# 22 20 **REC FOUNDATION** EVENT PARTNER

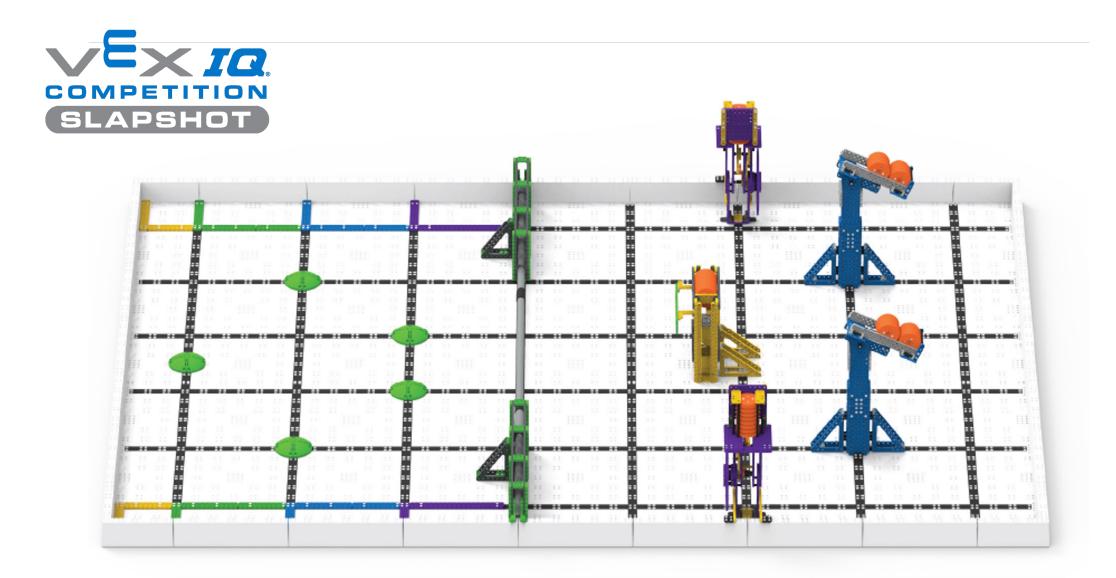
**VIQC Slapshot Discussion** 

Grant Cox Chairman of the VEX Game Design Committee



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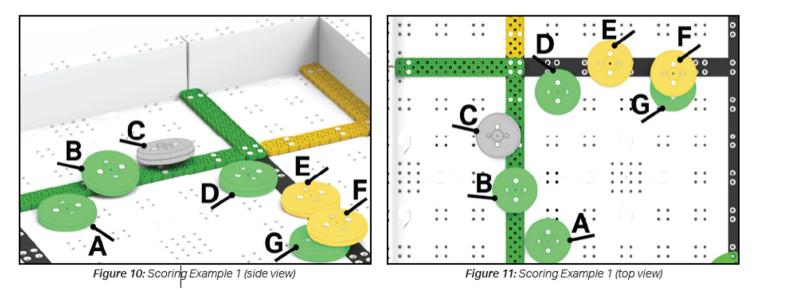






### Game Overview & Scoring Discs & Goal Zones

**<SC3>** *Disc* Scoring examples, per the criteria listed in <SC2>. In these figures, each labeled *Disc* is highlighted to indicate which *Goal Zone* it is scored in.



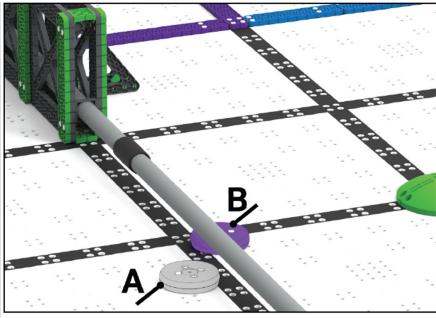


Figure 12: Scoring Example 2



### Game Overview & Scoring Contact Zones



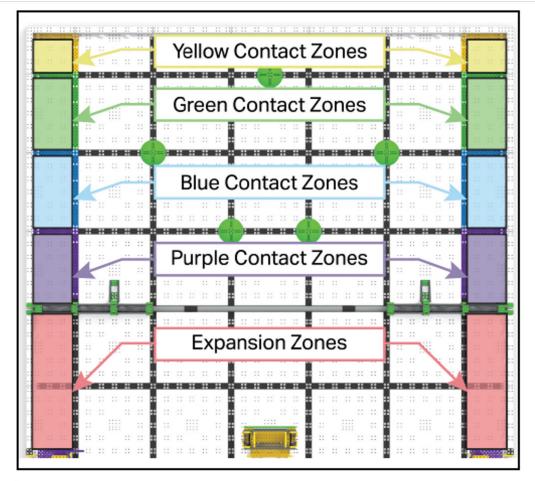


Figure 4: Overhead view of the field, depicting the Contact Zones and Expansion Zones.



### Misc Rules Stay behind the Fence

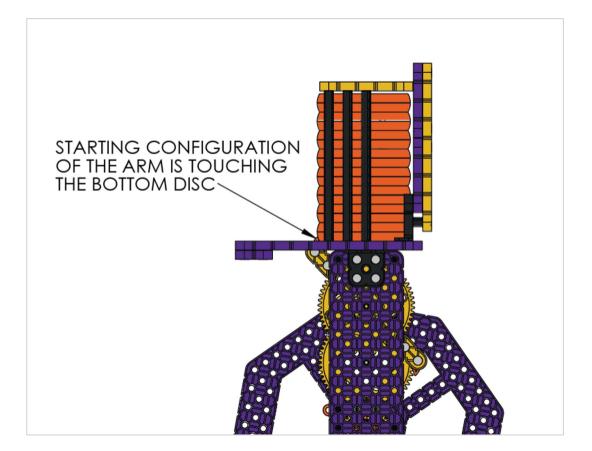
<G14> Don't cross the Fence Line until Contact. Robots may only extend over the Fence Line and "break the plane" of the 3-dimensional area of the 2-Point Goal Zone if they are contacting the Expansion Zone.

<G15> Discs that have crossed the Fence Line are "off limits". Robots may not contact any Discs which have fully crossed the Fence Line, regardless of whether the Robot is contacting an Expansion Zone or not.

<G16> Discs go under the Fence, not over it. Discs may only be Scored in Goal Zone by passing them underneath the gray PVC pipe. Robot actions such as "dumping," "placing," or "throwing" Discs over the Fence are strictly prohibited, and will result in a Disqualification.



### Field Layout & Setup Purple Dispenser Starting Rotation



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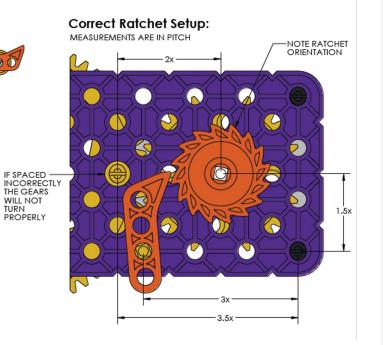
## Field Layout & Setup Purple Dispenser Shaft

**Correct Arm Build:** 

Correct:



Incorrect:



Question: Why doesn't my purple dispenser spin freely?

**Answer:** The arm can jam if either the standoff above the ratchet pawl or the pawls on the end of the arms are placed incorrectly.Checking your build against steps 30-31 and 36-37 of the <u>VIQC Slapshot Build Instructions</u> might help identify the problem.

Question: Why has my plastic shaft broken?

**Answer:** When the arm is jammed the torque produced from turning the wheel is enough to snap the shaft.

**Question:** Why can't I replace the plastic shaft with a steel one?

**Answer:** The plastic shaft was designed as an intended failure point to protect other parts of the dispenser that are not as noticeable. A steel shaft will not fail intended, and unseen damage can lead to intermittent issues such as the Dispenser skipping or taking more rotations to dispense.



# THANK YOU

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