

Team Update 01

General

N/A

Competition Manual

9.3 Areas, Zones, & Markings

- BASE ZONE: an 18 in. +/- 0.125 in. (45.70 cm +/- 0.30 cm) wide by 18 in. +/- 0.125 in. (45.70 cm +/- 0.30 cm) deep infinitely tall volume bounded by ALLIANCE colored tape. The BASE ZONE is an ALLIANCE specific zone belonging to the matching color ALLIANCE. **The BASE ZONE includes the tape lines (Figure 9-3).**

10.5.2 PATTERN Scoring Criteria

The randomization of the OBELISK during AUTO **prior to the start of the MATCH** selects the MOTIF which is repeated 3 times to define the PATTERN colors for each of the 9 indices on the RAMP (Figure 10-4).

11.4.4 ROBOT

G418 ROBOTS may not contact meddle with ARTIFACTS on RAMPS. ROBOTS may not contact, either directly or transitively through a SCORING ELEMENT CONTROLLED by the ROBOT, ARTIFACTS on a RAMP, including their own RAMP. **Exceptions are granted for inconsequential and inadvertent contact while operating a GATE. Additionally, ROBOTS may not:**

- descend an ARTIFACT from their own RAMP, or
- descend an ARTIFACT from the opponent's RAMP.

Violation: MAJOR FOUL per ARTIFACT, and the ALLIANCE is ineligible for the PATTERN RP if G418.A, or the opposing ALLIANCE is awarded the PATTERN RP if G418.B.

Exceptions are granted for inconsequential and inadvertent contact made by a ROBOT while operating a GATE.

Example 1: A red ROBOT that contacts an ARTIFACT on the blue RAMP is in violation of this rule and is assessed 1 MAJOR FOUL under G418.

Example 2: A red ROBOT that LAUNCHES an ARTIFACT at an ARTIFACT on the red RAMP, removing it from the RAMP is in violation of this rule. The red ALLIANCE is assessed 1 MAJOR FOUL and is ineligible for the PATTERN RP under G418.A.

G419 ROBOTS only score LAUNCH into the their own GOAL. ROBOTS may not:

- intentionally place or LAUNCH ARTIFACTS directly onto the their own RAMP, or
- place or LAUNCH ARTIFACTS into the opponent's GOAL or onto the opponent's RAMP.

Violation: MAJOR FOUL and the opposing ALLIANCE is awarded the PATTERN RP if G419.B.

The game intent is for ROBOTS to score by LAUNCHING into the open top of the their own GOAL. Attempts to intentionally score points with actions that enter the

ARTIFACT further down on the RAMP are considered violations of this rule. Attempts to score points for the opponent either through the opponent GOAL or with actions that enter an ARTIFACT further down on the opponent RAMP are also considered violations of this rule.

There is no violation for scoring in an opponent's DEPOT.

G425 **Keep out of opponent's SECRET TUNNEL** A ROBOT in the opponent's SECRET TUNNEL ZONE may not contact, directly or transitively through a SCORING ELEMENT, an opponent ROBOT while in the opponent's SECRET TUNNEL ZONE, regardless of who initiates contact.

12.1 General ROBOT Design

R105 **There are expansion limits.** After the MATCH has started, ROBOTS may expand beyond the STARTING CONFIGURATION but are still subject to sizing constraints relative to the ROBOT, based on the initial STARTING CONFIGURATION. ROBOTS must be physically constrained to fit within these limits without the use of software. The sizing constraints are:

- A. After the start of the MATCH, ROBOTS may expand horizontally but must remain within a fixed 18 in. (45.70 cm) by 18 in. (45.70 cm) when fully expanded per [G414](#).
- B. After the start of the MATCH, ROBOTS may expand vertically up to 18 in. (45.70 cm).
- C. Within the limitations per [G415](#), ROBOTS may expand vertically up to 38 in. (96.50 cm).

Any extension beyond the maximum expansion limit during ROBOT operation is considered a violation of this rule. This includes flexible extensions (e.g., surgical tubing flappers, star intakes) that cause the ROBOT to exceed the expansion limit.

Teams should be prepared to show compliance with this rule and demonstrate their ROBOT expansions during the inspection process. During inspection, each team will be asked to show the ROBOT'S STARTING CONFIGURATIONS and additionally its configurations at maximum mechanical extension. Software limits are not sufficient to demonstrate maximum extensions.

At maximum extension, a ROBOT in compliance will not exceed the maximum allowable vertical extension of 38 in. (96.50 cm) in one direction while maintaining the horizontal expansion requirements of 18 in. (45.70 cm) length and width perpendicular to the vertical height.

Teams are responsible for maintaining compliance with expansion limits and subject to penalties listed in [G414](#) and [G415](#) for any violations during the MATCH.