

# Q&A

## VEX IQ Robotics Competition 2024-2025: Rapid Relay

Tagged: SC4

Welcome to the official VEX IQ 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 VIQRC Rapid Relay 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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## 2556: Is it legal to reach into the Target with your robot?

19-Feb-2025

SC4

Our team is thinking about a design that would extend into the low Target without touching the switch. We would like to confirm whether this is legal. The action in question is shown in the following image: [img](#)

We couldn't find any rules disallowing it, although the manual does clearly state that the robot should never come in contact with the switch. As long as there is absolutely no robot contact with the switch, would this be considered legal?

[<SC4>](#)

### Answered by committee

Yes, this would be legal. Much of our answer to [Q&A 2324: Robot Pushes ball through Goal](#) applies your question as well.

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## 2454: SC4 Switch Scoring Clarification

22-Jan-2025

SC1 SC4

[<SC4>](#)

Hello GDC thank you for your tireless work so far this season! We've seen two different interpretations of SC4 / SC1 in our region:

1. Anytime a switch meets the description in SC4 the teams should receive credit for that switch being cleared (even if it later becomes uncleared and doesn't end the match cleared).
2. A switch only counts if the switch is in a cleared position after the match ends.

Based on other scoring rules, we can see either as reasonable and justified. Which is correct?

### Answered by committee

Thank you for your question! Your second interpretation is correct, and a Switch should only be recorded as Cleared if the Switch is in a Cleared position after the Match ends.

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## 2324: Robot Pushes ball through Goal

24-Nov-2024

SC3 SC4

[<SC6>](#) \*\*\*At league this past week we had a robot that would shoot the ball into the goal and it would miss occasionally hitting the target and go back into their loader. They would then use their flywheel to push the ball in. The robot touched the ball as it pushed it the entire way through goal. The robot was contacting the ball through its journey into the goal.

\*\*I took this to mean this is score impacting because according to SC3 below-- a scored goal is once a ball is no longer in contact with a robot and has fully passed through the target. I also conferred with our REC rep who was at league to make sure my interpretation was correct and he agreed with me. \*\*\*

SC3--An Alliance Scores a Goal once a Ball is no longer in contact with a Robot and has fully passed through a Target (i.e., from the "outside" of the Goal Wall structure into the "inside" of the Goal Wall).----

\*\*\*\* However- as I read on it says an addendum under SC4 of---don't over think this rule---- and there is no restriction on what type of robot action, mechanism, strategy or technique is used to score balls or clear switches. Which I think leaves some gray area as to is pushing considered a technique or strategy??? (See reference to SC4 below) \*\*\*\* We have some new teams who designed a Clawbot for this and I am afraid this may become a bigger issue at our league as they want to push the ball into the goal and drop it too. \*\* So clarification on if the robot is pushing a ball through the target/goal with a shooter, arm, flywheel, or another mechanism from their robot and the robot is still contacting the ball as it is going through goals is this illegal????

**I believe what is trying to be said above in SC3 is that students are to engineer or program a solution that would make it so the ball is to not be touching both robot an goal to be considered scored, but the over thinking rule and part of SC4 leaves some gray area and the rule open to some debate on if this is strategy or action. Thanks\*\***

<SC4> A Switch is Cleared once it has been struck by a Ball and is no longer parallel with the front face of the Goal Wall. Robots may not Clear Switches by contacting them directly (i.e., without it being part of the process of scoring a Ball through that Target).

Please don't over-think this rule.

Sometimes a Switch gets Cleared without scoring a Ball through the Target, or a Ball is Scored through a Target but the Switch is not Cleared. That's okay. Switches must be Cleared as part of normal gameplay, and by Balls, not Robots or humans. Beyond that, there are no restrictions on what type of Robot action, mechanism, strategy, or technique is used to Score Balls and Clear Switches.

[<SC3>](#)



<SC3> An **Alliance Scores a Goal** once a **Ball** is no longer in contact with a **Robot** and has fully passed through a **Target** (i.e., from the “outside” of the **Goal Wall** structure into the “inside” of the **Goal Wall**).

- a. A **Ball** that passes through a **Target** and then bounces back out into the playing field does not count as a **Scored Ball**, and the **Ball** remains in play.

Effectively, this should correspond with the **Ball** falling through the **Goal Wall** and landing in the **Pickup Zone**, and that “land in the **Pickup Zone** moment” can be used for most scoring needs. However, in the event of any jams or other malfunctions, the **Ball** is still considered **Scored** even if it does not touch down to the **Pickup Zone**. See <SG6>.

<SC4> A **Switch is Cleared** once it has been struck by a **Ball** and is no longer parallel with the front face of the **Goal Wall**. **Robots** may not **Clear Switches** by contacting them directly (i.e., without it being part of the process of scoring a **Ball** through that **Target**).

Please don't over-think this rule.

Sometimes a **Switch** gets **Cleared** without scoring a **Ball** through the **Target**, or a **Ball** is **Scored** through a **Target** but the **Switch** is not **Cleared**. That's okay. **Switches** must be **Cleared** as part of normal gameplay, and by **Balls**, not **Robots** or humans. Beyond that, there are no restrictions on what type of **Robot** action, mechanism, strategy, or technique is used to Score **Balls** and **Clear Switches**.

#### *Violation Notes:*

- *All **Violations** of this rule are inherently **Score Affecting**, and therefore **Major Violations**.*

### Answered by committee

[<SC3>](#) specifies that a Ball cannot count as Scored while it is in contact with a Robot, even if the Ball meets the other requirement of having fully passed through a Target. Once the Robot in your scenario drops the Ball so they are longer in contact with it, the Ball will count as Scored. It is legal for a Robot to be in contact with the Ball as it is going through the Target.

[<SC4>](#), including the blue box note within it, defines the requirements for a Cleared Switch and makes it abundantly clear that a Robot is not allowed to directly contact a Switch to Clear it. It is legal for a Switch to be Cleared by a Ball that is in contact with or in the possession of a Robot.

It is also legal (but extremely risky) for a Robot to hold the Ball as the Ball passes through a Target and Clears a Switch; if the Robot directly contacts the Switch while Clearing it, the result will be a Major Violation of rule [<SC4>](#) and a Disqualification for that Match. That extreme risk is why the game manual includes the following [<SC4>](#) violation note:

Violations of this rule should be rare, as Robots should never be designed to contact Switches directly.

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## 2323: When is a ball considered in play?

24-Nov-2024

SC4

[<SG4>](#) The field is defined as the entire playing Field, being six (6) field tiles wide by eight (8) field tiles long (totaling forty-eight (48) field tiles), including the Field Perimeter. The Pickup Zone is defined as the area of the Floor underneath the Goal Wall, bound by the Field Perimeter and the yellow PVC pipe that runs the length of the Field. The Pickup Zone refers to the Floor itself; it is not a 3-dimensional volume. See [<SG6>](#) With these two definitions in mind in either teamwork or skills: • A robot scores a ball through the goal, it lands in the pick up zone, which is part of the field. • Another ball is still on the field "in play" SO.. • A loader cannot load a ball through the loading station or in rapid load until the ball in the pick up zone is picked up and off the field otherwise there would be 3 balls on the defined field. Is this correct? It would be helpful if committee defines if there is any part of the field that considers a ball out of play.

[<SG4>](#) Using the Loading Station. Balls Loaded through the Loading Station must meet the following criteria:

1. No more than two (2) Balls may be in play at any one time (i.e., the next Ball should not be Loaded until a previous Ball is either scored or leaves the Field). 2083 - Loaders can load new ball immediately after current ball is Scored

SG4 seems to support that three balls could be on the field if one of those balls is in the pick up zone

### Answered by committee

SG4 seems to support that three balls could be on the field if one of those balls is in the pick up zone

This is correct. The third Ball can be Loaded after one of the two Balls in play has been Scored (i.e., has passed completely through the Goal Wall).

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## 2310: End of Game - Final Shot - 2 Balls Stuck - Switch Stuck

18-Nov-2024

SC3 SC4

At the end of a finals match recently, a robot capable of throwing a two balls at once launched balls before the buzzer. One ball went fully through the top goal, one ball went through the bottom goal, but not fully. If a straight edge across the face of the goal was used it would have contacted the ball that went through the bottom goal, but it did stay in this position after the match and the majority of the ball was through the goal. The top switch had been cleared earlier in the game, but the bottom switch had not. In the process of this final two ball shot, the switch was pinned between the two balls after the match at a 45 degree angle. Again, this was the final state of the match.

Per the most the game manual: <SC3> An Alliance Scores a Goal once a Ball is no longer in contact with a Robot and has fully passed through a Target (i.e., from the "outside" of the Goal Wall structure into the "inside" of the Goal Wall).

A. Ball that passes through a Target and then bounces back out into the playing Field does not count as a Scored Ball, and the Ball remains in play.

<SC4> A Switch is Cleared once it has been struck by a Ball and is no longer parallel with the front face of the Goal Wall. Robots may not Clear Switches by contacting them directly (i.e., without it being part of the process of scoring a Ball through that Target).

My expectations for this situation is:

1 - The ball that passed through top goal counts as a goal as it fully went through the goal.

2 - The switch is considered cleared as it ended the match no longer being parallel with the front face of the goal wall per SC4.

3 - The bottom goal does not count as it still had a small portion of the ball that had not fully passed the plane of the goal established by its border and a straight edge going across would have touched the ball. The ball has not fully passed through the goal per SC3.

Please determine if this is the correct interpretation.

If this is the correct interpretation, please define passing through the goal in more detail for this static end of game occurrence? If a straight edge across the more forward 2x plates that create the border of the goal count as the goal plane for this situation or is it the 2x plates that are further back? Not to be too specific, but I am sure a situation where this difference determines an outcome will inevitably occur.

However, Q&A 2081 states If a Scored Ball gets stuck inside the Goal Wall structure and does not make it to the Pickup Zone, a referee must free it by carefully reaching into the Goal Wall. If this action takes place the ball that has not fully passed through the goal is likely to fall. If the second ball that is teetering then falls, is this ball scored as well?

If neither is correct, could you please explain how an end of game situation like this should be scored. I would also expect the possibility of the balls falling during inspection of this situation. What would be the correct procedure if the balls fell after the match ended and prior to touching the balls during inspection of a close call that was not visually obvious?

### Answered by committee

My expectations for this situation is:

1 - The ball that passed through top goal counts as a goal as it fully went through the goal.

2 - The switch is considered cleared as it ended the match no longer being parallel with the front face of the goal wall per SC4.

3 - The bottom goal does not count as it still had a small portion of the ball that had not fully passed the plane of the goal established by its border and a straight edge going across would have touched the ball. The ball has not fully passed through the goal per SC3.

We agree with these interpretations.

In a case where a Head Referee must determine whether or not a Ball has fully passed through a Target, they should move a straight-edged tool or beam across the 2x beams that define the top and bottom boundaries of the Target. If a Ball falls during this assessment, it is likely that the straight edge contacted that Ball in order to move it, meaning that Ball had not passed fully through the Target and would not count as Scored.

## 2278: Counting Rings Scored in a Skills Match

10-Nov-2024

SC4

The tournament software used to score Skills Matches asks the scoring referee to input the number of "Rings Scored" and the number of "Top Rings Scored". However, we have experienced some confusion regarding this at a local competition because, while the wording of "Rings Scored" suggests that the total number of red rings that are scored on a stake (including the top rings) should be entered, Note 1 of [SC4](#) states that "A Ring that is considered a Top Ring does not also receive points for being Scored on a Stake; i.e., that Ring is worth 3 points, not a total of '3 + 1' points". This would mean that the number entered under "Rings Scored" should not include top rings, and the top rings should be counted completely separately under "Top Rings Scored".

For example, in a Driving Skills Match, Robot A has scored a total of 5 red rings on a mobile goal and 3 red rings on another mobile goal. No other rings, red or blue, are scored on any other stakes. How should this be scored?

- 8 Rings Scored and 2 Top Rings Scored
- 6 Rings Scored and 2 Top Rings Scored

### Answered by committee

In Tournament Manager, "Rings Scored" is a total count of every Ring that is Scored, including Rings that are considered Top Rings. The "Top Rings" count is a +2 point bonus that is being added to the 1 point already accounted for in the "Rings Scored" count.

In the provided example where 5 red Rings are Scored on one Mobile Goal and 3 red Rings are Scored on another Mobile Goal, the correct counts in TM would be 8 Rings Scored and 2 Top Rings Scored.

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## 2273: <SC4> Is a ball touching a switch considered cleared?

9-Nov-2024

SC4

per <sc4> Since a switch is scored when it "is no longer parallel with the front face of the Goal Wall"

Q- Would a ball touching the switch mean it no longer being parallel? Such as in the image on QA 2152

The specific positioning and state of the ball may or may not cause the switch to move by tiny amounts since it would need to overcome the force of the switch rubber bands. Therefore it is hard to surmise which case it would be with eyes alone.

### Answered by committee

For a Switch to qualify as Cleared ([SC4](#)), it must no longer be parallel with the front face of the Goal Wall, in a way that is clearly visible to the referee/scorekeeper.

Merely being contacted by a Ball is not enough to consider a Switch Cleared. Referees and scorekeepers are not expected to check this status with "paper tests" or other methods that give the Team the benefit of the doubt. If the referee or scorekeeper cannot clearly determine that a Switch has moved out of being parallel with the Goal Wall, then that Switch should not be considered Cleared.

On the other hand, contact with a Ball does not make a Switch ineligible to be considered Cleared. If the Switch meets the criteria of rule [SC4](#), it should be considered Cleared. If it does not, it cannot be considered Cleared.

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## 2236: Switch Force

28-Oct-2024

SC4

I am asking this as a coach and an event provider.

Out of the box the pulley rubber that is used to hold the switches are new and tight. A ball rolled onto the lower switch may not cause the switch to clear. A ball launched to the top switches has a very high probability of bouncing off. After being used for some time the pulley rubber stretches and switches are much easier to clear. Teams in their facility will therefore have very easy to clear switches and events that do not use all of their equipment regularly will have either all tight switches or a random combination of loose and tight switches. This will be the case at worlds also.

As an event provider I have seen new fields cause some very low scores because teams are not used to them but I don't want to figure out how to stretch out all these pulleys. As a coach I can't switch out pulleys every week to make sure that teams are getting an accurate indication of robot performance.

What is the force intended to have a switch cleared? Is it meant to be radically different? I know there are field variations but in this one could cause confusion at events and I want to be able to point to a Q&A.

[<SC4>](#)

### Answered by committee

Teams must be prepared for variance in the tension of Switch mechanisms, which do change over time with use, and should anticipate that any event they attend might use new Field Elements.

If the event schedule allows it, Teams may ask for (and events may offer) opportunities to calibrate Robots to the Field. This allowance, if offered, is at the discretion of the Event Partner and/or the Head Referee, and should not delay the Match schedule.

Note: If Field Elements must be repaired or replaced (e.g., the elastic component of a Switch), Event Partners should ensure that replacement parts match those included with the original game set. [<T11><T11>](#) clause a, "Replacing a damaged or missing VEX IQ Field component with an identical part of any color" still applies.

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## 2209: Switches becoming Un-Cleared During the Game

21-Oct-2024

SC1 SC4 SC7

Per [<SC4>](#) a switch is cleared once it has been struck by a ball and is no longer parallel with the front face of the goal wall. If a switch is cleared and then through normal game play the switch returns to the uncleared position where it remains till the end of the match, per [<SC1>](#) scoring statuses are evaluated after the match ends should the switch be evaluated based on the final position, even though [<SC7>](#) states that rapid relay is designed to be scored in real time.

Example: A ball becomes wedged in the switch, without fully passing through the target, holding the switch in a partially flipped position. The ball is later dislodged by a robot and falls back into the field, which causes the switch to return to its starting position, and is untouched till the end of the match.

How should cleared switches be scored with respect to [<SC1>](#) and [<SC7>](#)?

### Answered by committee

Based on the nature of the game, Passes and Goals must be scored in real-time, so [<SC7>](#) states that "Passes and Goals should be recorded at the time they occur." Cleared Switches are only evaluated and recorded at the end of the Match, per [<SC1>](#).

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## 2081: Ball stuck in the goal wall after scoring

2-Aug-2024

SC4

[<SC4>](#)



Based on question asked earlier that a robot can possess two balls and score at once, if a ball gets stuck in the goal wall (Attached picture) and if robot is unable to clear it, can the drive team member or referee reset the switch/balls and allow start over? There is no specific mention of this scenario in SC4 or Violation notes. Appreciate clarity on this situation.

<https://www.robotevents.com/VIQRC/2024-2025/QA/2014>

<https://www.robotevents.com/VIQRC/2024-2025/QA/2033>

### Answered by committee

As described in the blue box in rule [<SG6>](#),

If a Scored Ball gets stuck inside the Goal Wall structure and does not make it to the Pickup Zone, a referee must free it by carefully reaching into the Goal Wall.

This only applies to Balls that have passed through a Target, and which meet all of the criteria for a Scored Goal in rule [<SC3>](#). Balls that have not passed entirely through the Target may not be retrieved by a referee, although it is expected that they may fall into or out of the Goal Wall after the already-Scored Ball is removed.

Note: This answer was revised on 11/13/2024 to specify that a referee **must** free a Scored Ball that is stuck inside the Goal Wall structure. Additionally, the December 3 game manual update will specify that the referee should retrieve the Ball as quickly as possible when it's safe to do so.

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## 2033: Rapid Relay - Ball stuck in the switch mechanism

11-Jun-2024

SC4

[<SC4>](#) What is the course of action if a ball is stuck in the switch mechanism. We have seen the ball balance on the frame of the goal without dropping into the collection area. Is it left to balance?

Thanks for any clarification on this issue.

### Answered by committee

If a Ball becomes stuck in a Switch mechanism, it should be cleared by a Robot as part of game play and should not be manually adjusted by a referee or Drive Team Member.

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## 2023: Should a switch's status be "fixed"?

22-May-2024

SC4

[<SC4>](#)

It's rare, but we have seen already that a ball can go through a goal and not flip the switch.

It's also rare, but we have also seen a ball clear a switch but not go into the goal.

Should the switch's status reflect if a ball has scored in the goal, or should it be left as it is?

### Answered by committee

Referees should not manually alter the status of a Switch, even in cases where a Goal is Scored without Clearing the Switch or a Switch is Cleared without a Goal being Scored.

The blue box for rule [<SC4>](#), was revised in the October 8 game manual update to read as follows:

Sometimes a Switch gets Cleared without scoring a Ball through the Target, or a Ball is Scored through a Target but the Switch is not Cleared. That's okay. Switches must be Cleared as part of normal gameplay, and by Balls, not Robots or humans. Beyond that, there are no restrictions on what type of Robot action, mechanism, strategy, or technique is used to Score Balls and Clear Switches.

In cases where a Switch is Cleared directly by a Robot (not with a Ball) in Violation of rule [<SC4>](#), it should still be counted as Cleared but should also be recorded as a Major Violation and Disqualification in accordance with the Violation Notes for [<SC4>](#).

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## 1894: Uniform goal

25-Jan-2024

SC4

[<SC4>](#) clarify uniform goal. If you have 2 green and 2 purple in the same goal is that uniform?

If that is considered uniform. Do the opposite colored blocks have to be equal to be considered uniform. example 3 green 3 purple uniform 3 green 2 purple not uniform

### Answered by committee

As described in Clause B of rule [<SC4>](#), all Blocks which are Scored in a Goal must be of the same type for a Goal to be considered Uniform.

There are three types of Block: green, purple, and red. If a Goal includes more than one of these types, it cannot qualify as Uniform.

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## 1877: Determining contact between objects

17-Jan-2024

SC4

In a recent competition, a situation arose where a robot elevated in the last few seconds of the match very close to the field wall. Since the robot would not be considered elevated if it were contacting the field wall, the referee did a paper test between the robot and the field wall. The paper failed to go through. However, after a bright light was shined on the area in question, a very small gap between the robot and the field wall was visible.

In the note under SC4, referees may use a paper test to settle situations where a triball is close to the border between offensive zones and it is difficult to tell which side it is scored for, if at all. However, in other situations where contact is relevant, should a paper test be used? Additionally, in an event where a paper test fails but the existence of a gap can be seen (and is agreed upon by everyone), should it be considered to be contacting or not? (Does visual evidence override the paper test?)

### Answered by committee

The paper test is only a suggested tool to help a Head Referee evaluate whether or not a Robot meets the criteria of not touching the field wall. The rule is not "if a referee cannot place a piece of paper between your robot and the wall..."

Head Referees may use other, self-selected tools (e.g., the flashlight you've described) to help assist their decision making, as long as the method is similarly not easily refutable & is applied consistently during an event. In every case, as described in the first paragraph of rule [<T3>](#):

Once the Head Referee announces that their decision has been made final, the issue is over and no more appeals may be made (See rule [<T1>](#)).

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## 1862: Potential match load loophole in skills

8-Jan-2024

SC3 SC4 SG6 RSC1

Our team recently competed at a competition and we have some concerns about how rules at the skills challenge were being interpreted, and to our knowledge the rules have been interpreted in the same way at other competitions, including at the Hollywood Blockbuster Signature Event. To start let us get some context as to which specific rules we are concerned about.

First is [Q&A 1177](#). The phrase “Two Drive Team Members loading in rapid succession, such that two incoming Match Loads (or hands) are never past the field perimeter at the same time” makes it clear that a team is not permitted to have more than one match load crossing the field perimeter at a time and doing so while introducing a match load into a match would be considered a violation of rule [<SG6>](#). In the context of skills matches this would involve the note on rule [<RSC1>](#)

*Violation Note: In the Robot Skills Challenge, the standard definition of Match Affecting does not apply, since there is no winner and loser. When evaluating whether a rule Violation should be classified as a Major or Minor Violation in the context of this criteria, the term “score affecting” can be substituted for “Match Affecting”. A Violation is considered “score affecting” if it resulted in a net increase of that Team’s score at the end of the Match.*

This would mean that if a team illegally match loaded a triball during a skills match and the same triball was scored at the end of the match it would be considered “score affecting” thus escalating to a Major Violation resulting in a score of 0 points for the skills match.

From here we can address our concern. This is how the rules have been interpreted:

If a team scores using an illegally introduced match load, they could be given the opportunity to rectify their violation and not have it be a “score affecting” result if the team uses the robot to take the illegally scored triball and descore it by putting it into an unscored state.

Essentially the logic boils down to “descore any illegal triballs to deescalate the offense from score affecting to a minor violation.” Here are some scenarios where this may apply:

Scenario 1: A team illegally match loads 2 triballs which land within the red offensive zone. The robot then removes 2 triballs from the red offensive zone either by placing them into the blue offensive zone or any match load zone. Thus the triballs in question will have moved from a scored state into a descored state.

Scenario 2: A team illegally match loads 2 triballs which land within the red offensive zone. The robot then removes 2 triballs from the red offensive zone and places them into a part of the field where they do not count for points. However, the team then proceeds to take the exact same triballs and scores them into the red offensive zone again. Thus the triballs in question will have moved from a scored state to an unscored state and back to a scored state.

Scenario 3: A team illegally match loads 2 triballs which land in the red offensive zone. The robot then makes physical contact with the triballs and drives away. Per rules [<SC3>](#) and [<SC4>](#) the triballs in question briefly would not have been considered scored if a robot of the same alliance color (in the case of skills this is red) is touching them. Thus the triballs in question will have moved from a scored state to an unscored state and back to a scored state.

What penalties, if any, would a team receive in any of these given scenarios? Our team hopes that this interpretation of the rules is not valid to begin with, however we wanted a clarification so we can best prepare for future events. Thank you!

Answered by committee

We believe that this is addressed by our answer to [this similar Q&A post](#). If it is not, please feel free to rephrase and re-submit.

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## 1779: <SC4> <SC5> Alliance Triball contacting two offensive zones

20-Nov-2023

SC4 SC5

An Alliance Triball at the end of the match is contacting both offensive zones and not contacting a robot of the same color. The note below SC4 states that "If the Triball is contacting both Offensive Zones, then it is not considered scored in either Zone." SC5 states that "Alliance Triballs may be scored in any Goal or Offensive Zone, and always count toward the same color Alliance as the Triball." Given this scenario should the Alliance Triball be scored since the offensive zone it is in is irrelevant, similar to how Alliance Triballs in a goal are treated under SC5?

### Answered by committee

As you quoted from the note following [<SC4>](#),

If the Triball is contacting both Offensive Zones, then it is not considered scored in either Zone.

This includes Alliance Triballs.

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## 1697: Calculating the Match Score when there is a Score Affecting violation

13-Oct-2023

SC4 SG2

Should points scored by a Score Affecting violation be removed from the final score for the partner that was not Disqualified, regardless of the impact to the final score.

Scenario: Team 123A expanded horizontally while clearing out one or two cubes from the supply zone-. The supply zone was eventually cleared out by 987X, the non-violating team. Should the 20 points be removed from the final score?

[<SG2>](#)

The second scenario, is when Team 123A places a green block in a goal that has 2 purple blocks while 123A is illegally expanded horizontally. Removing/not counting the green block removes one point from the final score but adds 10 points for establishing a uniform goal. Or is this scenario even Score affecting since it results in a net loss of 9 points, hence only a minor violation is issued to 123A for expansion ?

[<SC4>](#)

### Answered by committee

Should points scored by a Score Affecting violation be removed from the final score for the partner that was not Disqualified, regardless of the impact to the final score.

No. Points scored during a Score Affecting violation should not be removed from the final score for an Alliance Partner that was not Disqualified.

Or is this scenario even Score affecting since it results in a net loss of 9 points, hence only a minor violation is issued to 123A for expansion ?

This scenario is not Score Affecting, and should only result in a Minor Violation. The definition of Score Affecting reads as follows:

- Score Affecting – A Violation which **improves an Alliance’s score** at the end of a Match.

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## 1676: Touching blocks after they have been scored

3-Oct-2023

SC4

I cannot find any mention of this but are there any limitations on touching or handling the blocks once they have been scored in a zone? Two examples:

1. Scoring a block of the wrong color and, if your robot is able, reaching in and removing the block to maintain a uniform color. <SC4>
2. Manipulating a red block that gets stuck on top of the scoring zone to allow it to fall in. <SC6>

### Answered by committee

Rule <SG3> requires Teams to "keep blocks in the Field." As long as Team and Robot actions meet all of the criteria of this rule, there are no other rules that limit Teams from moving blocks into or out of Goals or around the field.

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## 1634: Clarification of Intent of SC4 and SG8

31-Aug-2023

SC4 SG8

The *intent* of <SG8> appears to be to prevent descoring of triballs scored in goals, except when double zoning. However <SG8> allows alliance triballs scored in the opposing alliance goal to be removed. In addition <SC4> states that a triball is scored if two points are within the 3D volume of the goal, and it is not in contact with an robot of the same color as the goal, however this allows robots descoring opposing alliance triballs scored in their goal simply through contact. Is this an intended part of the gameplay of Over Under? Thank you for your time, 334V

### Answered by committee

Yes.

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## 1509: SC3; SC4: Are triballs legally scored in the goal also scored as being in the offensive zone

23-May-2023

SC3 SC4

The way the manual is currently written has a ball legally scored in the goal also legally scored in the offensive zone. This appear to mean each triball legally in the goal is worth 7 points, 5 for the goal and 2 for the offensive zone..

From the definitions of goal and offensive zone:

Goal – The Alliance-colored, netted structure on either side of the field, one red and one blue, into which Triballs can be scored for points. As a Field Element, the term “Goal” refers to the net and all supporting structures / hardware (e.g. PVC pipes and plastic bases). For the purposes of scoring, the “Goal” refers



specifically to the three-dimensional volume bounded by a vertical projection of the outermost PVC pipes onto the field and below the surface of the net.

Offensive Zone – One of two halves of the field, divided by the Barrier. See Figure 20. • Each Alliance has an Offensive Zone. An Alliance’s Offensive Zone is on the side furthest from their Alliance Station and closest to that Alliance’s colored Goal. • Each Offensive Zone consists of the gray foam tiles on one side of the Barrier. It is not a 3-dimensional volume. • The Long Barrier is not considered to be in either Offensive Zone. • The Match Load Zones are not considered to be part of either Offensive Zone.

There is a list of areas explicitly excluded from the definition of offensive zone, but the goal tiles are not among that list and the accompanying image shows the tiles under the goal to be colored as part of the offensive zones. Now the scoring rules:

SC3 A Triball is considered Scored in a Goal if it meets the following criteria: a. The Triball is not contacting a Robot of the same color Alliance as the Goal. b. At least two (2) corners of the Triball are within the Goal (i.e., are under the Net and have “broken the plane” of the outer edge of the PVC pipes that define the Goal volume).

SC4 A Triball is considered Scored in an Offensive Zone if it meets the following criteria: a. The Triball is not contacting a Robot of the same color Alliance as the Offensive Zone. b. The Triball is contacting the gray foam tiles within the Offensive Zone. Note: Offensive Zone scoring is based on contact with the gray foam tiles in each Offensive Zone. In the case of any close calls, referees may use a “paper test” (i.e. gently slide a piece of paper under the Triball) to determine which Offensive Zone it should be scored in. If the Triball is contacting both Offensive Zones, then it is not considered Scored in either Zone. See Figure 23.

Finally, I don’t see anything in any of the other scoring rules that the triball must be exclusively scored as either in goal or in the offensive zone, therefore a triball legally scored in the goal is 7 points, not just five.

Is this the correct interpretation?

#### Answered by committee

Thank you for your question! The next version of the game manual will clarify that a Triball that is considered Scored in a Goal is not also considered Scored in that Goal's Offensive Zone.