



# **Team Update 09**

### **General**

We've had an exciting first few weeks of DECODE! Based on observations and input from key volunteers in the community we've put together a few resources to help ensure consistency at events. While these guides are primarily intended to be used by volunteers at events, they can also be used by teams at home.

The <u>Field Acceptance Checklist</u> is used by event volunteers as a guide to assist in ensuring fields built at events meet the dimensional requirements in the Competition Manual.

In addition, at some events there have been reports of a few situations where the field did not behave as expected. We've published a <u>Field Mitigation Guide</u> to provide guidance on some of these potential issues and the recommended mitigation measures field staff can take if they occur. The intent of this guide is to provide guidance to volunteers and events, so they can ensure a fair and consistent experience for all competing teams.

### **Competition Manual**

### 9.9 SCORING ELEMENTS

SCORING ELEMENTS are ALLIANCE neutral ARTIFACTS. ARTIFACTS are 5 in. (12.70 cm) nominal Gopher ResisDent™ polypropylene balls in purple (am-3376a\_purple) and green (am-3376a\_green). There are 24 purple (P) ARTIFACTS and 12 green (G) ARTIFACTS total in a DECODE MATCH.

ARTIFACTS are not perfectly spherical and may vary in size. Teams should plan for this variation when designing their ROBOTS. Based on the specifications provided by the manufacturer, ARTFACTS are specified to be 4.9 in +/- 0.25 in. (12.45 cm +/- 0.65 cm) in diameter at the mold seam.

### 11.4 In-MATCH

#### 11.4.4 ROBOT

**G416** LAUNCHING in the LAUNCH ZONE only. ROBOTS may only LAUNCH SCORING ELEMENTS when inside a LAUNCH ZONE or overlapping a LAUNCH LINE.

Violation: MINOR FOUL per LAUNCHED SCORING ELEMENT. MAJOR FOUL per LAUNCHED SCORING ELEMENT if the SCORING ELEMENT enters the open top of the GOAL.

A SCORING ELEMENT is considered LAUNCHED if it is shot into the air, propelled across the floor to a desired location or in a preferred direction, or thrown in a forceful way.

"Bulldozing" (inadvertent contact with a SCORING ELEMENT while in the path of the ROBOT moving about the FIELD) is not considered LAUNCHING

This is not intended to penalize teams with active manipulators which are expelling SCORING ELEMENTS through normal operation, such as:





- A. Running an intake in reverse causing a SCORING ELEMENT to travel a short distance from the ROBOT.
- B. A ROBOT pushing a SCORING ELEMENT a short distance away in the process of herding it across the FIELD.
- **G418** ROBOTS may not 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. Additionally, ROBOTS may not:
  - A. remove an ARTIFACT from their own RAMP except by operating the GATE, or
  - B. remove an ARTIFACT from the opponent's RAMP by any means.

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 6418.

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.

Example 3: A red ROBOT contacts and opens the blue GATE, causing 5
ARTIFACTS that were on the blue RAMP to leave the RAMP and return to the
FIELD. Red is assessed a total of 6 MAJOR FOULS – 1 under G417.A and 5 under
G418.B – in addition to blue being awarded PATTERN RP under G417.A/G418.B.

# 13.7 Playoff MATCHES

\*During Playoff MATCHES, teams may have more ARENA access. At the discretion of the Event Director, during the Playoff MATCHES teams may need extra team members to maintain the ROBOT between MATCHES in a timely manner. Each team is permitted to have up to 3 additional pit crew members to help with needed ROBOT repairs. These team members should be granted the same ARENA access as the DRIVE TEAM but may not participate in any MATCH play.





# 16 Glossary

Term	Definition
LAUNCH/LAUNCHING	An action by a ROBOT in which the SCORING ELEMENT is shot shooting or throwing into the air, propelled across the floor to a desired location or in a preferred direction, or thrown in a forceful way
	an action by a ROBOT that is preventing the movement of an opponent ROBOT by contact, either direct or transitive (such as against a FIELD element)
PIN/PINNING	Preventing an opposing ALLIANCE ROBOT from moving, accessing, or exiting an AREA for an extended period by obstructing ALL paths of travel this includes the following conditions:
	A. Limiting the movement of an opponent ROBOT to a small or confined area of the FIELD, approximately one foam TILE or less, without an avenue for escape. If a ROBOT is not attempting to escape, it's not considered a violation.
	B. Preventing the movement of an opponent ROBOT directly or transitively through contact with the FIELD perimeter, game structure, another ROBOT.
	C. Controlling an opponent's movements by raising or tilting the opponent's ROBOT off the TILES.