



Purpose

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

First, refer to General Regulations, Page 9.

Clothing Requirement

Official SkillsUSA light blue work shirt and navy pants, black or brown 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.) To purchase official work clothes, contact Midwest Trophy Manufacturing Co. Inc. by calling 1-800-324-5996 or place your order online at www.mtmrecognition.com/skillsusa/.

Eligibility

Open to active SkillsUSA members enrolled in career and technical programs that include motorcycle service technology as an occupational objective.

Equipment and Materials

1. Supplied by the technical committee:
 - a. All necessary tools, equipment, supplies and publications for the contest.
 - b. All necessary information and furnishings for judges and technical committees.

Scope of the Contest

1. Contestants will demonstrate their ability to perform jobs or skills selected from the following lists of competencies as determined by the SkillsUSA Championships technical committee. Committee membership includes: Buell Motorcycle Co., Harley-Davidson Motor Co. Inc., Motorcycle Mechanics Institute, Snap-on Inc. and Yamaha Motor Corp., USA.
2. Major Areas of the Contest
 - a. **Shop Procedures**
 1. Use microfiche to identify part numbers of specified parts
 2. Use and read service manuals to find specifications and procedures
 3. Use proper techniques in the care and use of equipment
 4. Use proper safety procedures
 5. Fill out repair orders

b. Engine/Drive Train Condition

1. Determine engine condition by performing a cylinder leakdown and compression tests
2. Use dial bore gauges, micrometer and feeler gauges to determine the condition of cylinders, pistons, rings and other engine parts
3. Remove, measure and reinstall clutch components
4. Adjust valve clearance of screw-type and shim (pad) type valves
5. Diagnose, service and repair chain and sprocket and/or shaft driven type final drive systems

c. Carburetion

1. Remove and disassemble carburetor, adjust the float, identify components, reassemble and reinstall carburetor
2. Inspect, service and reinstall an oil-foam air filter
3. Synchronize carburetors

d. Wheels

1. Inspect, repair and service tubeless tires (street and ATV type)
2. Inspect, repair and service tube tires
3. Diagnose, service and repair disc and drum brake systems
4. Measure radial and lateral runout of a rim using a dial indicator true spoke wheel
5. Static balance wheel

e. Routine Inspection and Maintenance

1. Inspect, service and replace cables
2. Inspect, service and reinstall crankcase breather
3. Inspect fluid levels
4. Adjust ignition timing

f. Electrical Inspection

1. Use a multimeter to measure and diagnose resistance of specified components, amperage drain key off and on, battery voltage key off and key on, charging voltage and amperage. Locate and repair other electrical problems
 2. Inspect ignition timing
3. Contestants will take a written test administered by the technical committee.
4. Contestants will be tested on a variety of motorcycles, ATVs and scooters commonly found in the United States using both metric and American threads/wrenches.
5. Contestants will be judged on accuracy, proper use of tools and equipment and safety practices. Speed is judged only in the event of a tie. Rating sheets will reflect each specific skill requirement as determined by the national technical committee.

