

**2017 MICHIGAN SKILLSUSA
CHAMPIONSHIPS TASK & MATERIALS LIST**

SKILL OR LEADERSHIP AREA: AUTO SPECIALIST TECHNICIAN - ELECTRICAL

CONTEST LOCATION:

M-TEC Tassell Center
622 Godfrey Ave SW
Grand Rapids, MI, US (616)
234-3800
<http://cms.grcc.edu/node/2006>

RESUME:

Each student must submit a one-page printed resume before the contest starts at the contest site (present to contest coordinator, not judges). The resume is no longer submitted online. This is the only time that resumes can be turned in. Failure to do so will result in a 10 point penalty.

SECTION I

GENERAL INFORMATION

TASKS TO BE PERFORMED:

- Demonstrate an understanding of Ohm's Law
- Take electrical measurements
- Read and interpret wiring diagrams
- Build electrical circuits
- Troubleshoot electrical circuits
- Test electrical components

THERE ARE FOUR STATIONS, EACH WILL START WITH 2 MINTUES FOR INSTRUCTIONS AND 15 TIME LIMIT TO PERFORM THE TASK.

<u>CONTEST</u>	<u>ORIENTATION</u>	<u>CONTEST</u>	<u>DEBRIEFING</u>
Specialists - All	12:15 PM	12:40 – 2:10 PM	2:10 PM
Master Contest	8:00 AM	8:20 AM – 1:00 PM	1:00 PM

Note: Time is subject to change depending on number of contestants. Check schedule at time of registration. **Briefings and contests will begin promptly at the scheduled times.** Students arriving late will not be allowed to compete.

SECTION I

GENERAL INFORMATION (CON'T)

STUDENTS MUST SUPPLY: (This applies to all automotive contests)

- 1 page resume
- Safety glasses with side shields or goggles
- Appropriate dress consisting of one or two-piece work clothes
- 2 (two) #2 pencils

STUDENT DRESS CODE: Due to the professional nature of this contest, contestants are required to wear apparel appropriate to the trade. SkillsUSA Work Uniforms are strongly suggested.

- Leather work shoes are required - **NO ATHLETIC SHOES ALLOWED - NO EXCEPTIONS.**
- Only shirts with a collar are acceptable, **NO TEE SHIRTS, NO SCHOOL IDENTIFICATION - NO EXCEPTIONS.** Shirts are to be tucked into trousers.
- Basic work-style jeans will be acceptable, however trousers are preferable.
- Any necklaces or bracelets must be removed and long hair is to be tied back.

It is the responsibility of the instructors to ensure their students are properly prepared and supervised for these events. **Students will not be allowed to compete if they do not have the proper shoes or if their attire presents a safety issue.** All contestants called into briefing room will be inspected by the Resolution Team* prior to contest briefing. **ANY CONTESTANT NOT APPROPRIATELY DRESSED WILL RECEIVE A 50 POINT DEMERIT FROM THEIR FINAL SCORE.** [Click here for Clothing Assessment Rubric](#)

All contestants and instructors are expected to act with courtesy and respect to all contest staff and fellow contestants. **ANYTHING LESS MAY RESULT IN REMOVAL/EXCLUSION FROM CONTEST.**

***The Resolution Team will consists of one senior advisor (20 years or more) and one additional advisor who is a contest coordinator and/or is selected by the Automotive Service Technology Technical Committee.**

Cameras and / or video camera policy: **NO VIDEO TAPING BY TEACHERS, ADVISORS, OR PARENTS WILL BE ALLOWED DURING THE CONTEST.** Anyone wanting video of the contest should make arrangements ahead of time by contacting the Technical Committee. Photographs during the contest will also be restricted. Special arrangements will be made for photo opportunities following the contest.

SECTION II

CONTEST OVERVIEW FOR SPECIALIST TECHNICIAN - ELECTRICAL

DESCRIPTION OF CONTEST:

This contest is designed to test the basic skills and knowledge of an entry-level technician by:

- Using Ohm's Law to calculate electrical circuit values
- Taking electrical measurements using a Digital Volt/Ohm Meter
- Reading and interpreting wiring diagrams
- Building electrical circuits
- Troubleshooting electrical circuits
- Testing electrical components

TOOLS AND EQUIPMENT:

- Digital Volt/Ohm Meter
- 12-volt test lamp
- Jumper leads
- Necessary hand tools

EQUIPMENT SUPPLIED BY TECHNICAL COMMITTEE:

Contestants will not have to bring hand tools and equipment to the contest. They will have some options on the following equipment:

Digital Volt/Ohm Meter (DVOM) - Fluke Model #87/88 will be provided, however, due to the difficulties students exhibit when using DVOM's that they are unfamiliar with, the Technical Committee recommends that students bring their own. **Note: All meters must have a minimum of 10 Meg Ohm input impedance.**

IMPORTANT: The Technical Committee has observed that many students seem to have difficulty using tools and equipment they are unfamiliar with. Therefore, students are permitted to bring their own equipment, provided it is clearly labeled with the students name and/or your school's identification. Equipment that cannot be hand carried through the contest must be dropped off well in advance of the contest briefing so it can be placed at the station for the student to use. Calibration of your equipment is your responsibility.

Revised 1/10/17

SCORECARD Automotive Service Technology - Electrical

		Contestant Number						
Items Evaluated	Possible Points							
Circuit 1	250							
Circuit 2	250							
Circuit 3	250							
Ohm's Law Worksheet	250							
Resume Penalty	0 or -10 only							
Clothing Penalty	0 to -50							
Total Possible Points	1000							

Date:

Judges' Signatures:
