

SkillsUSA Maryland State Championship

2025 Automotive Service Technology Contest Scope

Purpose

To evaluate each contestant's preparation for employment in the Automotive Service Industry.

To recognize outstanding students for excellence and professionalism in the field of Automotive Service.

Please be familiar with the General Regulations, Skills USA Championship Technical Standards. The Maryland State Finals Event Technical Standards detailed below are based on the Championship Standards and have some minor modifications.

Eligibility

Open to active Skills USA members enrolled in career and technical programs with automotive technician or automotive service objective.

All Automotive Service Technology contestants must create a resume. The printed resume must be presented along with their Proof of Training form at on-site registration.

Clothing Requirement

All contestants must wear the following neat and clean professional uniform:

1. Light blue work shirt with or without the Skills USA logo. To be worn tucked in.
2. Navy work pants.
3. Automotive service belt that will not damage the vehicle finish.
4. Black or brown safety toe work footwear.
5. 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.)

Equipment and Materials

All equipment and supplies will be furnished by the Event Chair.

Scope of the 2025 AST Contest

1. All contestants will complete the Automotive Technology exam.
2. Contestants will be rotated through the following test stations:
 - A. Engine Mechanical Diagnosis and Testing.
 - B. Engine Performance Diagnosis and Testing.
Please Note: Contestants will be using the Toyota Techstream ADVi scan tool using GTS+ software along with provided factory service information.
 - C. Electrical Circuit Diagnosis and Testing.
 - D. Vehicle Body Electrical Diagnosis and Testing
 - E. Automatic Transmission Service, Diagnosis and Testing.
 - F. Manual Drivetrain Service, Diagnosis and Testing.
 - G. Suspension, Steering, Wheel, Tire, and Alignment Service, Diagnosis and Testing.
 - H. Brake System Service, Diagnosis, and Testing.
 - I. Electronic Service Information Research and Application.

Contestants will be judged on:

1. Accuracy related to measurements, specifications, math, and grammar.
2. Legibility (easy to read).
3. Task completeness.
4. Neatness and courtesy, showing care and orderliness.
5. Health and Safety. Observation of health and safety procedures and rules.

The following are examples of skills contestants may be required to demonstrate:

1. Using a dial indicator to measure end play, runout, or free play.
2. Using a micrometer and caliper to measure diameter or thickness.
3. Using Plastigauge to measure oil clearance.
4. Using a feeler gauge to measure clearance.
5. Using a scan tool to access diagnostic trouble codes, service data, component active tests, and live serial data.
6. Accurately utilize and interpret information to determine if a component or system operates correctly.
7. Use a DVOM to measure voltage, resistance, and amperes.
8. Accurately interpret wiring diagrams to diagnose electrical problems and/or construct a circuit.