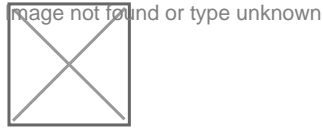


# Q&A

## VRC 2018-2019: Turning Point

Tagged: Caps



Welcome to the official VEX 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 VRC Turning Point 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 VRC Turning Point 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](mailto:support@vex.com) or [sales@vex.com](mailto:sales@vex.com).
- For game questions, suggestions, or concerns outside of specific and official rules questions, contact [GDC@vex.com](mailto:GDC@vex.com).

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## 248: Interpreting <SG8>

24-Feb-2019

Caps SG8

If in the elimination matches, in the act of scoring a cap on a pole, the cap leaves the field either due to defense or driver error, should that result in a disqualification for the robot attempting to score the cap? At a recent local tournament, the rules were set in such a way that if you had dropped a cap off the field at any point during the qualifier matches and then dropped a cap during the eliminations, you would be instantly disqualified regardless of if the offense was match affecting or not. Is this a proper interpretation of the rule sg<8> or not? Thanks

### Answered by Game Design Committee

The full text of <SG8> reads as follows:

<SG8> Keep Game Objects in the field. Though it is expected that some Game Objects may unintentionally leave the field during Match play, Teams may not intentionally or strategically remove Game Objects from the field.

a. Balls that leave the field during regular Match play, accidentally or intentionally, will not be returned to the field.

b. Caps that leave the field during regular Match play will be returned to the nearest foam tile, Low Scored for the opposite Alliance color of the last Robot to contact it. If a referee cannot determine which Robot was the last to contact the Cap, then the Cap will not be returned to the field.

An intent of this rule is to prevent Robots from "knocking" Caps out of the field to remove them from Posts. Any strategic, intentional, or repeated removal of Game Objects from the field would be considered a violation of this rule.

Minor violations of this rule that do not affect the Match will result in a warning. Match Affecting offenses will result in a Disqualification. Teams that receive multiple warnings may also receive a Disqualification at the Head Referee's discretion.

"Strategic, intentional, or repeated" is the key phrase to bear in mind. It is up to the Head Referee to determine if the way in which the Caps were removed from the field was intentional or strategic. Similarly, the exact definition of "repeated" will also be at Head Referee discretion, depending on the context of the Match and the event.

Generally, a Cap falling outside of the field due to defensive interactions would be protected by <G11>, although it is impossible to issue a blanket ruling that would cover all possible scenarios.

<G11> You can't force an opponent into a penalty. Intentional strategies that cause an opponent to violate a rule are not permitted, and will not result in an infraction on the opposing Alliance.

See [this Q&A](#) and [this Q&A](#) for more thoughts on this topic.

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## 212: What happens to a cap if sg8 is violated?

16-Jan-2019

Caps SG8

According to Sg8 balls can not be shot at caps on posts So let's say blue has a scored cap on a post and red comes over and shoots a ball and the cap falls off, will the cap be placed back on the post scored for blue due to the violation?

### Answered by Game Design Committee

First, to be clear, shooting Balls at Caps is not considered a legal strategy. Please see this relevant similar Q&A post: <https://www.robotevents.com/VRC/2018-2019/QA/197>

will the cap be placed back on the post scored for blue due to the violation?

There is no precedent in the Game Manual for "un-doing" an action mid-Match because the action was the result of a rules violation. Instead, the Head Referee should determine if the action was Match Affecting, and assign a warning or a Disqualification accordingly.

However, please note in the linked Q&A above, this particular action should result in an <S1> violation and a potential Disqualification at the Head Referee's discretion, regardless of if the action was Match Affecting or not.

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## 197: Shooting Caps Off Posts

27-Dec-2018

Caps

Regarding <SG8>.

Teams may not intentionally or strategically remove Game Objects from the field.

Some robots are capable of knocking caps off posts by shooting balls at them. If the ball hits the far underside of the cap just right it can knock it back onto the playing field. However, either the cap or ball, and most likely both, will leave the playing field.

Would this strategy be considered a violation of SG8?

### Answered by Game Design Committee

This strategy would be considered a violation of <SG8>, and potentially a serious violation of <S1> depending on the specifics of the interaction. Robots should not be intentionally shooting Balls out of the field, especially not directly towards Alliance Stations (where the Posts are), regardless if the Balls leave the field or not.

<S1> Be safe out there. If at any time the Robot operation or Team actions are deemed unsafe or have damaged any Field Elements or Game Objects, the offending Team may be Disabled and/or Disqualified at the discretion of the Head Referee. The Robot will require re-inspection before it may again take the field.

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## 190: Andy Zieglmeier Event Partner

20-Dec-2018

Caps SG8

Is it an option for the head referee to clarify expectations of SG8 before qualification matches begin? This would be in reference to the following - The intent of this rule is to prevent Robots from "knocking" Caps out of the field to remove them from Posts. Any strategic, intentional, or repeated removal of Game Objects from the field would be considered a violation of this rule.

Examples of clarification would be-

1. If your robot leverages a Pole scored Cap on the bottom side, from the field side only, this would be considered a violation of the note listed above. Reason for this is due to leverage from the field side only would result in knocking a Cap out of the field in most cases. Teams executing this move and "knocking" Caps out of the field, in this manner, will receive one warning and then be logged.
2. It is not possible to assume the intent of a robot to correctly de-score a Cap from a Pole in all scenarios. With that said, a robot that is correctly attempting to take possession of a Cap to bring it back to the field drops it out of the field will be notified that multiple attempts in that nature will be viewed as "knocking" Caps out of play.

My reasoning for asking for this clarification is due to volunteering as a referee or emcee at multiple tournaments this year and having teams knock two or more Caps out of the field and saying that they were trying to bring it back into the field. In clarifying the head referees expectations, this lowers the potential of alliances disagreeing with how the match is called.

It is not my belief that the game designers desired to see the Poles empty at the end of matches. I have not seen a robot be able to score a Cap on a Pole anywhere near the same time it takes to knock that scored Cap out of the field.

### Answered by Game Design Committee

The VEX Robotics Competition does include some rules which are not inherently black-and-white, and rely on some amount of contextual referee interpretation for heat-of-the-moment decisions. See [this Q&A](#) for some more discussion on this topic.

With this in mind, it is reasonable and standard practice for a Head Referee to hold a "[Driver's Meeting](#)" to review and/or clarify key rules prior to an event.

However, it is imperative that any clarifications made during this pre-event meeting are in accordance with the guidance given in official materials like the Game Manual, the Referee Training Videos, the Referee Guide, and the Q&A. Augmenting these guidelines with additional qualifications or criteria would not provide a consistent experience for teams across all events.

Much like we avoid making "blanket" assumptions in the Q&A for these context-specific rules, we would advise Head Referees to avoid making "blanket" assumptions for their entire event. Due to the dynamics of head-to-head robotics games, and the creativity of VRC teams, it is impossible to account for all scenarios that you may encounter.

To directly comment on your specific examples:

If your robot leverages a Pole scored Cap on the bottom side, from the field side only, this would be considered a violation of the note listed above. Reason for this is due to leverage from the field side only would result in knocking a Cap out of the field in most cases.

This is an example of a blanket statement, "We will always interpret X as Y because it can only be Z", which may not always be true. It would not be in your (or the teams') best interest to provide this assumption.

a robot that is correctly attempting to take possession of a Cap to bring it back to the field drops it out of the field will be notified that multiple attempts in that nature will be viewed as "knocking" Caps out of play.

This is a better example of a guideline that is in line with <SG8> as it is written. A portion of <SG8> is quoted below, bolded for emphasis.

Any strategic, intentional, **or repeated** removal of Game Objects from the field would be considered a violation of this rule.

Removal of Game Objects from the field does not have to be strategic, intentional, AND repeated; "repeated" alone can be considered a violation of this rule. This is a good case where the Head Referee should keep track of the warnings in their [Match Anomaly Log](#) and watch for repeated instances from the same Team.

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## 183: Clarification on Low Scored Cap

14-Dec-2018

Caps

**Low Scored** – A Cap status. A Cap is Low Scored when a Cap's Core is touching the foam field tiles, white tape lines, or Platforms, without touching a Robot of the color Alliance for which the Cap would award points. Points for a Low Scored Cap are awarded to the Alliance color that is facing "up" when the Core half on its opposite side is touching the foam field tiles, white tape lines, or Platform.

In the definition for a "Low Scored Cap" where it says "...without touching a Robot of the color Alliance for which the Cap would award points.", is it saying "without the Cap touching a Robot of the color Alliance" or "without the Cap's Core touching a Robot of the color Alliance"?

I've been to competitions where they didn't score the cap of the same color if you were touching the Cap at all and other competitions where they seemed to ignore that portion of the definition entirely.

Thanks

### Answered by Game Design Committee

The intent was for the Robot contact portion of this definition to refer to the entire Cap, not just the Core. It could also be written as the following, similar to the verbiage in the definition of High Scored:

*A Cap is Low Scored when a Cap's Core is touching the foam field tiles, white tape lines, or Platforms, and the Cap is not touching a Robot of the color Alliance for which the Cap would award points.*

This is also how it is presented in the Referee Training videos, as seen here:

<https://youtu.be/hOxbFWuJ0TY?t=83>

Thank you for pointing out this grammatical inconsistency, and we apologize for any confusion this may have caused. As noted in <G19>, the Q&A is considered an extension of the Game Manual and includes the correct and official interpretation of the Game Manual for ambiguous cases. This answer should serve as an amendment to the definition of Low Scored, and will be included in the April 5th, 2019 Game Manual update for VEX Worlds.

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## 173: Clarification on SG8 :Caps de-scored which leave the field

9-Dec-2018

Caps SG8

Please clarify the following situation as related to caps leaving the field in an attempt to de-score. Is this the correct procedure given the rules "as written"

SG8 says - Match Affecting offenses will result in a Disqualification.

1. Any time a cap is knocked off a post by an opposing alliance and falls out of the field, the referees need to make a mental note and verbally warn the offending team.
2. At the end of the match, the referees need to determine if the de-scored cap(s) affects the outcome of the match. Referees should score the match with the cap (or caps) on the post first. Then referees need to score the match with the caps de-scored. If the de-scored caps affects which alliance wins, the offending de-scoring team will be disqualified.
3. For clarification, is the offending team disqualified? Or is it the alliance disqualified?

SG8 also says: Teams that receive multiple warnings may also receive a Disqualification at the Head Referee's discretion.

1. Please define multiple. The dictionary says several which is also vague at best. Is multiple two or more? Is multiple three or more? Is multiple 15 times? Please replace the word multiple with a number that is not open to interpretation.

### Answered by Game Design Committee

1. Any time a cap is knocked off a post by an opposing alliance and falls out of the field, the referees need to make a mental note and verbally warn the offending team.
2. At the end of the match, the referees need to determine if the de-scored cap(s) affects the outcome of the match. Referees should score the match with the cap (or caps) on the post first. Then referees need to score the match with the caps de-scored. If the de-scored caps affects which alliance wins, the offending de-scoring team will be disqualified.

These are both correct interpretations.

3. For clarification, is the offending team disqualified? Or is it the alliance disqualified?

Please see the definition of Disqualification, in the Tournament section of the manual, for reference:

Disqualification – A penalty applied to a Team for a rules violation. When a Team is Disqualified in a Qualifying Match, they receive zero (0) WP, AP, and SP, and the opposing Alliance receives two (2) WPs. When a Team is Disqualified in an Elimination Match, the entire Alliance is Disqualified and they receive a loss for the Match.

So, the answer to your question depends if the offense occurs in a Qualification Match or an Elimination Match.

SG8 also says: Teams that receive multiple warnings may also receive a Disqualification at the Head Referee's discretion. Please define multiple. The dictionary says several which is also vague at best. Is multiple two or more? Is multiple three or more? Is multiple 15 times? Please replace the word multiple with a number that is not open to interpretation.

The word "multiple" is used throughout the manual intentionally, to provide referees with the flexibility to interpret and apply a ruling based on the context of their event. Two warnings for egregious actions, or warnings that are met with uncivil reactions, should bear more weight than two warnings for accidental actions, or warnings that are met with respectful discourse.

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## 170: Cutting Rubber Bands R4

6-Dec-2018

Flags Caps

Hello, I read the game manual and R4/R7 did not say anything about not cutting rubber bands. Since you can cut zip ties and 1/8" rope, can you cut rubber bands to string them together for usage with a mechanism? Thank you in advance.

**Answered by Game Design Committee**

Yes, this is legal, provided no other rules are violated in the process.

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## 154: Cap Score when leaning on platform

20-Nov-2018

Alliance Platform Center Platform Caps

Is a cap scored if it is leaning on it's side where the Core is touching the side of a platform but outer rim rests on the foam tiles? Our debate regards the definition of the platform whether or not the PVC Sides/Bottoms are included in the Platform. In this Example, the cap's core is NOT touching both the foam tile and platform. This cap is also NOT resting on TOP of the platforms as ruled in a previous post.

EXAMPLE: The cap's Core is only touching the rounded (colored) edge of one of the 3 platforms and the outer rim is resting on the foam tiles. This cap is supported by the side of the platform. I think this cap would count as Scored because the entire Colored PVT Pipe is included in the definition of the Platform. The only thing excluded is the metal side structure in Fig. 11.

Low Scored – A Cap status. A Cap is Low Scored when a Cap's Core is touching the foam field tiles, white tape lines, or Platforms, without touching a Robot of the color Alliance for which the Cap would award points. ...

### Answered by Game Design Committee

The definition of Platform is as follows, with a portion bolded for emphasis:

Platform – One of three (3) raised surfaces made of **PVC and polycarbonate**, roughly 23.875" (606.4mm) by 21.70" (551.2mm), that can be used for Parking Robots.

You are correct in your interpretation that the blue/red/yellow PVC edges are included in the Platform. Thus, a Cap whose Core is contacting the PVC would be considered contacting the Platform, and would be considered Low Scored.

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## 145: Hoarding Resolution - Hoarding Definition and SG5

15-Nov-2018

Caps SG5

Hoarding is defined as placing two or more caps . . . in one of the four corners of the field and actively preventing your opponent from gaining access to them. If a team placed two caps between two flag towers, would that be a legal means of hoarding?

### Answered by Game Design Committee

The definition of Hoarding is as follows:

Hoarding – A Robot status. A Robot is Hoarding if it is actively blocking opposing Robot access to more than two (2) Balls, or more than one (1) Cap, in any of the four (4) corners of the field (i.e. positioned in the corner roughly the size of one foam field tile).

The area between the Flags is not called out as a possible destination for Hoarding; therefore, placing two Caps between two Flag towers would not be considered Hoarding, and would be legal.

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## 10: Descoring legal this year?

16-May-2018

Caps

After reading through the game manual, I didn't see any mention of descoring being illegal. Specifically, can you flip a cap that has been scored on top of a pipe?

### Answered by Game Design Committee

If there are no rules prohibiting something, this generally means that it is legal. There are no rules prohibiting flipping the orientation of a Cap which is High Scored on a Post, thus it is legal. (provided, of course, that rules such as SG4, SG8, SG10 etc are still followed)