

Q&A

VEX V5 Robotics Competition 2024-2025: High Stakes

Tagged: SC2

Welcome to the official VEX V5 Robotics Competition Question & Answer system, where all registered teams have the opportunity to ask for official rules interpretations and clarifications. This Q&A system is the only source for official V5RC High Stakes rules clarifications, and the clarifications made here from the Game Design Committee (GDC) are considered as official and binding as the written [Game Manual](#) itself.

Please review the [Q&A Usage Guidelines](#) before posting. This system is only intended for specific V5RC High Stakes rules questions.

- For event, registration, or other competition support questions, please contact your [REC Foundation Regional Support Manager](#).
 - For VEX technical support, contact support@vex.com or sales@vex.com.
- For game questions, suggestions, or concerns outside of specific and official rules questions, contact GDC@vex.com.

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3175: SC2 Partially Covered = Scored / Invisible?

25-Jun-2026

SC2

Thanks all for Automate session June 22, nothing like breaking the game on our first spin - several questions ...

#5 Da Rules - SC2 A Pin is considered Placed if it meets all of the following criteria: i. The Pin is partially or entirely nested with a Goal, or with a Cup that is partially or entirely nested with another Placed Pin. ii. Each Goal and/or each half of a Cup nested with that Pin contains a maximum of one Pin half. (See Figure SC2-2.) b. A Cup is considered Placed if it meets the following criteria: i. The Cup is partially or entirely nested with a Placed Pin.

[<SC2>](#)

Da Question - SC 2 Placed scoring criteria has "partially" seated as a requirement unless specifically split – does count as scored, does this mean that the partially seated / gray cup that partially covers a colored pin is NOT scored while still being partially visible or?

Answered by committee

[<SC3>](#) states:

"To count as Scored for the corresponding Alliance, the half of the Placed Pin must remain fully visible (i.e, cannot be partially or fully nested inside the opaque half of a Cup)."

A half of a Placed Pin that is partially nested inside the gray half of a Placed Cup is not considered fully visible, and will not be Scored.

3153: Clarification on Classification of Stacked Game Elements and Removal of Elements

22-May-2026

SC2 SG9 SG10

In the rulebook, [<SG10>](#) states that "Placed Scoring Objects cannot be removed from neutral Goals.". [<SC2>](#) clearly identifies an example of a position a pin may take on a stack which is **not** Placed, shown in Figure SC2-2 (pin placed horizontally on a cup without either half of the pin being entirely contained within the concave portion of the cup).

We wanted to ask about the legality of the following:

- (a) Removing a Pin that is not Placed, such as a Pin positioned similarly to the one shown in Figure SC2-2.
- (b) Removing a Cup which is similarly balanced horizontally on top of other game elements without being placed.
- (c) Removing a Cup which is balanced on top of another Cup without a pin in between (or, similarly, a Pin balanced on a Pin with no Cups in between).
- (d) Removing a Placed cup which is not affecting the score of the game (ex. transparent part facing downwards, with no pins above, thereby not adding or subtracting points from the game).
- (e) If it would be a major violation to accidentally knock over protected scoring elements in an effort to reopen an alliance or neutral goal for scoring by removing a game element that was positioned on the goal but not Scored/Placed.
- (f) Rule [<SG9>](#) states that "Robots may not directly or indirectly interact with the opposing Alliance-colored Goals", and clarifies that this includes adding and removing scoring objects. Would stacking a horizontal game element as seen in Figure SC2-1, or any unplaced game elements as stated above count as interaction with these goals? By definition, this is not Placed, and it is not an action of descoring, but it forces the opposing alliance to take time to reopen their own alliance's goal for scoring.

(g) If it would be a violation of <SG6> for one of these game elements to fall onto a bot already possessing 1 pin and 1 cup in the action of removing it from the goal.

Thank you so much!

Answered by committee

Note: Rules <SG2>, <SG9>, and <SG10> have since been updated in later versions of the game manual. We have revised and reformatted your question to reflect that update and to make it easier to address your individual questions.

To answer questions (a), (b), and (c), <SG10> only applies to Placed Scoring Objects, so removing a Pin or Cup that is not Placed from on top of a neutral Goal would not be a Violation of <SG10>.

(d) Removing a Placed Cup from a neutral Goal would be a Violation of <SG10>, regardless of whether or not the Placed Cup affects the score of the Match.

(e) It's legal to remove Placed Scoring Objects from your own Alliance-colored Goals, whether accidentally or intentionally. However, a Robot action that results in the removal of Placed Scoring Objects from a neutral Goal would be a Violation of <SG10>. This will escalate to a Major Violation if it's considered to be Match Affecting, if it's deemed by the Head Referee to be intentional and/or egregious, or at the Head Referee's discretion after committing repeat Minor Violations. (See Violation notes in Appendix C for more details.)

(f) Making contact with Scoring Objects stacked on an opposing Alliance-colored Goal would be considered interacting with that Goal, regardless of whether those Scoring Objects are Placed or not, which would result in an <SG9> Violation.

(g) If the Scoring Object falls into the Possession of a Robot that is already in Possession of 1 Pin and 1 Cup, the Robot would technically be in Violation of <SG6> for exceeding the Possession limit and must immediately stop all actions other than attempting to remove the excess Scoring Objects. The Robot would not be able to continue participating in gameplay until the excess Objects are removed from its Possession.

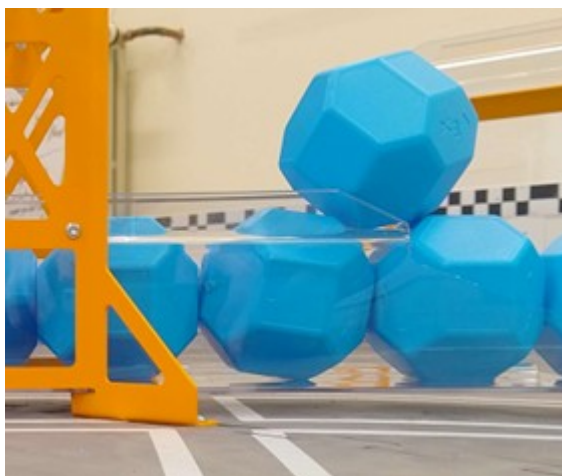
2737: Scored Block Clarifications

27-Jul-2025

SC2

<SC2> states: "A Block is considered Scored if it meets all of the following criteria: a. The Block is in contact with the inside surface(s) of the plastic trough of a Goal. b. The Block is not in contact with a Robot of the same color as that Block. c. The Block is not in contact with the Floor."

Is the "plastic trough" the entire plastic structure of the goal? Does contacting an inside edge or corner constitute contacting an inside surface? i.e., are all the blocks in the following image considered scored?

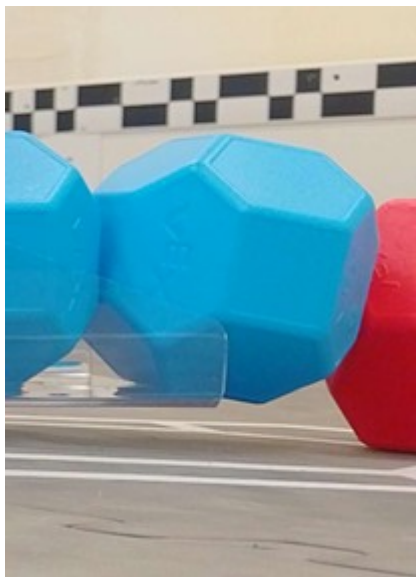




(Left: image of Blocks Scored in Center Lower

Goal, right: close up of Block contacting only an inside corner of the plastic trough)

Is "contact with the Floor" Transitive? i.e, is a block scored if it satisfies all the criteria but is being supported by an unscored block that is touching the floor, or a stack of blocks that are touching the floor? Below are some examples, where if the red blocks are removed, the blue blocks will fall out.



Answered by committee

The blue Block sitting above and outside of the Goal in the first two images isn't contacting the inside surface of the Goal and is not scored.

The outermost blue Block in images 3 & 4, which meets the criteria of [<SC2>](#), is scored. Contact with non-scored Blocks does not impact a Block's scored status.

2538: [G9][SC2] Hands and Scenarios Involving Autonomous Losses

15-Feb-2025

G9 SC2

Per rule [<G9>](#) it states that

b. Drive Team Members are not permitted to break the plane of the Field Perimeter at any time during the Match, apart from the actions described above. c. Transitive contact, such as contact with the Field Perimeter that causes the Field Perimeter to contact Field Elements or Scoring Objects inside of the Field, could be considered a Violation of this rule.

and per rule [<SC2c>](#) it states that

c. Any rule Violations, Major or Minor, during the Autonomous Period will result in the Autonomous Bonus being awarded to the other Alliance. If both Alliances violate rules during the Autonomous Period, no Autonomous Bonus will be awarded.

Examples:

- **Red1's Drive Team** breaks the plane of the field while pointing to strategize with **Red2's Drive Team** near the end of the Autonomous Period.
- **Blue1's Drive Team** is against the field wall and bumps the field perimeter very minorly which shifts a ring slightly on the field.
- **Red2's Drive Team** is against the field wall and bumps the field perimeter which causes the ring on the Alliance Stake to become more firmly Scored on the Alliance Stake.
- **Blue2's Drive Team** is against the field wall and bumps the field perimeter which causes the ring on the Alliance Stake to become Descored from the Alliance Stake.
- **Red1's Drive Team** breaks the plane of the field while pointing to strategize with **Red2's Drive Team** after the end of the Autonomous Period while the Autonomous Bonus is being calculated.

Should any of these actions happen during or after the Autonomous Period from an Alliance, would this be considered a Violation that should affect [<SC2c>](#)?

Answered by committee

We're going to ignore your specific examples in favor of advising Head Referee's to apply rule [<G3>](#), and to state that the intent of rule [<G9>](#) is to prevent Drive Team Members from having direct, tangible effects on the Match.

Pointing into or over the Field is not likely to affect the Match, though Drive Team Members should still be warned against doing so. Bumping the Field wall in a way that changes the location of a Scoring Object *has* affected the Match. If the Team breaks [<G9>](#) in a way that affects the outcome of the Autonomous Period, they should be ineligible to receive any portion of the Autonomous Bonus or an AWP for that Match.

2462: Autonomous period scoring

26-Jan-2025

SC2

At a local competition in a finals match

The blue alliance scored 4 blue rings total: 2 rings on 2 separate mobile goals.

The red alliance scored 3 red rings total: 2 mobile goals had one ring each and the red alliance stake had 1 ring scored.

We counted the score as red:9 blue:8

The referee awarded the blue alliance the autonomous bonus stating that top rings do not count.

Is there something more we can bring to the referees attention besides SC2?

[<SC2>](#)

Answered by committee

Clause A of rule [<SC2>](#) excludes Climb points and Corner modifiers from the calculation of an Alliance's score for the purposes of determining the Autonomous Bonus. Scored Rings and Top Rings should, however, be included in that calculation.

If a Drive Team Member believes a Head Referee has made an error during a Match, rule [<T3>](#) gives them the right to appeal the ruling. In the case of an incorrect Autonomous Bonus or AWP determination, we recommend that Drive Team Members get the Head Referee's attention before the Driver Controlled Period begins. A Drive Team Member should politely express that they disagree, and ask the Head Referee to recount based on the misunderstood or misapplied rule number.

1800: catapult manually

29-Nov-2023

[SC2](#)

can you pull back your catapult manually while loading [<S1>](#)

Answered by committee

Please review the [Q&A Usage Guidelines](#) before posting, specifically point 2, "Read and search existing Q&As before posting." We believe [Q&A 1778](#) addresses your question; if it does not, please feel free to rephrase and re-submit.

1365: Robot Skills Clarifications

5-Jan-2023

[SC2](#) [RSC1](#) [RSC2](#) [RSC3](#) [RSC4](#) [RSC5](#) [RSC6](#)

[<RSC7>](#) Here are a couple of questions regarding running teams during a skills match. As per the update on November 1, teams are supposed to be disqualified for coming into contact with anything outside of the field during endgame.

1. How do we mark team as *disqualified* during a skills match? As of December, Tournament Manager does not include an option to disqualify a team during a skills match. The definition of disqualification says that "A Team that receives a Disqualification in a Driving Skills Match or Programming Skills Match receives a score of zero (0) for that Robot Skills Match" Do I simply modify their score to be zero on everything?

2. Also, does the definition of breaking the field perimeter include the top of the field walls, or only the outside? (Would a team be in violation of S2 if a part of their robot is touching the top of the field wall, but not the outside perimeter?)
3. How strict are we supposed to be regarding the expansion rule before endgame (e.g., 18" exactly or 18" +/- 1")? Many teams may have intake rollers that break 18" during operation. There were also some teams with string that would sway outside of the 18" during driving. (One team also had a piece of metal partially detach and stick outside of 18"). Should we keep a sizing tool at the skills field to show teams what part of their robot would violate the 18" rule during operation?
4. Being able to eyeball the size of a robot on the field is slightly subjective and might cause problems with newer volunteers. What is the best method for teaching them how to spot a violation?
5. Finally, how do we resolve a dispute of a robot going oversize and entering endgame early? Depending on how strict we are supposed to be with the expansion limit, this will be a point of conflict. As per the manual, "The Head Referee has final authority regarding all Robot rules". Is this only for the designated Head Referee for the event, or does this include everyone that has been certified as a Head Referee by REC?

Answered by committee

Thank you for your questions.

1. How do we mark team as *disqualified* during a skills match?

The Scorekeeper should record a score of 0 for the Skills Match.

2. Also, does the definition of breaking the field perimeter include the top of the field walls, or only the outside? (Would a team be in violation of S2 if a part of their robot is touching the top of the field wall, but not the outside perimeter?)

Rule [<S2>](#) specifies that a Robot that comes in contact with the outside face of the Field Perimeter is in Violation of the rule. It does not address or include the top edge of the Field Perimeter.

3. How strict are we supposed to be regarding the expansion rule before endgame (e.g., 18" exactly or 18" +/- 1")?

Any horizontal expansion beyond 18"x18" prior to the Endgame is a Violation of rule [<SG4>](#), including swaying or dragging strings, flexible intakes that cause the Robot to expand beyond 18" while intaking a Disc, and partially detached Robot components that protrude or drag beyond the 18" size limit. When determining the correct penalty, the Head Referee must consider the clauses and Violation Notes of [<SG4>](#) as well as any steps the Team takes to remedy the Violation. Having a sizing tool available to the Head Referee at the Field is always a good idea.

4. Being able to eyeball the size of a robot on the field is slightly subjective and might cause problems with newer volunteers. What is the best method for teaching them how to spot a violation?

If your Head Referee and Scorekeeper Referees are available to help with Robot Inspection, it can provide hands-on experience and understanding of Robot sizing.

5. As per the manual, "The Head Referee has final authority regarding all Robot rules". Is this only for the designated Head Referee for the event, or does this include everyone that has been certified as a Head Referee by REC?

The Head Referee for the event (or, in the case of an event with multiple Head Referees, the Division or the Match) is the one person with final authority regarding all Robot rules and Match play. Other Referees may provide information about what they saw during a Match, and may advise the Head Referee as requested, but all rulings are

based on the judgment of the Head Referee and must be made by the Head Referee.

1340: Expansion Over White Support Beam

10-Dec-2022

SC2

[<S2>](#) Can your string launcher go over the white support beam without touching the basket? The game manual says that the white support beam is not part of the high goal.

Answered by committee

Thank you for your question. Rule [<SG5e>](#), which still applies during the Endgame period, specifically makes this contact illegal (the pertinent section of the rule is presented in bold text below for emphasis):

Robots may not contact the High Goal, Discs which are Scored in the High Goal, **or the horizontal supporting structures directly underneath the High Goal**. This rule applies at all times, regardless of Alliance / High Goal color.

All Violation Notes for rule [<SG5>](#) also apply. An intentional, strategic, and/or Match Affecting Violation should be considered a Major Violation, and repeated Minor Violations may escalate to a Major Violation at the Head Referee's discretion.