

Skills U.S.A. MAINE

AUTOMOTIVE COLLISION REPAIR TECHNOLOGY

Thank you for your participation in the 2020 Maine Skills U.S.A. competition. We are sending a copy of the scope of the contest and general regulations to all participating and potential Auto Collision programs. If there are any questions or concerns, please call Fred Steeves (743-7756 ext.1105 or 240-9084) or Steve Dyer (942-5296)

Clothing Requirement: Dark Blue “Dickie type” work pants, Skills USA light blue work shirt or equivalent, Leather work boots (Points may be deducted for canvas or Leather athletic shoes), Safety glasses with side shields or goggles. Prescription glasses may be used only if they have side shields. If not, they must be covered with approved goggles. No hats

Written Test

The written test will be taken on line this year when the contestants take the P.D.P. Test. It is to be administered by a proctor and not their instructor. The test consists of 25, A.S.E. style and multiple choice questions. The test is a closed book style test. No notes or researching answers is permitted. Correct answers will be worth 4 points each, with a possible score of 100.

Estimate Writing Section

Contestant will be asked to write an estimate on a damage vehicle. Contestants will be rated on, but not limited to: Safety, Vehicle identification, Estimate written legibly, List of parts in logical sequence, Time involved in repairing, Parts and material cost, Estimate completion, Final figure, and Clean up.

Equipment and Materials

1. Supplied by technical committee
 - A. Collision damaged vehicle
 - B. Collision Estimating Guides
 - C. Blank Estimate sheets
2. Materials each contestant must bring
 - A. Clip Board
 - B. Pencils and scratch paper
 - C. Battery or solar powered calculator

Total number of points possible 100- Time limit 60 minutes

Plastic Parts Repair

Contestant will be asked to repair a damaged section of a plastic bumper cover. Contestants should be prepared to repair two sided damage with the 3M flexible backer patch. They must apply 2 part plastic repair as the manufacturer recommends and sand as needed . The panel must be ready for primer when completed. Contestants will be rated on, but not limited to: Safety practices, Proper use of tools, proper application of products, sanding of filler, overall appearance, and Completion.

This year contestants will be using 3M Products. Contestants should review the following SOP.

<https://www.youtube.com/watch?v=4B-G9r9gGSg&feature=youtu.be>

Equipment and Materials

1. Supplied by technical committee
 - A. Plastic bumper panels as mentioned
 - B. Adhesives
 - C. Various air and hand tools
 - D. Cleaners, abrasives, supplies etc.

2. Materials each contestant must bring
 - A. Safety Equipment and P.P.E.

Total number of points possible 100- Time limit 45 minutes

Parts Identification / Damage Analysis Section

Contestant will be asked to identify various types of Frame Construction, Suspension and Body Parts, Steering Parts and Analysis, Collision Damage Terminology. Contestants will be rated on, but not limited to: Safety and Proper Identification of various items.

Equipment and Materials

1. Supplied by technical committee
 - A. Vehicle set up on frame bench with light collision damage
 - B. Various steering and suspension parts to identify
 - C. Various body parts to identify
 - D. Tags with numbers

2. Materials each contestant must bring
 - A. Pencil
 - B. Clip Board

Total number of points possible 100- Time limit 15 minutes

M.I.G. Welding

Contestant will be asked to make Plug welds, Lap/Filet Welds, Butt Welds with backer, and / or Open Butt Welds in the vertical or overhead position. Contestants will be rated on, but not limited to: Safety, Welder set-up, Weld appearance and Weld destruction, to the I-CAR Welding Qualification Test for steel standards. Information can be found on the I-CAR web-site.

Equipment and Materials

1. Supplied by technical committee
 - A. Welding coupons, 22ga , 3" X 5"
 - B. Welders and consumables
 - C. Welding benches
 - D. Adequate Ventilation
 - E. 8mm Hole Punch and 6mm hole punch
 - F. I-CAR Welding Steel Gauge

2. Materials each contestant must bring
 - A. Welding Personal Protective Equipment
 - Leather Welding Gloves
 - Welding jacket or leathers
 - Welding shield
 - etc.

 - B. Vice Grips- 2 ea
 - Duck bill/Sheet metal
 - Welding/ Fingered Style
 - Small C Clamp
 - Large C Clamp
 - C. Tape Measure, Sharpe Marker
 - D. Wire Cutters and Wire Brush

Total number of points possible 100- Time limit 60 minutes

Metal Work / Body Filler

Contestant will be asked to repair a golf ball sized dent in a steel panel and apply body filler as needed. The panel must be ready for primer when completed. Plastic work will be finished with 100 grit and feathered with 180 grit. Contestants will be rated on, but not limited to: Safety practices, Proper use of tools, Metal Work/ Straightening, Use of filler, Overall Appearance, Completion.

Equipment and Materials

1. Supplied by technical committee
 - A. Panel with damaged area
 - B. Various air and hand sanding tools (grinder, D. A. , sanding block, hand board, etc.)
 - C. Materials (Sandpapers, fillers, cleaners etc.)

2. Materials each contestant must bring
 - A. Safety Equipment and P.P.E.
 - B. Hand Tools
 - Body hammer
 - Dolly
 - Metal file
 - Etc.

Total number of points possible 100- Time limit 60 minutes

Contestants should be in the Auto Collision Shop at UTC no later than 7:30 am.
Please bring your toolbox at that time.

The Auto Collision contest is scheduled to end at 12:00pm.

All Auto Collision contestants will be expected to attend a debriefing from 12:00 to 12:30 at the competition area.

Please schedule transportation accordingly.