
14.3 Identify variant that will produce the best possible blend.

ART 15.0 – Appropriate masking techniques for refinishing quarter panel and blending into adjacent panel (rear door) application in relationship to tasks in the National Automotive Technicians Education Foundation (NATEF) Collision Repair and Refinishing (B2) Technical Standards for Painting and Refinishing

15.1 Mask and protect adjacent panels that will not be refinished.
15.2 Mask door jambs and other aperture panels.

ART 16.0 – Complete an estimate to related tasks in ASE Catalog of Collision Repair / Refinishing Tests B6 (Damage Analysis and Estimating)

16.1 Report heading/legibility.
- 16.1.1 List entrant number on estimating test.
- 16.1.2 Locate provided "Vehicle Description and Labor Rate Page" and complete vehicle owner information segment on estimate (e.g., owner name, address, phone numbers, license plate, vehicle year, series, mileage, vehicle identification number).
- 16.1.3 Write legibly.

ART 17.0 – Identify parts replacement

17.1 Locate and select vehicle to be estimated in the provided collision estimating guide.
17.2 Locate and list the correct part prices and replacement labor times and refinish labor times for the pre-determined parts being replaced.
17.3 Estimate labor adjustments for vehicle options when appropriate.
17.4 Recognize and apply body labor overlap and refinish labor overlap where appropriate.
17.5 Consider and apply "included" and "not included" operations where appropriate."
17.6 Consider and apply labor footnotes (# signs) when necessary.

ART 18.0 – Prepare calculations

18.1 Calculate and list the correct paint and materials allowance.
18.2 Calculate and list parts, body labor, refinish labor, paint and material column totals.
18.3 Calculate and list total labor hours (body labor plus refinish labor).
18.4 Multiply total labor hours by provided labor rate and list labor dollar amount.
18.5 Calculate and list TOTAL estimate amount.

ART 19.0 – Oral Assessment / Interview

19.1 Exhibit personal skills such as attendance, time management and individual responsibility.
19.2 Demonstrate promptness when required to meet interviewer at specific time and location.

ART 20.0 – Maintain professional conduct

20.1 Demonstrate courteous behavior while waiting for the interviewer.

ART 21.0 – Maintain professional appearance

21.1 Demonstrate appropriate attire (SkillsUSA uniform – light blue shirt, dark blue pants Not required.)

ART 22.0 – Complete job application and résumé.*
** Each contestant will be provided a blank job application during the contest orientation meeting, the night before the contest. The application is to be filled out prior to the start of the contest.*

22.1 Properly and legibly complete a job application and résumé.

ART 23.0 – Demonstrate interview skills