

# Skills Canada Mobile Robotics Toronto 2025 Competitor Questions and Responses Document

## September

# Sept.Q1:

Q: The scope says the hallways are 22" wide. Appendix A has them at 21 1/4 inches. What is correct?

R: Appendix A should be considered the correct measurements.

## Sept.Q2:

Q: Appendix A in the Autonomous Line drawing has a discontinuity in the black tape. Does the intersection connect?

R: Yes, the intersection will connect.

## Sept.Q3:

Q: What configuration will the barrel bolts be in at the start of the game?

R: The barrel bolts will start closed across the front of the transformers and the knob will be in the down or horizontal position such that the bolt can be slid without needing to be rotated.

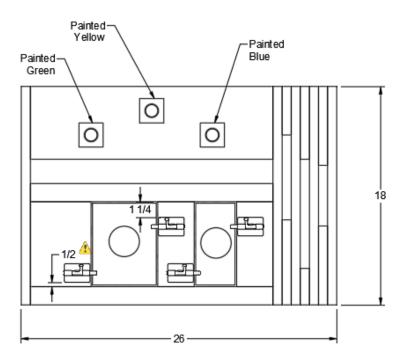




#### Sept.Q4:

Q: What are the heights of the barrel bolts?

R:



#### Sept.Q5:

Q: What are the dimensions of the pieces and coloured area on the circuit boards?

R: In line with Appendix A, the "circuit boards" are 4x8, 6x8, and 8x8. They will have 3.5" of colour painted along the front edge.

#### Sept.Q6:

Q: If the autonomous bot knocks something over after the switch is flopped, can the team lose points?

R: According to Section: 6.1.3. "Teams may end their match before the 4 minute time limit by flipping the "ECU breaker switch"."

This means the score for that team will be based on the location of things at this time. This would indicate the state of the objects at the time the flip was switched would be the scoring state.

The only exception to this would be if a piece was dropped and was still moving when the switch was flipped, then it would be scored when it reached its resting position.



#### Sept.Q7:

Q: If a robot separates into two parts while remaining connected with a wire is this acceptable?

R:All parts of the robot must be in continuous physical connection to be considered one robot.

## Sept.Q8:

Q: Teams are not allowed to drop pieces off their robot. Are teams allowed to transfer pieces between robots? For example, could a "trailer" attached to 1 robot at the start of the match be attached to the other robot part way through?

R: Based on Sept.Q7, this would be considered "dropping a piece off of the robot", which Section 3.2.6. prohibits.

This would not be permitted.

#### Sept.Q9:

Q: Are distance sensors that use class 1 lasers legal?

R: No Lasers. However, commercial, unmodified distance sensors that use class 1 lasers are permitted for sensor use only.

Note: Teams must provide documentation proving the laser within the device is a class 1. For more clarification about a specific product, reach out to your regional NTC.

#### Sept.Q10:

Q: Can the pool noodles for the autonomous bot all be a specified colour so that we will know that our sensors will work?

R: Section 5.1.1.3.1. states "pool noodles may be a variety of colours". Teams are expected to be able to adjust and adapt as necessary.