

# Q&A

## VRC 2023-2024: Over Under

Tagged: SG11

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 Over Under 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.

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- 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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## 1933: Momentary Elevation while Crossing Barrier

5-Feb-2024

SG11

\*<SG11> During the last 30 seconds, robots may not contact... Opponent Robots who meet the definition of Elevated.

"Elevated: A robot is considered elevated at the end of the match if they meet the following criteria..."

Thoughts: Elevated is not defined during the match. Therefore SG11 can only protect elevated robots at the end of the match.

I assume this to be an oversight.

Let's assume that Robots can be considered elevated during a match. Then a robot that is crossing the barrier (on their side of the auton neutral lines) to score, and teters on it for a moment, would be considered elevated in that moment. That is a protected state, a state that being contacted in would draw a minor infraction, and said minor infraction should be recorded.

This means that during the last 30 seconds, robots attempting to go over the bar cannot be defended against, because that might result in momentary violations of <SG11>, even though the robots are not attempting to elevate, just to traverse the barrier.

As a referee, this seems challenging to enforce. Should a team interact with an opponent crossing the bar and momentarily meeting the definition of elevated, then one has to consider the effect that had on the match and track the likely number of points impacted by the interaction. Did it result in one triball not being scored or two?

Can you clarify the state of being "elevated" to address both of these concerns? Thanks!

Thanks!

### Answered by committee

As you quoted from rule [<SG11>](#) (bold added for emphasis):

<SG11> During the last 30 seconds, robots may not contact ... **Opponent Robots who meet the definition of Elevated.**

Any Robot that meets the conditions of points 1-4 of the definition of Elevated (contacting only required/allowed items, and not contacting disallowed items) gains the protection of rule [<SG11>](#) during the final 30 seconds of the Match.

If a Robot is crossing their own Barrier while moving Triballs and not trying to Elevate, the Head Referee is unlikely to consider contact with that Robot as a Match Affecting Violation of [<SG11>](#) and that specific contact will likely result in a Minor Violation; however, the final determination must be made by the Head Referee within the larger context of the Match. For the purposes of this rule, Match Affecting calculations should be based on points earned for Elevation, and not for Triballs.

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## 1920: Clarification regarding updates to SG11 in Version 3.0

1-Feb-2024

SG11

*SG11 Elevation is Protected* was updated to reduce protected period of short barrier to 15 seconds, and contact with elevated opponent elevation bars, elevated robots, and robots in contact with elevation bars remains prohibited in the last 30 seconds . [<SG11>](#)

However the red clarification box still mentions indirect contact with adjacent barriers could be a violation, but does not distinguish between the time period from 0:30 to 0:15, and 0:15 to 0:00.

The intent of this rule is to prevent potentially damaging defensive interactions with Robots who are in the process of Elevating. Indirect contact may also be considered a Minor or Major Violation of G1, G13, or SG11, at the Head Referee's discretion. This could include actions such as: ...

- Repeatedly hitting the Barrier adjacent to the opponent's Elevation Bar ...

How should referees interpret intentional ramming or blocking of the short barriers in the time period from 0:30 to 0:15, since contact is no longer explicitly prohibited? Would one or both of these be considered viable defensive strategies now? Or the intent of the change simply to reduce penalties for incidental contact with short barrier in that time period, and intentional ramming still count as a violation?

### Answered by committee

The intent of clause D of rule [<SG11>](#) is to reduce penalties for incidental contact with the short Barrier. As described in the notes and red box for that rule, indirect contact that is part of a potentially damaging defensive interaction--including hitting the Barrier in an indirect attempt to dislodge a Robot that is in the process of Elevating--may be considered a Major Violation at the Head Referee's discretion at any time during the last 30 seconds of the Match.

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## 1875: Elevation Status of a Robot

15-Jan-2024

SG11

I understand the definition of elevated, however we have run into some issues of being elevated but then falling off the bar while they calculate points. So, isn't the robot considered to be elevated if it is not moving and hanging at the end of the match? Or does the robot need to stay elevated the entire time that they calculate up the points. Any information and specific rules you could provide would be greatly appreciated.

### Answered by committee

Rule [<SC1>](#) states that "*Scores are calculated once all Triballs, Field Elements, and Robots on the field come to rest*".

If an action occurs after Robots, Triballs, and Field Elements have come to rest, then it is not considered part of the Match and should not impact scoring. If the Robot never comes to rest in the Elevated state before falling, then it will be scored where it comes to rest.

With that being said, in the context of the specific scenario described by this question, it will be difficult for a referee to determine where a Robot "used to be" if it falls before having a chance to be scored. A Team with this design would essentially be waiving any "benefit of the doubt", and should only expect to be scored at a height the Head Referee can confirm with certainty.

For example, if the only thing that they could confirm was that the Robot was a few inches above the horizontal Elevation Bar (i.e. somewhere between Tiers E and G), it would be within their purview to assume Tier E.

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## 1846: Descoring triballs on an opposing elevated robot

29-Dec-2023

SG11

In one of our matches an opposing team interfered with our hang by ramming triballs into us but we still elevated in the end and were the only elevated robot. This meant that the score was not changed by refs. However, 2 triballs were descored since they were contacting our robot despite still being in our offensive zone. This changed the outcome of the match which was 99-100. Should there have been a penalty for pushing triballs into a robot in the process of elevating/elevated?

### Answered by committee

First, please see the following red box note in rule <T1>1:

Note from the VEX GDC: The rules contained in this Game Manual are written to be enforced by human Head Referees. Many rules have “black-and-white” criteria that can be easily checked. However, some rulings will rely on a judgment call from this human Head Referee. In these cases, Head Referees will make their calls based on what they and the Scorekeeper Referees saw, what guidance is provided by their official support materials (the Game Manual and the Q&A), and most crucially, the context of the Match in question. The VEX Robotics Competition does not have video replay, our fields do not have absolute sensors to count scores, and most events do not have the resources for an extensive review conference between each Match. When an ambiguous rule results in a controversial call, there is a natural instinct to wonder what the “right” ruling “should have been,” or what the GDC “would have ruled.” This is ultimately an irrelevant question; our answer is that when a rule specifies “Head Referee’s discretion” (or similar), then the “right” call is the one made by a Head Referee in the moment. The VEX GDC designs games, and writes rules, with this expectation (constraint) in mind.

We’re mentioning this quote because the scenario described by this post is about as “edge case” of a scenario as one can find. Without more explicit direction in the Game Manual or a precedent-setting Q&A, a Head Referee would not have been “wrong” for ruling it either way.

With that being said, we do feel that this scenario warrants a unique combination of <SG11> and <G17>.

Per SG11, “Robots may not contact [...] c. Opponent Robots who meet the definition of Elevated”.

G17, in its entirety, reads as follows:

<G17> Use Triballs to play the game. Triballs may not be used to accomplish actions that would be otherwise illegal if they were attempted by Robot mechanisms (e.g., interfering with an opponent’s Autonomous routine per <SG9>.)

The intent of this rule is to prohibit Teams from using Triballs as “gloves” to loophole any rule that states “a Robot may not [do some action]”. This rule is not intended to be taken in its most extreme literal interpretation, where any interaction between a Triball and a Robot needs to be scrutinized with the same intensity as if it were a Robot.

Violation Notes: If a rule is Violated through the use of Triballs instead of a Robot mechanism, it should be evaluated as though the rule in question had been Violated by a Robot mechanism.

If the Head Referee determined that the opponent Robots had directly used the Triballs to contact the Elevated Robots, then yes, SG11 has been Violated, since the rule should be evaluated as though the interaction had occurred with a Robot mechanism. And, because this pseudo-SG11 violation was what changed the outcome of the Match, then yes, it would have been considered Match Affecting.

If the Head Referee determined that the contact was incidental or otherwise not a direct attempt to interfere with an Elevated Robot, then the red box in G15 would apply, and it would not be considered an SG11 violation.

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## 1793: SG11 - Interactions with the short Barrier

27-Nov-2023

SG11

Some overlap with this [unanswered question \(as of posting\)](#)

<SG11> <SG11> Elevation is protected. During the last 30 seconds of the Match, Robots may not contact the following: a. The opposing Alliance's Elevation Bars b. Opponent Robots who are contacting their Elevation Bars c. Opponent Robots who meet the definition of Elevated d. The Short Barriers adjacent to the opposing Alliance's Elevation Bars

From this the short barrier itself is protected, and elevated robots are protected; no explicit protection is given for non elevated robots contacting solely their short barrier, likewise non influential transitive contact with triballs contacting this bar is potentially not a violation.

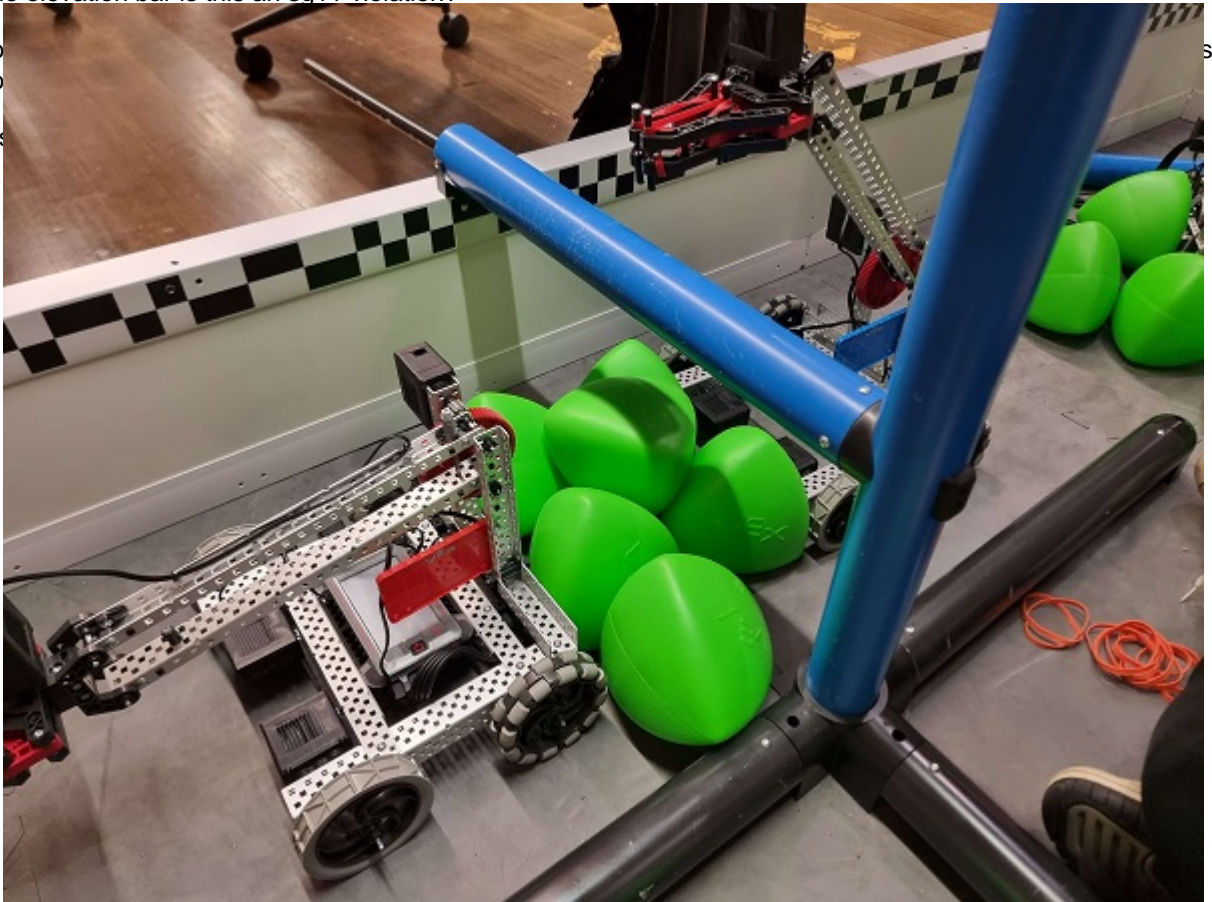
Should a robot that is contacting their short barrier be protected?

Should transitive contact be outlawed, this is influential for scoring triballs around elevation bars - potentially allowing locking down triballs.

A robot could be involved in a pushing battle with another bot underneath the elevation bar where neither is contacting a protected component however triballs are in contact with the short barrier Likewise in a similar pushing battle a triball is in contact with the elevation bar is this an sg11 violation?

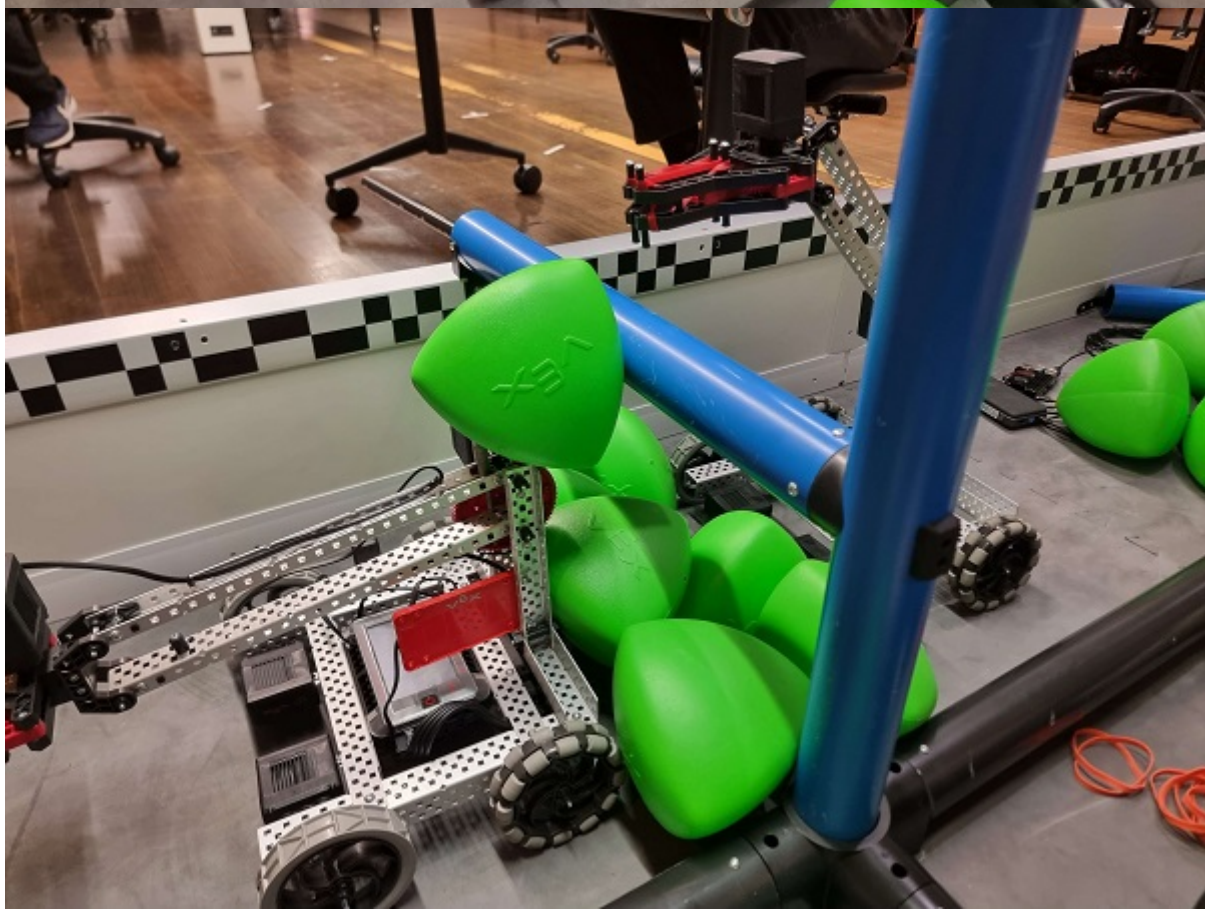
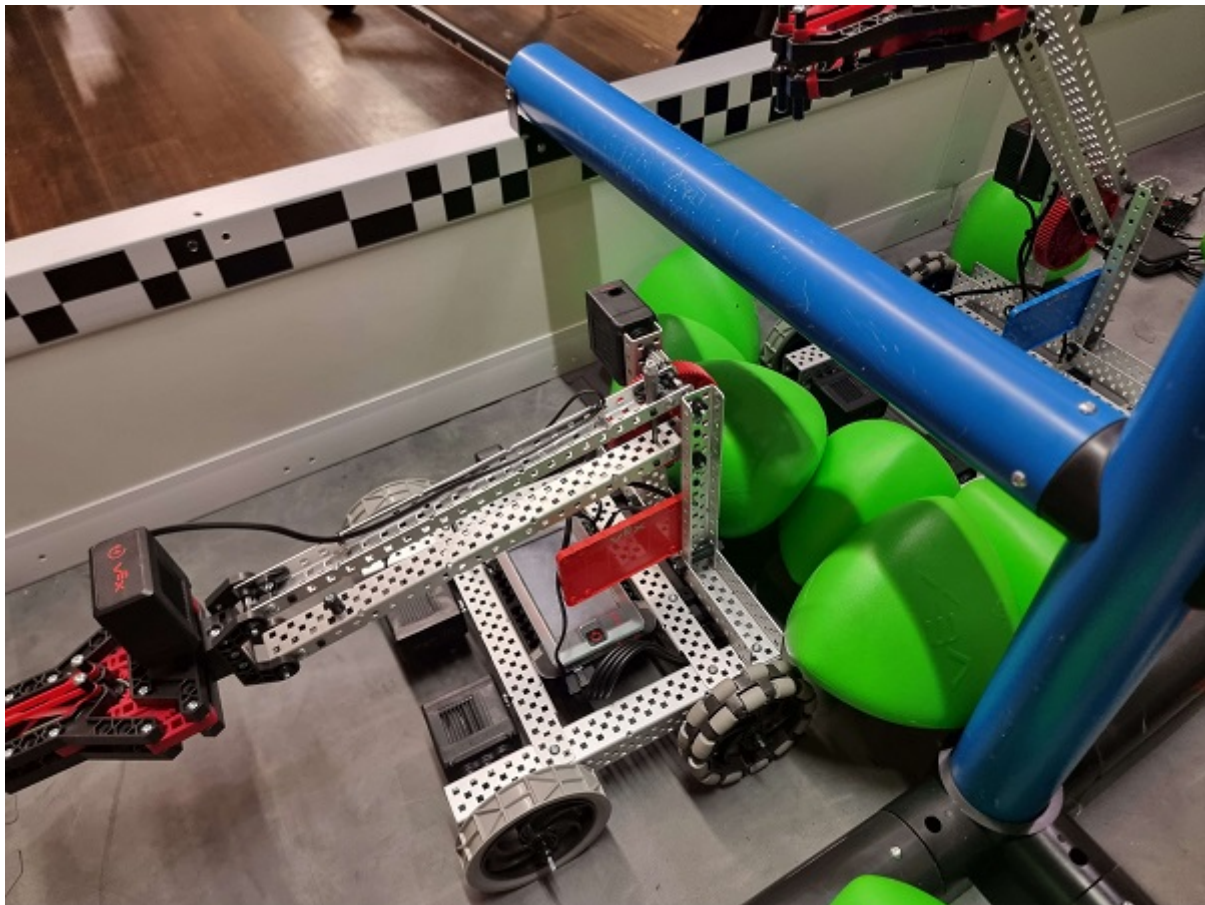
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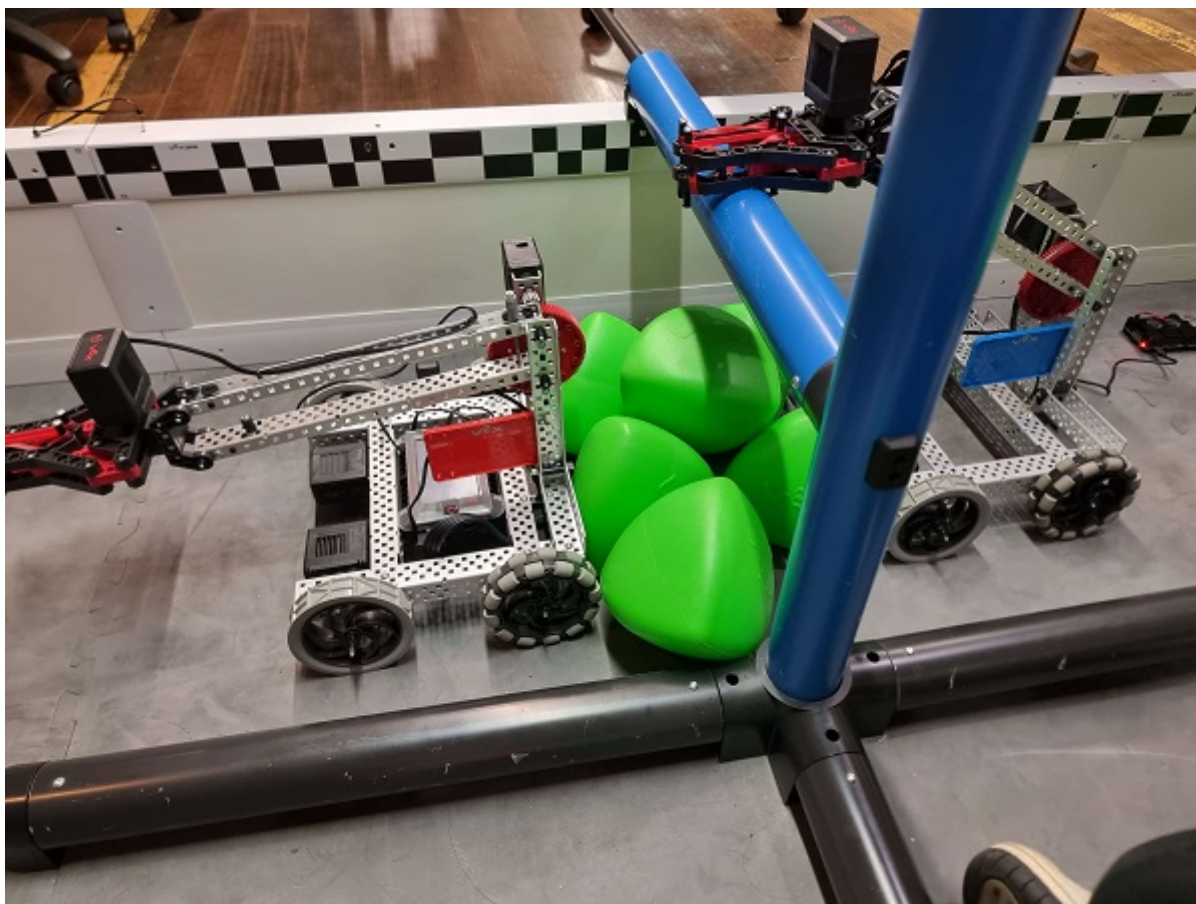
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elevation bar)







### Answered by committee

A robot could be involved in a pushing battle with another bot underneath the elevation bar where neither is contacting a protected component however triballs are in contact with the short barrier Likewise in a similar pushing battle a triball is in contact with the elevation bar is this an sg11 violation?

These are shown in the images below, thus which of these cases should be a violation? Does transitive contact matter as long as it is not indirectly affecting an elevated robot in "a potentially damaging interaction"

Transitive contact is irrelevant, as it is not mentioned in [<SG11>](#) or any other rules pertaining to this subject.

Rule [<G17>](#) would apply in cases where a Robot is specifically using a Triball to violate a rule (as described in the [<G17>](#) Violation note), such as directly using a Triball to affect a Robot that is Elevating or already Elevated.

With that in mind, the interaction shown in your 4th image (where a Robot is in contact with its Elevation Bar) could potentially be considered a Violation of rule [<SG11>](#) through [<G17>](#), and reinforced by [<G14>](#). The other scenarios would require a Head Referee's judgment based on the context of the interaction and Match, and we cannot provide blanket guidance.

Should a robot that is contacting their short barrier be protected?

Should transitive contact be outlawed, this is influential for scoring triballs around elevation bars - potentially allowing locking down triballs.

Please be sure to review the [Q&A Usage Guidelines](#) before posting, specifically note 1, "The Q&A system is for rules clarifications only." Put more pointedly - the Q&A platform is intended to be a communication channel for questions such as "is this interpretation of a rule legal", not a discussion forum for questions such as "I disagree with this rule, can it be changed?" For suggestions or concerns outside of specific and official rules questions, please use the official [VEX Forum](#) or email [GDC@vex.com](mailto:GDC@vex.com).



## 1786: Blocking Maneuvers & Definition of Elevating

26-Nov-2023  
SG11

As per <SG11> Elevation is protected. During the last 30 seconds of the Match, Robots may not contact the following:

The opposing Alliance's Elevation Bars Opponent Robots who are contacting their Elevation Bars Opponent Robots who meet the definition of Elevated The Short Barriers adjacent to the opposing Alliance's Elevation Bars. Violation Notes:

Regarding points "a" and "d": If no opponent Robots are in the process of Elevating, then most incidental or momentary contact is unlikely to be Match Affecting, and should only be considered a Minor Violation.

If a Violation results in opponent Robot damage, or otherwise impedes an opponent's Elevation, then it should be assumed that they would have reached the highest possible Elevation Tier when determining Match Affecting implications. The intent of this rule is to prevent potentially damaging defensive interactions with Robots who are in the process of Elevating. Indirect contact may also be considered a Minor or Major Violation of <G1>, <G13>, or <SG11> at the Head Referee's discretion. This could include actions such as:

After finding additional posts on SG11, we have revised our original questions. It appears that according to this post, <https://www.robotevents.com/VRC/2023-2024/QA/1725>, parking a robot to block your opponent's access to elevation or short barrier is allowed provided they do not contact the elevation bar or short barrier in the process. The blocking robot is also protected from violation if the opponent pushed the robot into the low barrier while trying to elevate. Post <https://www.robotevents.com/VRC/2023-2024/QA/1642> states that "whether a Robot's actions are defensive or offensive is irrelevant to determining whether or not they violated rule".

Which of the following defensive blocking maneuvers would be considered legal:

1. A 4 wheel robot parks itself in the last 35 seconds across the low barrier without making contact to the low barrier once parked.
2. A robot drives up the low barrier and parks itself on the low barrier during the last 30 seconds making constant contact with the low barrier. None of the opponents' robots are in the processing of elevating at the time when the robot parked.
3. 2 opposing robots race towards the elevation bar during the last 30 seconds with constant contact between the 2 robots. The robot attempting to block their opponent is on the inside, closest to the short barrier. When they reached the short barrier, the blocking robot touches the low barrier while the opponent's robot is in contact with the blocking robot.

Our interpretation based on the current rule and posts from the Q&A is that #1 would be permitted without penalty as it does not violate SG11 and cannot be forced into penalty as per G15. Any attempt by the opponents to dislodge the blocking robot would not result in any violations. One side of the elevation would be effectively blocked.

#2 is unclear as it would only incur a minor violation for contacting the low barrier during the last 30 seconds since none of the opponent's robot is in the process of elevating. But would this be considered a repeated minor violation due to constant contact with the low barrier and become a major violation if matching effecting.

For #3, if there was benefit of the doubt we would assume the call would be ruled in favor of the robot attempting to hang. However, it seems there is no benefit of the doubt it when it comes to elevating so it would be in clear favour of any defensive bot blocking access to elevation bar or low barrier as most likely there would be constant contact between 2 battling robots. Any violations of SG11 would be extremely difficult to call as the defending robot would be protected by G15.

Lastly, we would like clarification on the definition of "in the process of elevating". Does the definition of elevating mean when a robot's lifting mechanism actually starts to lift the robot or when a robot is starting the elevation routine, such as raising hanging mechanism or driving to it's elevating position, or really only counts when it also touches the elevation bar.

Thank you.

## Answered by committee

We'll address your scenarios in order:

1. Assuming the Robot in your scenario does not contact any of the items made off-limits by the clauses of rule [<SG11>](#) during the final 30 seconds of the Match, there are no rules preventing this, therefore it is legal.
2. The first Violation Note for [<SG11>](#) specifies that (bold added for emphasis), "Regarding points "a" and "d": If no opponent Robots are in the process of Elevating, then most incidental or momentary contact is unlikely to be Match Affecting, and should only be considered a Minor Violation." In your scenario, the contact is neither incidental nor momentary, and would very likely be deemed a Major Violation by the Head Referee. However, the final judgment call and any penalty would have to consider the full context of the Match.
3. In this scenario, the Head Referee's judgment call would have to consider whether or not the contact with the opponent's Short Barrier was incidental or momentary as described in the Violation Note described in scenario 2.

Regarding your request for a clarification of the definition of "in the process of elevating" as used in the first Violation Note of [<SG11>](#): a Robot that is in the process of elevating will *generally* be trying to climb onto the Barrier on their side of the Neutral Zone or be in contact with one of their Elevation Bars. However, this determination can only be made by the Head Referee within the larger context of the Match, and we cannot provide a blanket answer that encompasses all possible situations.

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## 1776: How to consider G14 and G15 when determining a potential SG11 violations

20-Nov-2023

[G14](#) [G15](#) [SG11](#)

Hello, At a recent tournament we encountered a situation where there was a robot that disconnected and was unable to move, but happened to be in front of the opposing elevation bars. We determined that going into the 30 second mark the robot was not in violation of [<SG11>](#) until an opposing robot attempting to elevate pushed them into the elevation bar. The disconnected robot was then preventing them from elevating. We interpreted that because they were pushed into the elevation bar, they would not be penalized as per [<G15>](#). We considered that in Tipping point there was an explicit phrase that said the offensive robot gets the benefit of the doubt supersedes you cannot force an opponent into a penalty, this year that clause is absent so we determined that [<G14>](#) does not supersede G15. Is this the correct interpretation.

If this is the correct interpretation, if a robot were intentionally try to block an opponent's access to their elevation bars, would they be afforded the same protections against being forced into an SG11 violation.

## Answered by committee

Your interpretation is correct. As described in rule [<G15>](#), a Robot cannot be forced into a penalty for a Violation of [<SG11>](#).

We believe [our response to Q&A 1725](#) addresses your follow-up question, regarding a Robot that blocks an opponent's access to their Elevation Bars without violating rule [<SG11>](#).

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## 1767: SG11 part D Clarification

13-Nov-2023

[SG11](#)

I have been the head referee at a number of central Florida events. The biggest rule violation I have seen for this game is teams accidentally touching the barrier adjacent to Elevation bar in the last 30 seconds of the match. At a competition last Saturday at Apopka HS there were a significant amount of minor violations given out for this rule alone. I believe the way the rule is written is unfairly penalizing teams attempting to play offensively and score triballs. The rule states: [<SG11>](#) Elevation is protected. During the last 30 seconds of the Match, Robots may not contact the following:

a-The opposing Alliance's Elevation Bars b-Opponent Robots who are contacting their Elevation Bars c-Opponent Robots who meet the definition of Elevated **d-The Short Barriers adjacent to the opposing Alliance's Elevation Bars.**

I believe this rule needs immediate clarification. This rule is written to protect teams going for the elevation points at the end of a game, but with the way it is written in part d penalizes teams who touch the adjacent barriers to the opposing Alliance Elevation Bars with NO consideration on where the opposing alliance is on the field. In the last 30 seconds there is likely to be many triballs around those bars so teams playing offensively attempting to score these triballs are being penalized for slightly bumping into this adjacent bar, EVEN IF the opposing alliance is not attempting to elevate. The rule clearly states that robots may NOT contact the short barriers adjacent, but I am looking for clarification on if there is some leeway given out if the opposing alliance is not making any attempt to elevate.

### Answered by committee

Please be sure to review the [Q&A Usage Guidelines](#) before posting, specifically note 1, "The Q&A system is for rules clarifications only." Put more pointedly - the Q&A platform is intended to be a communication channel for questions such as "is this interpretation of a rule legal", not a discussion forum for questions such as "I disagree with this rule, can it be changed?" For suggestions or concerns outside of specific and official rules questions, please use the official [VEX Forum](#) or email [GDC@vex.com](mailto:GDC@vex.com).

The question of leeway for a situation where no Robots are Elevating is addressed by SG11's Violation Note:

Regarding points "a" and "d": If no opponent Robots are in the process of Elevating, then most incidental or momentary contact is unlikely to be Match Affecting, and should only be considered a Minor Violation.

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## 1765: Opposing alliance tips onto horizontal elevation bar early in match

13-Nov-2023

SG11

[<SG11>](#)

Early in a match Red tips falls onto blue horizontal elevation bar and is unable to free self from bar. Red is not contacting barrier bars, but passage on that side of field is block. Blue keeps playing match. Neither drives to try to elevate and active in game play one both sides of fields. Mid-way through last 30 seconds one Blue team points out red on horizontal bar.

How should this scenario play out?

1. Major violation to Red? DQ if match affecting?
2. Award one Blue highest elevation? Both?

Thank you for your insight!

### Answered by committee

In any case where a Robot is in contact with their opponent's Elevation Bars during the final 30 seconds of the Match, the Team should receive a Minor or Major Violation at the Head Referee's judgment based on the full context of the Match. It is impossible to issue a blanket answer beyond what is written in the Game Manual that encompasses all possible situations based on a snapshot description of a hypothetical Match.

The following Q&As about rule SG11 may help Head Referees make those judgment calls:

- [Q&A 1551](#)
  - [Q&A 1669](#)
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## 1763: Determining Match Affecting SG11 violations

12-Nov-2023

SG11

At the end of the game one red robot is hanging at A tier, and the second red robot is attempting to also climb to A tier. Blue accidentally violates [<SG11>](#) and prevents red from hanging. Neither blue robot elevates. So the red robot gets 20 points for an A tier hang.

The game finishes with blue winning by 17 points. To determine if the SG11 violation was match affecting we look at the game manual.

...then it should be assumed that they would have reached the highest possible Elevation Tier when determining Match Affecting implications.

So we give a J tier hang to red (20 points), along with their existing A tier hang (now 15 points). Using this criteria, the violation would not be match affecting, as Blue still wins by 2 points.

However, if red had 2 robots at A tier, then they would get 20 points for each robot, and would have won the match by 3 points. Should the accidental SG11 violation be match affecting in this case?

### Answered by committee

First - the definition of Violation, which addresses the concept of Match Affecting, includes the following note:

To determine whether a Violation may have been Match Affecting, check whether the Team who committed the Violation won or lost the Match. If they did not win the Match, then the Violation could not have been Match Affecting, and it was very likely a Minor Violation.

In the second scenario, if the blue Alliance did not win the Match, then their actions could not have been Match Affecting.

With that being said - we believe the root ambiguity that led to this question is similar to [this related Q&A](#). Further clarification will be provided alongside the upcoming December 5 Game Manual update.

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## 1748: SG 11 Offended bot eventually hangs but isn't the highest ...

6-Nov-2023

SG11

DA Rules ... [<SG11>](#) Elevation is protected. During the last 30 seconds of the Match, Robots may not contact the following: a. The opposing Alliance's Elevation Bars, b. Opponent Robots who are contacting their Elevation Bars, c. Opponent Robots who meet the definition of Elevated, d. The Short Barriers adjacent to the opposing Alliance's Elevation Bars.

Violation Notes:

- Regarding points "a" and "d": If no opponent Robots are in the process of Elevating, then most incidental or momentary contact is unlikely to be Match Affecting, and should only be considered a Minor Violation.
- If a Violation results in opponent Robot damage, or otherwise impedes an opponent's Elevation, then it should be assumed that they would have reached the highest possible Elevation Tier when determining Match Affecting implications.

Red Box ... The intent of this rule is to prevent potentially damaging defensive interactions with , Robots who are in the process of Elevating. Indirect contact may also be considered a Minor or Major Violation of [<G1>](#), [<G13>](#), or [<SG11>](#) at the Head Referee's discretion. This could include actions such as: • Repeatedly hitting the field perimeter wall that the opponent's Elevation Bar is connected to • Repeatedly hitting the Barrier adjacent to the opponent's Elevation Bar • Launching Triballs at an Elevated Robot



## DA QUESTIONS

QUESTION 1 = SG11 Elevation violations when offender touches / interferes with a robot that is touching the elevation bar or already elevated. If the robot still gets elevated and there are multiple elevated robots on either side does the offended robot (for the purposes of Match affecting scores) consider a J - max 20pt score or just the score of the elevation? MY WHY - if the offended bot automatically considers 20pts for MA if not getting to the elevated position and considered that with only the score of being elevated (maybe less than 20pts depending on who else finishes at an elevated tier) - I can see it being a strategy to play possum, or do something else other than getting a lesser value A-B tier hang below a competitors', and NOT elevate if offended during last 30 seconds

CLARIFIER – if, in this instance the offended robot is the only robot trying to elevate – no questions as even an “A” solo tier hanger would get 20pts we'd consider the 20pt for Match affecting determination, BUT where multiple robots start hanging at various heights, the offended bot getting to an “A” hang might be 4th highest or somewhere in the middle as opposed to getting the J-highest tier hang due to SG11 infraction

QUESTION 2 = FURTHER – if we get to a point where opposing teams start getting to the J-tier hang for the purposes of match affecting how will we clarify its “best tier” instead of tie? will we temporarily consider the J-tier Match affecting 20pt for the offended robot and reduce by 1 tier all other hangs to clearly understand the 20-15-20-5pt allocations?

### Answered by committee

QUESTION 1 = SG11 Elevation violations when offender touches / interferes with a robot that is touching the elevation bar or already elevated. If the robot still gets elevated and there are multiple elevated robots on either side does the offended robot (for the purposes of Match affecting scores) consider a J - max 20pt score or just the score of the elevation?

This question operates under a bit of a false pretense that makes it difficult to provide a blanket answer. Per the Violation Note being referenced, this situation only applies *"If a Violation results in opponent Robot damage, or otherwise impedes an opponent's Elevation"*. Generally speaking, if a Robot is still able to Elevate, it has most likely not been damaged or impeded to the degree that this Note is intended to address.

if the offended bot automatically considers 20pts for MA if not getting to the elevated position and considered that with only the score of being elevated (maybe less than 20pts depending on who else finishes at an elevated tier) - I can see it being a strategy to play possum, or do something else other than getting a lesser value A-B tier hang below a competitors', and NOT elevate if offended during last 30 seconds

Yes, this hypothetical scenario could occur. If a Robot has been damaged such that it can no longer Elevate, then it would be reasonable to expect it to play other portions of the game. Defensive Robots should be mindful of this possibility when attempting Elevation blocking strategies.

Conversely, offensive Robots should be mindful of the above statement if attempting to exploit this allowance. If the SG11 contact is a minor/incidental graze with 29 seconds remaining, it is unlikely that a Head Referee would judge it to be "damage" or directly "impeding" an Elevation. Therefore, an SG11 Violation may still occur, but the Violation Note that warrants the "automatic Elevation" would not apply.

QUESTION 2 = FURTHER – if we get to a point where opposing teams start getting to the J-tier hang for the purposes of match affecting how will we clarify its “best tier” instead of tie? will we temporarily consider the J-tier Match affecting 20pt for the offended robot and reduce by 1 tier all other hangs to clearly understand the 20-15-20-5pt allocations?

The phrase "highest possible Elevation Tier" is intended to refer to the highest possible Tier in that Match, i.e., **equivalent to the highest Elevated Robot** (or, "the only Elevated Robot" if no other Robots are Elevated). In your example, the offended Robot would receive a J Tier for 20 points, and the other Robots' Tiers would not be affected. We apologize for the ambiguous wording of this phrase, and will provide better clarification in the upcoming Game Manual update.

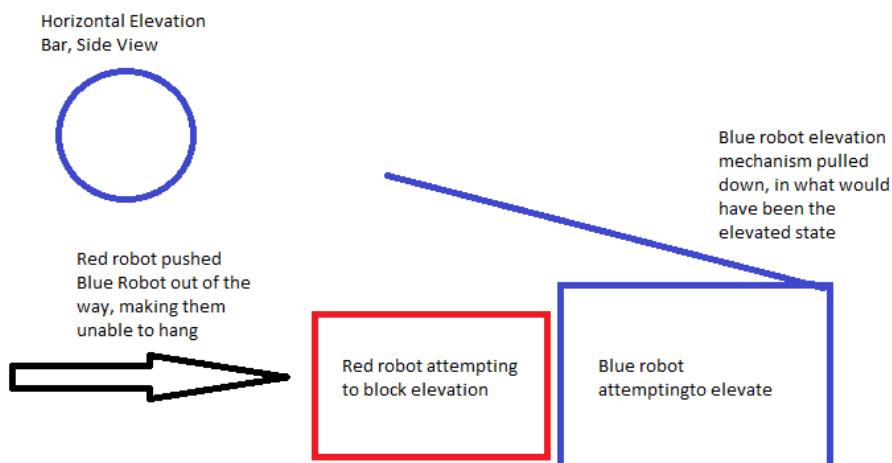
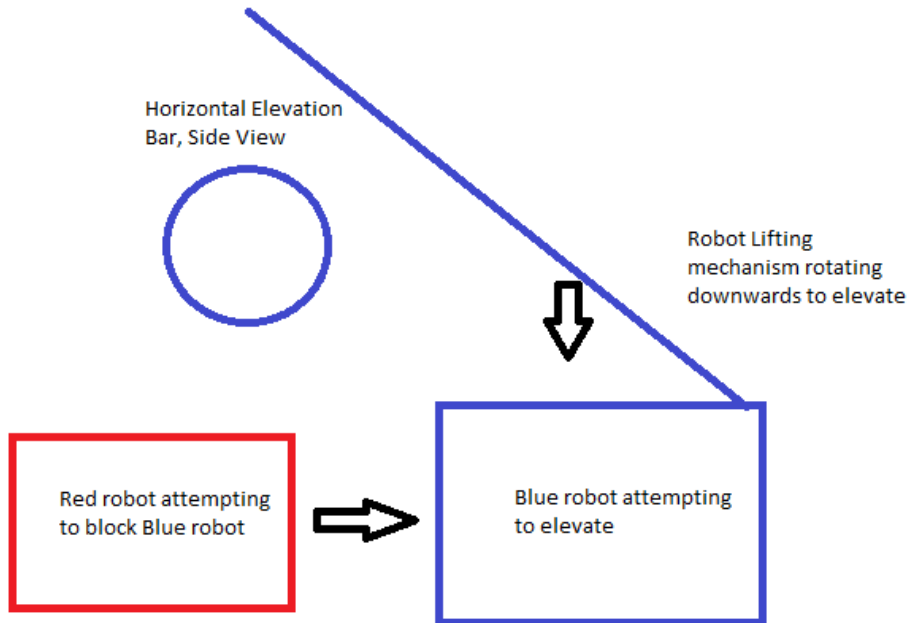
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## 1725: <SG11> Clarification

27-Oct-2023

Many robots contain mechanisms intended to elevate their robot on the Horizontal Elevation Bar. This is considered to be a "pull up hang" as the robot moves a piece of C-channel, or plastic above the elevation bar, and then applies torque to bring the C-Channel or plastic down into the robot, therefore bringing the robot off of the ground. <SG11> states that "Robots may not contact opposing robots who are contacting their elevation bars" Our team would like a clarification on this rule within a scenario that we witnessed at a competition.

An elevating robot using this "pull up hang" requires moving over the bar (not touching it) and then pulling down (touching it). While not touching the bar, an opposing robot can very easily push them out of the way and negate their hang entirely. Images are provided below for clarity:



Is this legal for the red robot to do?, as they are stopping the Blue robot from elevating, even though the blue robot is not touching the bar.

Thank you for your time

### Answered by committee

Is this legal for the red robot to do?, as they are stopping the Blue robot from elevating, even though the blue robot is not touching the bar.

Assuming the red Robot in your scenario does not contact any of the items made off-limits by the clauses of rule [<SG11>](#), there are no rules preventing this, therefore it is legal.

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## 1669: Blue robot pushing red robot into blue elevation short bar during last 30 sec

28-Sep-2023

G15 SG11

If red robot is on blue offensive side during the final final 30 secs. and the blue robot starts maneuvering toward the blue elevation bar, but the red robot is between the blue bot and blue elevation bar. If the blue robot drives into or bumps the red robot and in that process pushes the red robot into the lower short bar of the blue elevation bar is that a violation for the red bot or not. One of my students felt this falls into a SG11 violation due to blocking or preventing elevation. My head ref and I felt this was not intentional and that G15 applied. Can you provide direction on which rule takes precedence?

[<SG11>](#)

[<G15>](#)

Thanks

### Answered by committee

In your scenario, the blue Robot has forced the red Robot into contact with the blue Elevation Bars during the final 30 seconds of the Match. Rule [<G15>](#) specifies that a Team cannot force an opponent into a penalty, so the red Robot should not be penalized for the contact.

Given the potential for restricted views in the area of the Elevation Bars, Head Referees may not be able to determine whether a Robot is in Violation of rule [<SG11>](#) or should instead receive protection from [<G15>](#). The first Violation Note for rule [<SG11>](#) should be used to help guide the referees' decision:

Regarding points "a" and "d": If no opponent Robots are in the process of Elevating, then most incidental or momentary contact is unlikely to be Match Affecting, and should only be considered a Minor Violation.

Our answer to [this unrelated question about Tipping](#) takes a deep dive into the need for Head Referees to consider the context of the Match when making judgment calls, which also applies in this and other situations.

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## 1655: SG11-Elevation is protected.

21-Sep-2023

SG11

[<SG11>](#)

When the red robot was on its way to climb (before it touched the Elevation Bars), it was pushed away and stopped by the blue robot. Does this count as a violation of SG11 for the blue robot? Or, is it only a violation of SG11 if the Blue Robot comes into contact with Elevation Bars, Robots or The Short Barriers under the circumstances described in SG11?

### Answered by committee

Because the red Robot in your scenario is not contacting their Elevation Bars and does not meet the definition of Elevated, the blue Robot is allowed to contact them during the last 30 seconds of the Match. Rule [<SG11>](#) is provided here for reference:

**Elevation is protected.** During the last 30 seconds of the Match, Robots may not contact the following:

- a. The opposing Alliance's Elevation Bars
- b. Opponent Robots who are contacting their Elevation Bars
- c. Opponent Robots who meet the definition of Elevated
- d. The Short Barriers adjacent to the opposing Alliance's Elevation Bars.

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## 1642: SG11 while retrieving Match Loads

7-Sep-2023

SG11

Hello,

Here is rule [<SG11>](#) for reference.

I've noticed it is common to see defensive play around the Match Load Zone/Bar as robots try to prevent their opponents from processing Match Loads. I am curious how this approach should be treated in the last 30 seconds (when SG11 is in effect).

Questions:

1. If defensive play occurs during the last 30 seconds, and the defensive robot contacts the opponent's Elevation Bar or Short Barriers, would that be considered a violation of SG11?
2. If a team is instead retrieving Match Loads from THEIR Match Load Zone and contacts the opponent's Elevation Bar/Short Barriers, would that be considered a violation of SG11?
3. If a robot pushes an opposing team into the Elevation Bar / Short Barriers during interactions in the last thirty seconds, would that result in a SG11 violation (or would that fall under [<G15>](#))? Does this change if the robot which violates SG11 is considered the "defensive robot" in the interaction (per [<G14>](#))?
4. In general, does SG11 provide a team any extra degree of "safety" from defensive interaction during the last thirty seconds around that team's Elevation Bar / Short Barriers while processing Match Loads, or is it only applicable when a robot is attempting to climb?

### Answered by committee

Thank you for your question. We'll start by saying that trying to determine whether a Robot's actions are defensive or offensive is irrelevant to determining whether or not they violated rule [<SG11>](#). Head Referees should instead focus on the actions of the Robot. For example, did the Robot contact the opposing Alliance's Elevation Bar during the last 30 seconds of the Match? Contacting the items identified in clauses A through D of rule [<SG11>](#) is a Violation regardless of whether or not the opponent is attempting to climb, and whether the Robot is playing defensively or offensively.

**Elevation is protected.** During the last 30 seconds of the Match, Robots may not contact the following:

- a. The opposing Alliance's Elevation Bars
- b. Opponent Robots who are contacting their Elevation Bars
- c. Opponent Robots who meet the definition of Elevated



- d. The Short Barriers adjacent to the opposing Alliance's Elevation Bars.

To directly address your specific scenarios:

1. Yes. This would be either a Minor or Major Violation depending on whether the contact actually interferes with a Robot's climb or not (and whether other Robots were climbing for comparative points or not).
2. Same answer as #1.
3. This interaction would be covered by rule <G15>, because this isn't a "don't touch the Tipping Point platform" rule. In this case it's an Alliance partner using an opponent Robot to interfere with their own Alliance's climb. No penalty.
4. <SG11> does not specifically provide protection of Match Loads. Robots in those areas of the field are subject to rule <SG11> with no modifications.

Additionally - please note that rule SG11 was modified in the October 3rd Game Manual update to better capture these intentions, and hopefully helps to clarify these questions.

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## 1551: Contact with robot attempting to elevate

15-Jun-2023

SG11

<SG11>

During the last 30 seconds of the Match, Robots may not contact the following: a. The opposing Alliance's Elevation Bars b. Opponent Robots who are contacting their Elevation Bars c. Opponent Robots who meet the definition of Elevated

There is no stated penalty for violations of this rule, so the referee must use the diagram on page 12 to determine what the penalty for this infraction is.

We have played more than sixty matches at camp this week. There is a recurring situation for which we need clarification. When a red robot is attempting to elevate, a blue robot repeatedly hits the robot. It is unclear whether the red robot could have or would have elevated, so there is no way to know if the rules violation was match affecting. To be clear, the head referee is unable to guess whether or not the red robot could have or would have elevated.

What is the penalty for this infraction?

### Answered by committee

The context of interactions like you one you've described is incredibly important, and we're unable to give a definitive answer that will apply to all situations. However, we can provide some guidelines to help Head Referees determine the appropriate penalties.

<SG11> provides some protection for Robots during Elevation, which puts the non-elevating Robot in most <SG11> scenarios in a defensive role. The non-elevating Robot automatically earns, at minimum, a Minor Violation.

The flowchart in Figure 3 of the game manual assists Head Referees in deciding the appropriate penalty for a rule Violation, including the one you've described. <G14> gives the offensive (in this case, elevating) Robot the benefit of the doubt, which should be factored into the Head Referee's ruling in situations where the answer isn't obvious and intuitive.

This brings us to context. Was the contact an accidental bump or an intentional smash? Could the elevating Robot have actually climbed to a high tier, or does it lack a climbing mechanism? If it's capable of a 20-point Elevation, would it have changed which Alliance won the Match? The final determination and rulings will always be in the hands of the Head Referee based on the larger context of the Match and the event.

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## 1541: SG11 and interactions between two protected robots

12-Jun-2023

G14 G15 SG11

**Elevated** – A Robot status. A Robot is considered Elevated at the end of the Match if it meets the following criteria:

1. The Robot is contacting at least one of the following: a. One or more of their Alliance's Elevation Bars b. The Barrier c. An Alliance partner Robot which meets the requirements of points 1-3 in this definition
2. The Robot is not contacting any Field Elements other than those listed in point 1. This includes gray field tiles, the field perimeter, Goals, the opposing Alliance's Elevation Bar, etc. a. Contact with (or Possession of) Triballs is irrelevant when determining a Robot's Elevated status.
3. The Robot is not contacting the yellow Elevation Bar Cap

**Barrier** – The black structure, made up of 2" Schedule 40 PVC pipe (with a 2.375" outer diameter) PVC pipe and associated connectors/hardware, that sits in the middle of the field. For some rules, the Barrier is divided into one Long Barrier and two Short Barriers, but it is usually referred to collectively as just "the Barrier."

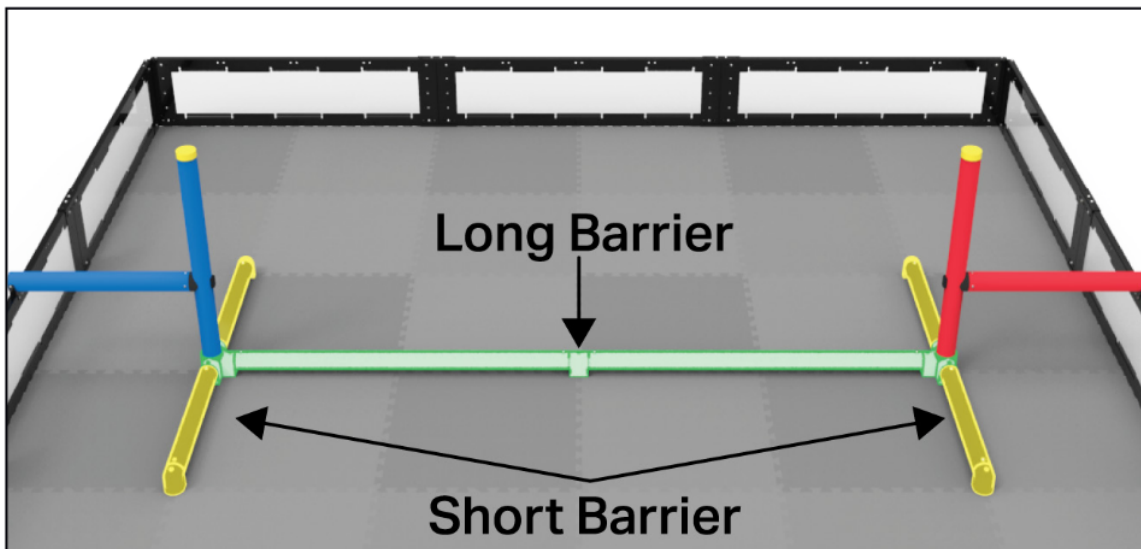


Figure 4: A view of the field, with the Short Barriers (yellow) and Long Barrier (green) highlighted.

[<SG11>](#) Elevated Robots are protected. During the last 30 seconds of the Match, Robots may not contact the following:

- The opposing Alliance's Elevation Bars
- Opponent Robots who are contacting their Elevation Bars
- Opponent Robots who meet the definition of Elevated

[<G14>](#) Offensive Robots get the "benefit of the doubt." In a case where Head Referees are forced to make a judgment call regarding a destructive interaction between a defensive and offensive Robot, or an interaction which results in a questionable Violation, referees will err on the side of the offensive Robot.

[<G15>](#) You can't force an opponent into a penalty. Intentional strategies that cause an opponent to break a rule are not permitted, and will not result in a Violation for the opposing Alliance.

With 35 seconds to go, a blue robot elevates itself by only contacting the long and short barriers, the blue robot is very close to, but not touching, the red elevation bars. The robot is therefore considered elevated as per the definitions of the barrier and elevated and is therefore protected by [<SG11>](#) in the last 30 seconds,

With 25 seconds left, a red robot begins an attempt to climb the red elevation bar. The red robot is in contact with the red elevation bar, so is protected by [<SG11>](#) when it hits the blue robot, which is elevated, so is protected by [<SG11>](#)

In the following cases, how should the referees interpret [<SG11>](#), [<G14>](#) and [<G15>](#) when deciding on appropriate ruling:

1. The red robot contacts the blue robot with no elevation change from the red robot
2. The red robot contacts the blue robot, elevates and falls due to the positioning of the blue robot
3. The red robot contacts the blue robot, causing the blue robot to no longer be elevated either from falling or contacting the elevation pole

### Answered by committee

An upcoming game manual update will include modifications to rule [<SG11>](#) and/or the definition of Elevated that will address scenarios like those you have described. If you still have questions about these interactions after that update, please feel free to rephrase and resubmit your question.