

Robotics Urban Search & Rescue Contest
MO SkillsUSA 2023
Tool List

Supplied by the contestant:

- a. Safety equipment — eye protection is required at all times in the competition area
- b. Laptop computer (optional) for technical presentation purposes only. Laptop not used for robot operation.
- c. Fully assembled, tested, and operational ordnance disposal robot conforming to the guidelines and parts restrictions listed in this document (see “Urban Search and Rescue Challenge Kit Bill of Materials” in Appendix)
- d. Team number affixed to robot
- e. Presentation software for oral presentation to judges (optional)
- f. CAD/CAM software for blueprint design (optional)
- g. Completed Engineering Notebook
Note: Technical drawing/blueprint of robot drive chassis must be included in notebook
- h. Pens, pencils and paper
- i. One 6' multiple-outlet surge protector
- j. Tools:
 - 1.) Allen wrench set (English)
 - 2.) Clamping vise
 - 3.) Metal tin snips
 - 4.) Power strip
 - 5.) Calculator
 - 6.) Tape measure
 - 7.) Hammer
 - 8.) Metal file
 - 9.) Flat-head and Phillips-head screwdrivers
 - 10.) Wire strippers (one set)
 - 11.) Wire cutters/snips (one set)
 - 12.) Roll of electrical tape
 - 13.) 4" nylon wire ties (25 pack)
 - 14.) Multimeter
 - 15.) Multi-nut pliers
 - 16.) Metal-cutting hacksaw (manual)
 - 17.) Cordless drill with charger
 - 18.) Set of standard drill bits
 - 19.) Pliers (needle nose or regular)
 - 20.) Set of box wrenches

Note: Please review the Robotics Urban Search & Rescue contest specifications in the [2022-2023 SkillsUSA Technical Standards Package](#).

Remember to prepare for the SkillsUSA Knowledge Test and upload your resume online!