



Game Update 01

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Game Rules

G5. Maximum two cups controlled at a time

A ROBOT may actively control as many as 2 CUPS at a time inside the field perimeter. Exceeding this limit will result in 2 PENALTY POINTS per infraction.

Control can be defined as:

1. Supporting, either partially or entirely.
2. Grabbing or Grasping
3. ~~Imparting direction force on the cup~~ Imparting directional force on a CUP while contacting it, either directly or transitively through another object.

G8. Autonomous scoring

AUTO points will be awarded at the end of the 15 second AUTO period for every one of the following scenarios considered to be true **when the period ends**.

G9. Teleop scoring

TELEOP points will officially be awarded at the end of the 75 seconds TELEOP period for each CUP based on its location and orientation per the following table.

<u>CUP state</u>	<u>Points for a CUP in an upright orientation (U)</u>	<u>Points for a CUP on it's side (S)</u>
T2. Located completely outside the FIELD PERIMETER, located beyond the A or D ZONES-, not entirely supported by the PLATFORM and not controlled by the ROBOT.	4 (T2-U)	2 (T2-S)
T4. Located entirely within the STARTING ZONE, not in direct contact with the PLAYING FIELD and not controlled by the ROBOT. <i>For this state, you effectively need to stack the CUP on another cup.</i>	6 (T4-U)	N/A 3 (T4-S) <i>An entire stack of cups CUPS on it's side will have every cup in the stack considered to be in contact with the PLAYING FIELD. Therefore this state doesn't exist.</i>



G14. The zones shift for teleop

Rule [G123](#) will continue to apply until a robot has fully moved into its side of the field during the TELEOP period. This is to say that a ROBOT may not exploit the grace period rule to steal additional CUPS beyond what is defined in [G123](#)

G16. No touching opponent's scored cups

ROBOTS may not ~~touch~~ [directly or indirectly touch](#) CUPS in the STARTING ZONE or on the PLATFORM on the opposing side of the field. Touching a cup in these areas on the opposing side is worth 10 PENALTY POINTS for a single CUP or 20 PENALTY POINTS for a stacked, upright CUP.

[As an example of this rules applicability, launching a CUP into an opponent's scored CUP counts as indirectly touching the CUP.](#)

G17. End game scoring

This rule overrides [G910](#) by adding the additional clause of "Cannot touch any part of the opponent's field".



Game Q & A

1. Would it be possible to get a situation in which T4-S would be applied by creating a platform of cups in the starting zone, then placing a tipped over cup on top?

And, if so, how many points would a cup meeting T4-S be awarded?

This situation is possible. The game rules will be updated to match. The point value for a CUP in this state will follow the same trend of being worth half as much as an upright CUP. (3 points.) Keep in mind that an entire stack of CUPS on it's side will still consider every CUP in that stack to be in contact with the PLAYING FIELD.

2. As the PLATFORM is located beyond D zone, does this mean that if T5-U/T5-S applies, T2-U/T2-S also applies, and therefore awards 12 points per upright cup and 6 points per cup on its side that are on the platform (and does the same apply for the combination of T3-U/T3-S and T4-U/T4-S)?

Only one teleop scoring state will apply per cup. Even though the PLATFORM is located beyond the D ZONE, it is its own scoring location. For the scenario described in the questions, T4 would take precedence over T2, only awarding the T4 point values for the CUPS. The T2 rule definition will be updated to reflect this. *T2. Located completely outside the FIELD PERIMETER, located beyond the A or D ZONES, not entirely supported by the PLATFORM and not controlled by the ROBOT.*

3. Is there a rule preventing the movement of the PLATFORM? (before any cups are on it)

The PLATFORM is meant to be a static piece of the field. It should not be moved during a match. We will look into providing instructions on how to properly secure it once we ourselves have received the game fields.

4. Am I allowed to move cups to a lower scoring zone (like off the PLATFORM) once they have exited the field, as long as I keep them off the field? (G7 says that "Scored cups cannot be returned to the field or moved to a **higher**-scoring zone.")

This is correct. There is no penalty for moving CUPS to a lower scoring location provided they are not returned to the field. Keep in mind that the CUPS will be worth the lesser point value when scored at the end of the match.

5. I notice that in the KoP, there are 3D printed parts that are delayed. Could there be/are there files available so that people with 3D printers could print them?



If all goes well, these parts will be provided. We will also look into providing all pertinent CAD files.

6. Controlling a Cup: if you throw a cup at another cup or hit a cup and it falls and rolls, at what point is the cup considered to be out of the robot's control. And what if it rolls outside of the field perimeter, at what point will it be out of control then?
CUPS are not considered controlled by a robot if they aren't in direct or transitive contact with the robot. The wording in rule G5 will be updated for clarity. *3. Imparting directional force on a CUP while contacting it, either directly or transitively through another object.* For the examples given in the question, the CUPS are no longer considered controlled by the robot once they are not contacting it. (Directly or transitively through another cup)
7. Quick question, what is the game field made out of?
The game field is printed on smooth banner material.
8. Bulldozing: if I were to hit a group of cups, with the sole intention of getting them out of my way, am I in control of all those cups?
Yes. The robot would be considered to be in control of all those cups.
9. For the robot measurements, R1 only specifies the height for the starting configuration of the robot. Does this mean that once the match starts, there's no limit on how high the robot can extend?
That is correct, there is no limit on how high a robot may extend after the match has begun.
10. For the autonomous period, If for example, you reach section D but then return to one of the other sections, do you still get the 9 points for reaching D or will you just get the points for whatever section you happened to be on once the auto period ended?
The states outlined in the table under rule G8 are evaluated once at the end of the autonomous period. You will be awarded points based on where your robot is located at the end of the 15 second AUTO period. The wording in rule G8 will be updated for clarity. *AUTO points will be awarded at the end of the 15 second AUTO period for every one of the following scenarios considered to be true when the period ends.*