

## 2019 SkillsUSA State Competition South Carolina

### COLLISION REPAIR TECHNOLOGY



This contest is hosted by the Auto Body Repair Department at Greenville Technical College. It is located at the McKinney Automotive Center (227 N Pleasantburg Dr, Greenville, SC 29607).

The 2019 South Carolina SkillsUSA Collision Repair Technology competition will operate the same as last year's competition.

### Information for Career Centers/ High School (Secondary)

The competition will be open to TWO contestants from each career center/high school for EACH area. Meaning that each secondary school can bring two contestants for Collision Repair and two contestants for Automotive Refinishing.

The elimination round will be on Thursday. The top 16 secondary competitors will move on to Friday's competition.

### Brief Schedule

Thursday, March 14

- Start check-in at 11:30 AM
- Competition will begin at 1:00 PM
- Competition will conclude at 5:00 PM

Friday, March 15

- Competition will begin promptly at 9:00AM. It is suggested to arrive at the competition location no later than 8:30.
- Competition will conclude at 4:05

Saturday, March 16

- Awards Ceremony

### Clothing Requirement

Official SkillsUSA light blue work shirt and navy pants; black, brown or tan leather work shoes; and 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.)



These regulations refer to clothing items that are pictured and described at: [www.skillsusastore.org](http://www.skillsusastore.org). If you have questions about clothing or other logo items, call 800.401.1560 or 703.956.3723.

**Note: Contestants must wear their official contest clothing to the contest orientation meeting.**

### Equipment and Materials

#### ***Supplied by contestant:***

- Hard copy of résumé
- Mechanics Gloves
- Safety Glasses
- Tape Measure
- Dust Respirator (Cartridge Type)
- Specialty Body Hammers
- Specialty Sanding Blocks
- Body File (if preferred)
- Welding Jacket
- Welding Helmet

- Welding Gloves
- Welding Respirator
- Welding Cap (no “doo-rags”)
- Sharpie Marker
- Flashlight (optional)

\*If a contestant wants to bring their own DA sander, it must have a ‘sticky’ pad.\*

***Supplied by the committee and ABR department:***

**A. Materials for metalworking phase:**

1. Safety Glasses
2. Air Blowers
3. Hammers and dollies
4. Identical fenders to be repaired
5. Plastic filler
6. Die Grinder
7. Various grits of sandpaper, DA sanders, hand sanding blocks, Roloc disc.
8. Plastic filler mixing boards and spreaders.

**B. Materials for plastic repair phase:**

1. Identical plastic bumpers
2. Cleaning solvent
3. DA sanders and die grinders
4. Plastic repair material
5. Mixing boards and spreaders
6. Abrasive discs and sheets
7. Clamps

**C. Materials for estimating phase:**

1. Vehicle owner’s name and address
2. Scratch pads
3. Estimate sheets
4. Estimate books
5. Calculator
6. Parts price list for car involved

**D. Materials supplied for welding stage:**

1. Sheet metal coupons
2. Clamps

## **Standards and Competencies**

The contest aligns identically to the current national standards. See their documents for specific details. For each portion of the

competition listed below, the national standards that are met will be in *italics* beside each title.

## **Scope of the Contest**

### **Thursday, March 14, 2019**

Thursday’s competition consists of three different segments:

1. Knowledge Performance (100 points) – 50 question written ASE exam
2. Written Estimate (100 points) – *Standard 21*
3. Job Interview (100 points) – fill out a job application and have a 5 minute interview. *Standards 22 – 26*

Thursday’s competition will be in three rotations, each rotation is one hour and fifteen minutes. The times and rotations are as follows:

- **Rotation 1: 1:00PM – 2:15PM**
  - **5 minutes for rotation**
- **Rotation 2: 2:20PM – 3:35PM**
  - **5 minutes for rotation**
- **Rotation 3: 3:40PM – 4:55PM**

**\*After Thursday’s competition, there will be an elimination to determine the top 16** (secondary and post-secondary) that will move forward to Friday. **So please make sure to hang around until the announcement has been called.\***

### **Friday, March 15, 2019**

Competition will begin promptly at 9:00AM.

Again, it is suggested to arrive at the competition location no later than 8:30AM.

Friday’s competition consists of four segments:

#### **Station 1: Metal Repair** (maximum points: 175) *Standards 1 - 4*

1. Small dent across a body line with filler (58 points)
2. Stretched crease area with filler (58 points)

3. Small “ding” repair with NO filler (59 points)

**Station 2: Attachment Methods** (maximum points: 175)

*Standard 5* - Follow I-CAR SWQT test procedures. Test is given on 16 gauge (thick) and 22 gauge (thin) cold rolled steel with no coatings. Each weld is 17.5 points.

*Vertical Welds:*

1. Fillet on lap joint (thin - thin)
2. Open Butt Joint (thin – thin)
3. Plug (thin – thick)
4. Plug (thin – thin)
5. Plug (thick – thick)
6. Butt joint with backing (thick – thick)

*Overhead Welds:*

7. Fillet on lap joint (thin – thin)
8. Open butt joint (thin – thin)
9. Plug (thin – thick)
10. Butt with backing (thin – thin)

**Station 3: Plastic Repair** (maximum points: 175)

*Standards 6 - 10*

1. Two sided repair (88 points) – hole cut through bumper cover that requires a patch on the backside.
2. Torn tab repair (87 points) – replace a torn tab using adhesive

**Station 4: Structural Analysis and Repair**

(maximum points: 175) *Standards 11 – 20*

1. Universal Measuring System (Car-O-Liner UMS) – Read and verify damage using the vehicle and a worksheet from the Car-O-Liner measuring system. (45 points)
2. Damage simulator with centerline gauges – Identify damage using measuring tools provided. (40 points)
3. Tram Gauge Measurements and Steering and Suspension Identification – Use tram gauge to measure between specified points. Identify all labeled

steering and suspension components. (45 points)

4. Computerized Measuring System Analysis (Chief Velocity) – read and verify damage using the vehicle and a supplied worksheet from the Chief measuring system. (45 points)

### **Day 2 Competition Schedule**

Each individual competition area will be one hour and thirty minutes. The times and rotations for day two of the competition will be as follows:

- **Rotation 1: 9:00AM – 10:30AM**
  - 5 minutes for rotation
- **Rotation 2: 10:35AM – 12:05PM**
- **Lunch: 12:05PM – 1:00PM**
- **Rotation 3: 1:00PM – 2:30PM**
  - 5 minutes for rotation
- **Rotation 4: 2:35PM – 4:05PM**

**Lunch will be provided for competitors and instructors ONLY.**

This will conclude Day 2 of competition.

Upon any time contingencies, all rotational time will be adjusted. The amount of time for each station will not be affected.

### **IMPORTANT**

**INSTRUCTORS ARE NOT TO HAVE ANY CONTACT OR COMMUNICATION WITH COMPETITORS AT ANY POINT DURING THE COMPETITION.** Contact between instructors and competitors during the time of competition, or during breaks, will be grounds of **DISQUALIFICATION** from the SC SkillsUSA competition.