

# Q&A

## VEX IQ Robotics Competition 2026-2027: Level Up

Tagged: SG4

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 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 VIQRC game rules questions.

- For event, registration, or other competition support questions, please contact your [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)

## Index

[<SG4> introducing match loads with new all gray anti static tiles](#)

[Introducing match loads, GRAY tiles <SG4>](#)

[SG4\(a\) - Clarification on removal of deflected game objects](#)

[Clarification on <SC4>](#)

[Starting Pin leaves the field](#)

[SG4 - Retrieving externally-deflected blocks](#)

[<SG4> Keep Blocks in the Field](#)

[Clarification on violations of <SG4> in autonomous](#)

[Skills Scoring, what is the effect of a block leaving the field from the top of the Loader?](#)

[Returning Blocks to a Drive Team Member Clarifications](#)

[SG4 - Violations During Loader Interactions](#)

[Ball Loading Through the Load Station](#)

[SG4 Complications for finals](#)

[How can a team rectify an SG4 violation?](#)

[< SG4 > Accidental Ball Possession Limit Exceeded and Remediation Options](#)

[Can a loader use a tool \(a 1x20 beam for example\) influence the ball to exit the loading station in a particular direction?](#)

[Clarification on rules](#)

[SG4 Intentional Strategy](#)

[Can a robot extend over the front of the Loading Station](#)

[Stuck ball in the loading station.](#)

---

## 466: <SG4> introducing match loads with new all gray anti static tiles

19-Dec-2019

SG4

Now with the releasing of the all gray anti static tiles, does that mean now we can introduce match loads on the previous colored tiles?

<https://www.robotevents.com/VEXU/2019-2020/QA/412>

In this QA it was ruled that match loads **cannot** be introduced onto colored tiles.

<SG4> Match Load entry. Drive Team Members may introduce Match Loads during the Driver Controlled Period by placing them gently onto a gray foam field tile such that they satisfy the following conditions: a. Contacting the field perimeter wall on the side that coincides with their Alliance's Goal Zones and Alliance Station.

- b. Contacting the **gray** foam field tiles.
- c. Not contacting a Tower.
- d. Not contacting any Cubes besides another Match Load.
- e. Not contacting a Goal Zone or a Barrier.
- f. Not contacting a Robot.

### Answered by committee

SG4 should be ruled as applicable for the fields at any given event. If the event is using anti-static tiles (i.e. all gray), then the Match Loads may be placed on the tile that would have otherwise been red/blue (provided that all other conditions in SG4 are met). Teams should be cognizant of the possibility that an event may use either of the two possible sets of field tiles, and plan to accommodate accordingly.

---

## 412: Introducing match loads, GRAY tiles <SG4>

10-Nov-2019

SG4

SG4 b. specifies match loads are required to be introduced onto GRAY foam tiles. The VRC Tower Takeover - Referee Training - Chapter 8: Cube Do's & Don'ts, at 1:22, it gives the thumbs up and a green check for match loads being introduced on a BLUE tile ( [https://youtu.be/ksrJ1\\_rdv0?t=80](https://youtu.be/ksrJ1_rdv0?t=80) ).

Are teams not allowed to introduce match loads onto red and blue foam field tiles? If they are restricted from those tiles, can you clarify that teams ARE allowed to introduce match loads onto their alliance's inner protected zone gray foam tile (providing the cubes satisfy SG4 and specifically aren't touching a barrier or goal zone)?

<SG4> Match Load entry. Drive Team Members may introduce Match Loads during the Driver Controlled Period by placing them gently onto a gray foam field tile such that they satisfy the following conditions: a. Contacting the field perimeter wall on the side that coincides with their Alliance's Goal Zones and Alliance Station. **b. Contacting the gray foam field tiles.** c. Not contacting a Tower. d. Not contacting any Cubes besides another Match Load. e. Not contacting a Goal Zone or a Barrier. f. Not contacting a Robot.

### Answered by committee

Well.... good catch. Thank you for noticing this and bringing it to our attention!

Please see rule G22, which was primarily written to account for the unfortunate realization that we on the GDC are only human and mistakes sometimes happen:

The 2019 - 2020 Q&A is the ONLY official source for rulings besides the Game Manual. If there are any conflicts between the Game Manual and other supplemental materials (e.g. Referee Training videos, VRC Hub app, etc), the most current version of the Game Manual takes precedent.

---

### 3170: SG4(a) - Clarification on removal of deflected game objects

23-Jun-2026

SG4

[<SG4>](#)

When preparing to referee/score-keep a scrimmage recently, I came across a particular scenario regarding clause A of <SG4>. The first sentence of Clause A states:

If a Scoring Object is leaving the Field (as determined by the Head Referee), but is deflected back into the Field by a Drive Team Member, field monitor, ceiling/wall, or other external factor, it should still be considered "out of the Field" and removed by a Scorekeeper Referee or Head Referee.

My question regarding this clause is if the game element in question does indeed leave the field, as determined by the Head Referee, and is deflected back into the field via an external factor, **but comes to rest in a hard to reach area such as close to or within the midfield** (emphasis mine):

**A)** Are the Scorekeepers or Head Referee still expected to reach into the field during a match to attempt to remove the game element and reintroduce it back as described in main body of <SG4>?

**B)** If Yes to A, then how would this be applied to raised fields where mobility to reach into the field is already extremely limited to roughly the first tile or two from the perimeter wall?

**C)** If No to A, since the objective of the game does not involve any form of tossing or launching of the game elements, would this be left as a Minor/Major Violation ruling based on the listed violation notes and/or a violation of <GG4>, Hands out of the Field, as listed in the latter sentence of Clause A?

I would appreciate the GDCs clarification in proceeding given such a scenario. Thank you!

#### Answered by committee

**Note: In version 1.0 of the game manual, <SG4> has been updated such that Scoring Objects that have been deflected back into the Field are no longer considered "out of the Field."**

A) No. There is no need to remove these Scoring Objects since they are no longer considered "out of the Field."

B) N/A

C) In the event a Scoring Object is leaving the Field but gets deflected back into the Field by a Drive Team Member, it would most likely be considered incidental contact and would not result in a [<GG4>](#) Violation. It would only result in a [<GG4>](#) Violation if the contact was deemed to be intentional.

---

### 3144: Clarification on <SC4>

16-May-2026

SG4

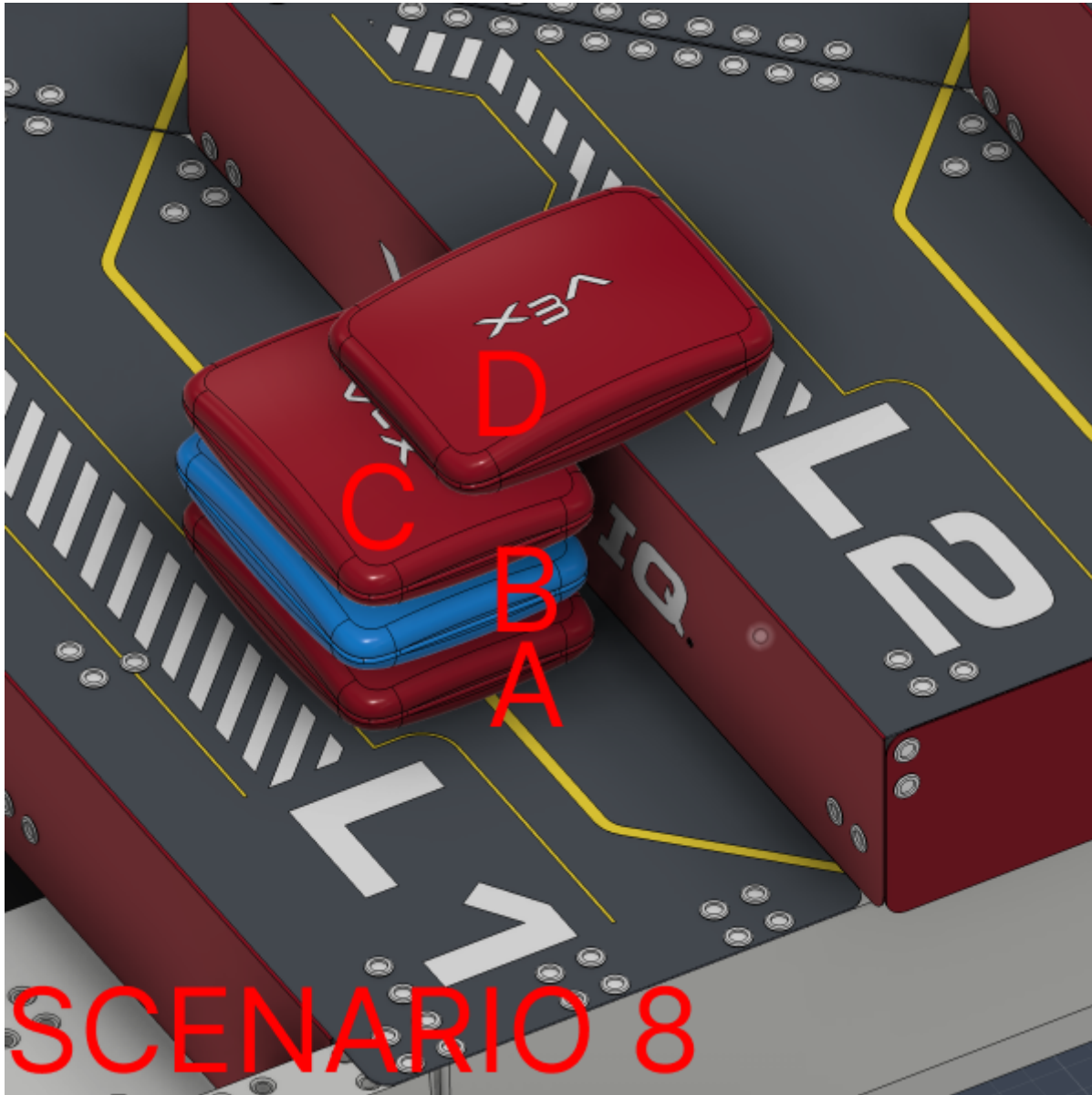
There are multiple vague scenarios as follows:

**Scenario 8:**

Bean Bag D is partially stacked on Bean Bag C and is in contact with the L2 PET sheet.

Bean Bag C is stacked on top of Bean Bag B (a blue Bean Bag), which is stacked on top of Bean Bag A. Bean Bag A is in contact with the L1 PET sheet. All four Bean Bags meet all criteria listed in [<SC4>](#).

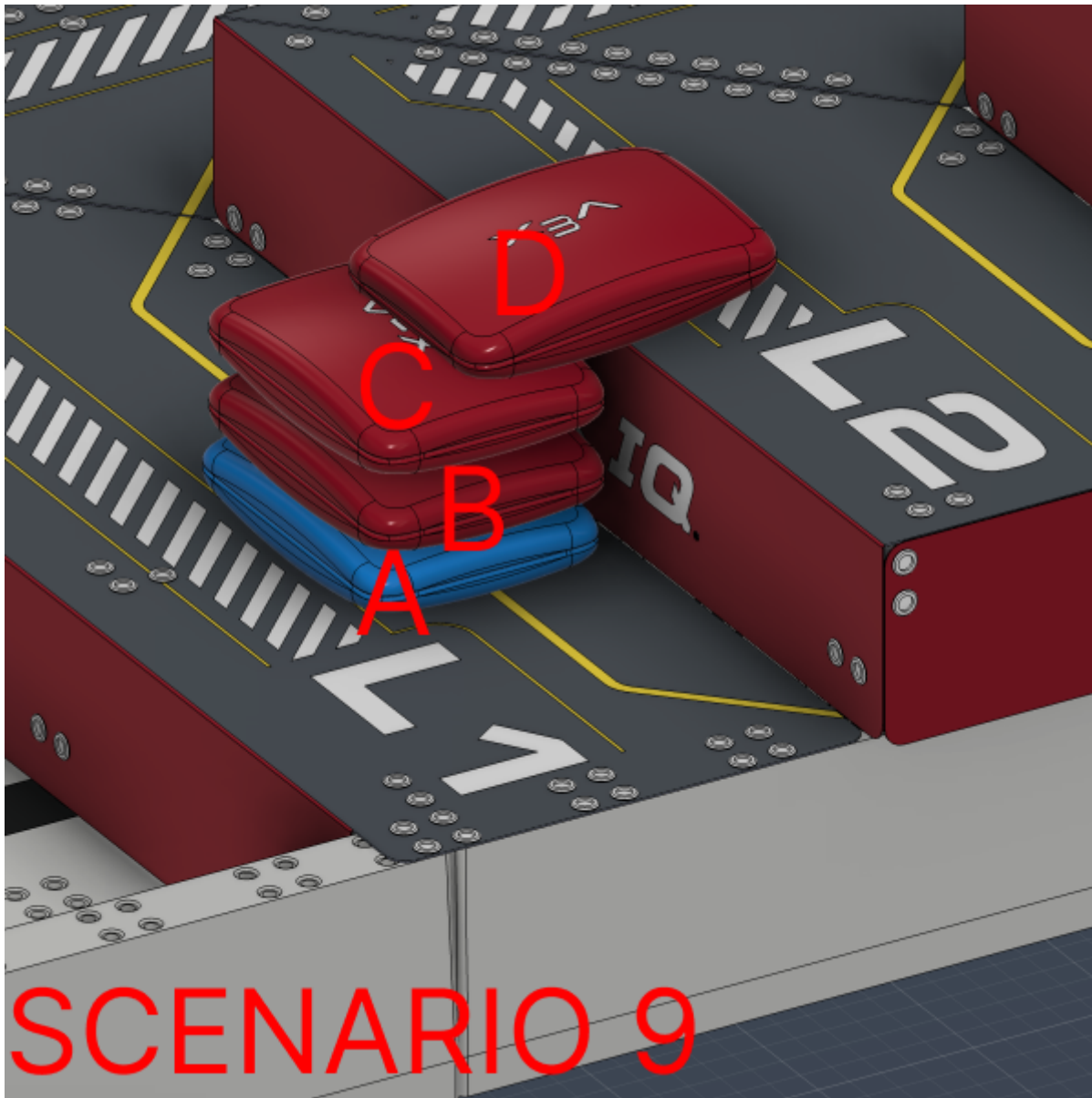
What is the scoring status of Bean Bag A, Bean Bag B, Bean Bag C, and Bean Bag D?



**Scenario 9:**

Similar to Scenario 8, except Bean Bag A is a blue Bean Bag and Bean Bag B is a red Bean Bag. All four Bean Bags meet all criteria listed in [<SC4>](#).

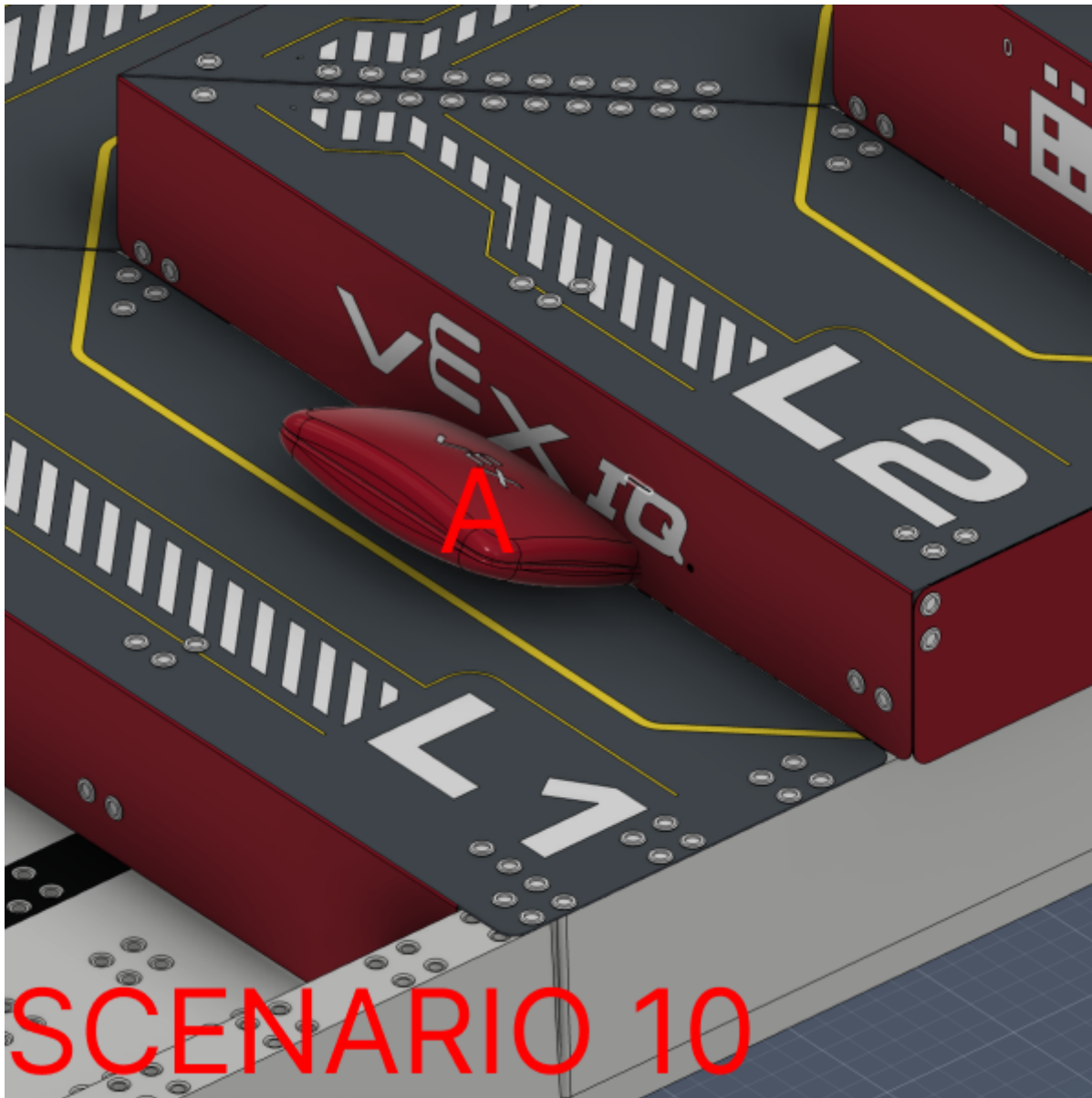
What is the scoring status of Bean Bag A, Bean Bag B, Bean Bag C, and Bean Bag D?



**Scenario 10:**

The PET sheet is flexible. Bean Bag A is stuck inside the Goal and is contacting the horizontal PET sheet that defines the L1 Goal.

What is the scoring status of Bean Bag A?



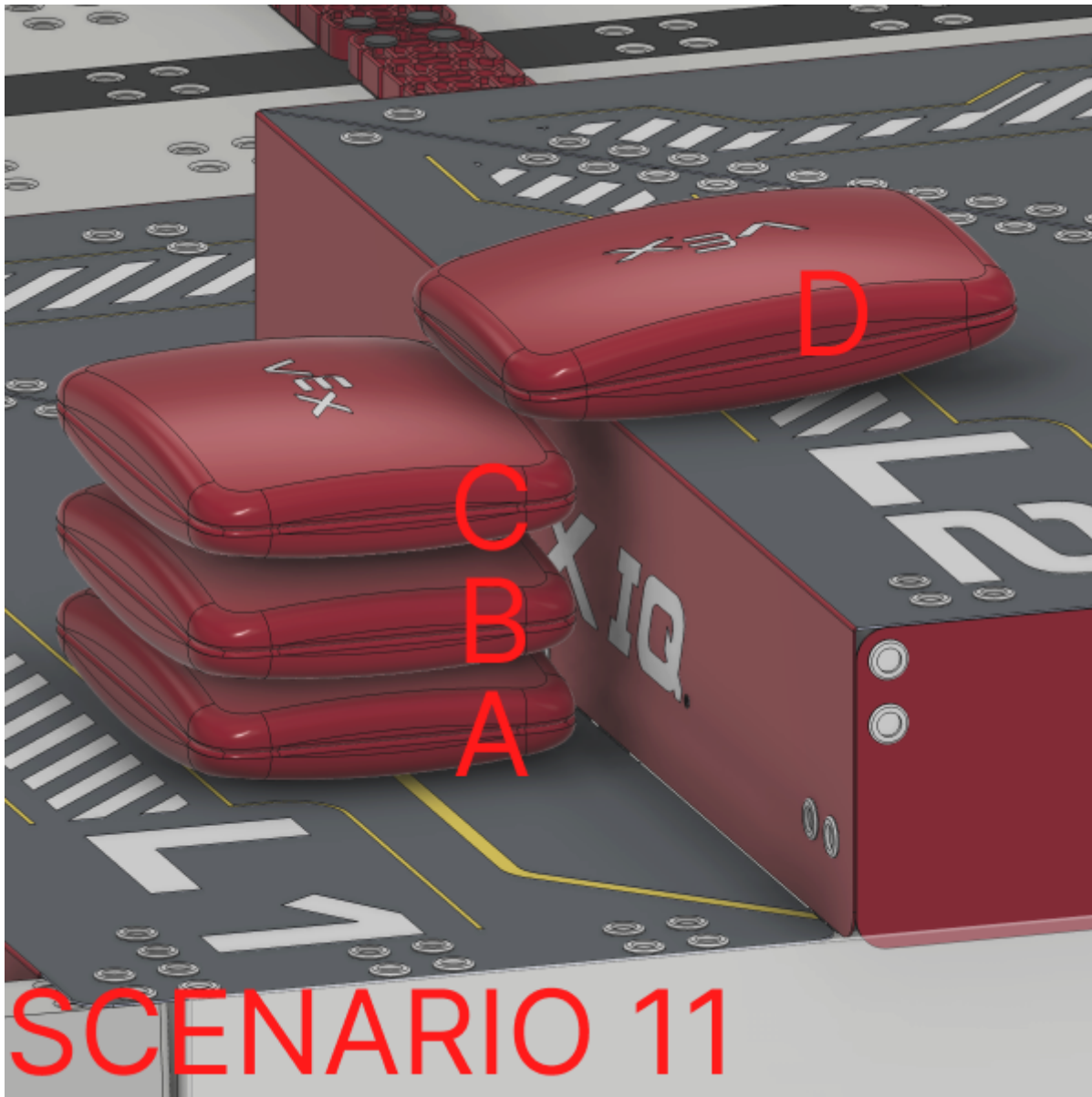
**Scenario 11:**

Bean Bag D is resting on the L2 PET sheet and is slightly contacting Bean Bag C.

Bean Bag C is stacked on top of Bean Bag B, which is stacked on top of Bean Bag A. Bean Bag A is in contact with the L1 PET sheet. All four Bean Bags meet all criteria listed in [<SC4>](#).

What is the scoring status of Bean Bag A, Bean Bag B, Bean Bag C, and Bean Bag D?

Furthermore, if Bean Bag D is gradually pushed toward Bean Bag C while still slightly contacting the L2 PET sheet — at what point does the scoring status of Bean Bag D change?



# SCENARIO 11

## Answered by committee

### Scenario 8:

- Bean Bags A and C meet all criteria to be scored on the L1 Goal, since they are either in contact with the L1 Goal or are supported (directly or indirectly) by a Bean Bag in contact with the L1 Goal.
- Bean Bag B is not scored since it does not match the color of the Goal (and is not yellow).
- Bean Bag D meets all criteria to be scored on both the L1 and L2 Goals, but only receives points for the highest level (L2).

### Scenario 9:

- Bean Bag A is not scored since it does not match the color of the Goal (and is not yellow).
- Bean Bags B and C meet all criteria to be scored on the L1 Goal, since they are supported (directly or indirectly) by Bean Bag A which is in contact with the L1 Goal.
- Bean Bag D meets all criteria to be scored on both the L1 and L2 Goals, but only receives points for the highest level (L2).

### Scenario 10:

- Bean Bag A meets all criteria to be scored on the L1 Goal. (If this Bean Bag was fully inside the Pyramid Goal structure, it would be considered “out of the Field” and would not be scored.)

### Scenario 11:

- Bean Bags A, B, and C meet all criteria to be scored on the L1 Goal.
- Bean Bag D meets all criteria to be scored on both the L1 and L2 Goals, but only receives points for the highest level (L2).

---

## 2913: Starting Pin leaves the field

12-Nov-2025

SG4

[<SG4>](#)

Rule SG4 states " Scoring Objects that leave the Field during a Match may be reintroduced by a Loader in accordance with <SG6>". Since it doesn't state anywhere that I can find, the referee replaces objects that leave the field back in their original position, my students believe that if their robot knocks the starting pin off it's holder and it falls onto the floor instead of into the field, it will still count as "Starting pin cleared."

Is that correct?

### Answered by committee

As described in [<SC7>](#), "A Starting Pin is Cleared if no part of its Starting Pin Support is within the volume of a Pin at the end of the Match."

There is no requirement that a Starting Pin remain inside the Field to be considered Cleared.

---

## 2910: SG4 - Retrieving externally-deflected blocks

10-Nov-2025

SG4

Per [<SG4a>](#):

If a Block is leaving the Field (as determined by the Head Referee), but is deflected back into the field by a Drive Team Member, field monitor, ceiling/wall, or other external factor, it should still be considered "out of the field" and removed by a scorekeeper or Head Referee...

I could envision a block being deflected by an external factor, returning to the field in a spot that is unsafe/impractical to be retrieved by a referee during the match. While this could be rare, what are the GDC's recommendations for handling these deflected blocks? I.e., a block ended up near the center of the field, and retrieval would interfere with the match.

Thanks!

### Answered by committee

Thanks, Blake, for your question.

In a case where the Block can't be easily and safely retrieved, the Head Referee should leave the Block in the Field and issue a Minor [<SG4>](#) Violation for the Robot that removed the Block from the Field.

---

## 2809: <SG4> Keep Blocks in the Field

23-Sep-2025

SG4

[<SG4>](#)

If during autonomous a block were to launch out of the top of the loader and land on top the plastic field perimeter and stay. Is that block considered inside the field or outside the field?

If this were to happen during driver control would the answer be different?

Can a team member retrieve the block from the top of the field and use it?

Obviously if it is considered outside the field then during auton it would be a GG13 violation.

Also if it is a violation then it counts as a block leaving the field for any and all SG4 violations in that match.

### Answered by committee

Hello, John Queen, and thanks for this question!

Because the definition of Field includes the Perimeter, a Block that comes to rest on top of the Perimeter is still inside the Field unless it contacts something outside of the Field (e.g., volunteer, Drive Team Member, field monitor, etc.).

Because this Block is still in the Field, it can't be retrieved by a Drive Team Member. Intentional contact by a Drive Team Member would result in a [<GG4>](#) Violation. If this Block later leaves the Field, an [<SG4>](#) Violation might be appropriate for the Robot that causes it to leave (the 3rd Violation Note for [<SG4>](#) might apply, although [<GG16>](#) will still apply and Teams can't force opponents into penalties).

We hope this helps!

---

## 2798: Clarification on violations of <SG4> in autonomous

19-Sep-2025

GG13 SG4

The violation notes for <SG4> state that "After a Team's third Match with any Violation of this rule (either Major or Minor), all subsequent Violations of this rule will immediately escalate to a Major Violation."

"Match" is defined to include both the Autonomous Period and the Driver Control period. Therefore, it seems that a block leaving the field during autonomous would result in a violation that counts toward the total number of matches with a violation of <SG4>.

However, the violation note to <GG13> explains that "In general, Minor Violations of SG rules that occur during the Autonomous Period should only affect the outcome of the Autonomous Period (i.e., the Alliance can't win the Autonomous Bonus or earn an Autonomous Win Point) and should not be considered when determining whether a Violation has been repeated during the event."

Should a violation of <SG4> in autonomous be logged so that it counts toward the total number of matches with an <SG4> violation, or should it only result in the loss of autonomous?

### Answered by committee

As described in the Violation Notes for [<GG13>](#), Minor Violations of [<SG4>](#) that occur during the Autonomous Period of a Match should not be considered when determining whether a Violation has been repeated during the event or the Match. If a Team removes 2 or fewer Blocks from the Field during the Autonomous Period, that Violation should only affect the outcomes of the Autonomous Period and should not be recorded as a Violation for future counts.

However, if a Team removes 3 or more Blocks from the Field during the Autonomous Period, it should be considered a Major Violation as described in the 2nd Violation Note for [<SG4>](#). The Team should receive a Disqualification for the Match in addition to the penalties described in rule [<GG13>](#) for Violations committed during the Autonomous Period.

---

## 2794: Skills Scoring, what is the effect of a block leaving the field from the top of the Loader?

16-Sep-2025

RSC1 RSC2 SG4

<RSC1> says: a. Removing Blocks from the Field in a Robot Skills Match is not a Violation. Blocks that leave the Field cannot be returned.

<RSC2> provides that: d. The Team will earn points for a cleared Loader if no Blocks are within that Loader at the end of the Match.

If a team during skills autonomous/driving hits the bottom of the loader and a block leaves the field from the top of the loader, and the team then clears the loader, the violation of [<SG4>](#) would be score affecting, as the block leaving the field from the top of the loader contributed to clearing the Loader. However, [<RSC1>](#) says there is no violation for the block leaving the field.

In this scenario, should the score be zero, or should the team get the points for the loader being cleared?

### Answered by committee

Hello, Richard, and thanks for your question!

[<RSC1>](#) changes [<SG4>](#) for skills matches, and there is no Violation if Blocks leave the Field through the top of Loaders.

[<S1>](#) applies, and a Team that damages a Loader may receive a Disablement and/or Disqualification at the discretion of the Head Referee.

We hope this helps!

---

## 2788: Returning Blocks to a Drive Team Member Clarifications

15-Sep-2025

G3 SG4

[<SG4>](#) **Keep Blocks in the Field.** Teams may not remove Blocks from the Field. A Block that leaves the field during Match play, intentionally or unintentionally, will be given to a Drive Team Member from the same color Alliance as the Block...

Using stored event items from Over Under, many EPs will likely use bins to store match load Blocks this year. In regard to [<SG4>](#) specifying a Drive Team Member will receive a block that has left the field, I have the following questions,

1. Can the Block be placed or tossed into a bin in a manner that is not reckless instead of directly handing the Block to a student?
2. If yes to question 1, must scorekeepers and other volunteers attempt to return Blocks in the same manner at an event or can they randomly (in terms of Drive Team Member expectations, they do not know what to expect) choose the manner they return Blocks?

3. If the first option is the answer to question 2, must scorekeepers be consistent with their method such that students have to be ready for whatever an event decides as their manner and cannot ask for the opposite or special instructions (if it is somehow possible to clarify beyond bin or hand) for receiving Blocks?
4. Applying <G3> and context of the full match, can the delay or an inconsistent manner of receiving a Block that left the field ever be deemed score affecting?
5. Does question 4 apply differently based on which alliance caused if the Block(s) in question to leave the field?
6. If yes to question 4, is the score affecting threshold of a match 3 points (as <SG9>'s violation notes value one Block), 13 points (the maximum amount of points a scored Block and a controlled zone can accumulate to), or the next highest accumulated points total given the full context of the match?

### Answered by committee

As always, thanks for your questions, Karson! Here are our answers:

1. Yes. We'll update the guidance in the game manual to require that Blocks be given to the Alliance matching the color of the Block, not necessarily handed to them.
2. There is no requirement that Blocks be returned in a predictable way.
3. N/A
4. No. Volunteers should return Blocks as quickly as possible, but this time will vary between Events and Matches based on the full context of the Match and available volunteers.
5. No.
6. N/A

## 2735: SG4 - Violations During Loader Interactions

26-Jul-2025

SG4

<SG4> states, in part (emphasis mine):

Teams may not **intentionally or strategically** remove Blocks from the Field. A Block that leaves the field during Match play, **intentionally or unintentionally**, will be given to a Drive Team Member from the same color Alliance as the Block and may be used as a Match Load in accordance with SG9. Violation Note 1: After a Team's third Match with **any Violation** of this rule (either Major or Minor), all subsequent Violations of this rule will immediately escalate to a Major Violation. Violation Note 2: Any Team that **removes three (3) or more Blocks from the Field in a single Match** will receive a Major Violation.

Scenario: A Robot is attempting to remove Blocks from a full Loader with 6 Blocks in it. As the Robot extends into the Loader to retrieve Blocks, one or more of the Blocks near the top of the Loader pop up and fall out of the Field. An example of this scenario occurs at approximately 2:38:35 of this video at the bottom-left Loader of the screen:

[https://www.youtube.com/live/tgUlpMw\\_tzA?si=Z5zzyf\\_2M77x6t07](https://www.youtube.com/live/tgUlpMw_tzA?si=Z5zzyf_2M77x6t07)

Which, if any, of the following outcomes would be appropriate for this scenario with respect to SG4 Violation Note 1?

- Since the Robot is attempting to retrieve Blocks from the bottom of the Loader, the Blocks exiting the top of the Loader out of the Field is an unintentional action. Since the first sentence of SG4 prohibits **intentional or strategic** Block removal, this scenario should **not** result in a Major or Minor Violation counted towards the 3 Matches before a Major Violation.
- The actions of the Robot caused the Block to exit the Field, so this action should be considered **intentional** and result in a Minor Violation that counts towards the 3 Matches before a Major Violation.
- Would some other scenario apply? Would the color of the Robot and the Block being removed matter? SG4 does not specify Block color, so I would assume no, but would appreciate confirmation.

Which, if any, of the following outcomes would be appropriate for this scenario with respect to SG4 Violation Note 2?

- If the Block is ruled to be unintentionally leaving the field, the Block should not count towards one of the 3 in a Match before a Major Violation is issued.
- Violation Note 2 does not differentiate between intentional and unintentional removal of Blocks from the Field, so any Block removed in a Match should count towards the 3 that would result in a Major Violation.
- Would some other scenario apply? Would the color of the Robot and the Block being removed matter?

Thank you for your time!

### Answered by committee

**Note: This answer was revised following the September 4, 2025, game manual update, which removed all occurrences of "intentionally or strategically" from rule <SG4>.**

Each Block removed from the Field in a Head-to-Head Match is a Violation, regardless of whether it was removed intentionally/strategically or accidentally, and all <SG4> Violation Notes apply. Each Block removed counts toward the Match and Block counts in the first two Violation Notes.

---

## 2579: Ball Loading Through the Load Station

26-Feb-2025

SG4

Once a ball legally enters the loading station and passes through it does the robot have to retrieve ball from the load zone itself, or can it be loaded in a way that bypasses the load zone and enters the field directly -similar to a spin entry?

According to the Q&A, the ball does not need to make contact with the load zone floor <SG4>

### Answered by committee

We're not certain that we're understanding your question, but we believe that our answer to [Q&A 2428](#) applies here as well.

Provided the human Loader meets all requirements of <SG4> and causes no damage to the Loading Station, Ball, or other Field Element, there is no rule against Loaders attempting to influence how the Ball exits the Loading Station.

---

## 2572: SG4 Complications for finals

24-Feb-2025

SG4

How are we handling illegally loaded balls in the finals matches.

SG4 Says that it is head ref discretion. So I guess my question is: How can all of the head refs be consistent in the finals with Disqualifications and calls for things such as starting early, switching late, and illegally loaded balls.

### Answered by committee

Balls that are Loaded improperly through the Loading Station are handled as described in clauses E & F of rule <SG4>, regardless of the type of Match.

Balls that are Rapid Loaded improperly are handled as described in clause G of rule [<SG5>](#), regardless of the type of Match. As described in the 2nd Violation Note for [<SG5>](#), all Score Affecting Violations of [<SG5>](#) in Finals Matches and repeated Score Affecting Violations in Qualification Matches are treated as Major Violations.

As to consistency of calls, the blue box following rule [<T1>](#) describes the intent of rules that may require Head Referee judgment. In short, when judgment is required there is no "right" ruling beyond the one made by the Head Referee.

---

## 2542: How can a team rectify an SG4 violation?

16-Feb-2025

SG4

During a recent competition, a question came up that we couldn't answer. If a ball is improperly loaded, following rule SG4, it states in part e: "The Ball must then be removed from the Load Zone by a Loader before it is retrieved by a Robot and legally Loaded again.". The question came up of what should be the recommended course of action if it is retrieved by a robot. From our understanding, if the ball is scored in anyway (a goal or a pass), that is score affecting, then the team or teams involved should be disqualified. But, what if it isn't. Can the team rectify the situation?

- A. Can the team remove the ball from their robot? Would that require a full robot reset?
- B. Can the team's robot remove it from itself? By shooting it out or by unloading it? Can the loader then retrieve the ball from the field and have it remain a minor violation?
- C. What if the robot shot it outside of the field? Can the loader retrieve it then?

In all three cases, it is assumed the offending ball was not scored in any way.

### Answered by committee

The Team could use any of the methods you describe to remove the incorrectly-Loaded Ball from play before it is Passed or used to score a Goal. If the Ball is removed from play before it is used for a Score Affecting action, the Team should only receive a Minor Violation.

If the Ball is directly removed from a Robot by a Drive Team Member, it must be as part of a full Robot reset as described in rules [<G10>](#) and [<RSC8>](#).

---

## 253: < SG4 > Accidental Ball Possession Limit Exceeded and Remediation Options

26-Feb-2019

SG4

This is a multi-part question around < SG4 > The Possession limit of balls, and disqualifications.

These questions are related to the "Match Effecting" interpretations of excess ball possession.

< SG4 > Watch your Possession limit. Robots may Possess a maximum of one (1) Cap and two (2) Balls at a time. Note: Robots that interact with High Scored Caps while already Possessing a Cap will undergo additional scrutiny regarding 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.

During recent events as the pace of the game has picked up, it has become fairly common for robots to accidentally ingest more than the two-ball possession limit as the balls bounce around and ricochet into the intake mechanisms. At a recent event a team was disqualified for possessing 4 balls at the end of the match that were never used to score. Since the difference in the final score was 4-points and the two extra balls could have been used to score those 4 points the referee called for the disqualification as the possession was match effecting.

Definition: Part 1: Is there a scenario where accidentally possessing 3 or more balls is considered match effecting even if the balls are never used to score a flag? it has been argued that simply possessing excess balls is match effecting since the robot is now controlling balls that are not available for the opposing alliance to score (effectively "hoarding"). Therefore, If the balls in possession have the potential to score points that are equal to, or greater than the match differential, then should this be considered match effecting? (also similar to the point differential when caps that are knocked out of bounds being a match effecting disqualification)

Remediation Options?: Part 2: If simply exceeding the possession limit is not match effecting (i.e. Part 1), is it then permissible for a team announce to the referee that they are have excess capacity and they intend to safely discharge the excess balls in such a way as to not attempt to score? (either through reversing the intake, or if that isn't possible, discharge the excess balls with the launcher directly and safely into the net while avoiding changing the state of any flag)

Part 3: Finally, if a team does score a flag while unintentionally possessing more than 2 balls, could the team: a. announce to the referee they intend to de-score the illegal flag (that is return the scored flag to its previous state) before scoring additional points so as to make the accidental score impossible to affect the match? b. after scoring the flag, announce to the referee they intend to safely discharge all remaining balls in possession before scoring additional points?

This post is for clarification for future occurrences, and in no way trying to modify a previous ruling.

Thank you!

### Answered by committee

Part 1: Is there a scenario where accidentally possessing 3 or more balls is considered match effecting even if the balls are never used to score a flag?

Yes, for exactly the reason you imply - in a game with neutral Game Objects of a limited quantity, any additional Possession has the potential to limit the opposing Alliance's ability to play the game.

Part 2: If simply exceeding the possession limit is not match effecting (i.e. Part 1), is it then permissible for a team announce to the referee that they are have excess capacity and they intend to safely discharge the excess balls in such a way as to not attempt to score?

Discharging the extra Game Objects would not just be permissible, it would be required. If a Robot comes into Possession of more than the permitted number of Game Objects, then they should immediately attempt to rectify the situation. We would expect that the Head Referee would instruct the Team to do so, not the other way around as proposed here, but the philosophy is the same.

Part 3: Finally, if a team does score a flag while unintentionally possessing more than 2 balls, could the team: a. announce to the referee they intend to de-score the illegal flag (that is return the scored flag to its previous state) before scoring additional points so as to make the accidental score impossible to affect the match? b. after scoring the flag, announce to the referee they intend to safely discharge all remaining balls in possession before scoring additional points?

First, <SG4> does not contain "intentional" or "unintentional" verbiage, so whether they intentionally or unintentionally Possessed the extra Game Object is irrelevant; Toggling the Flag in this situation is a clear-cut violation of <SG4> (see [this similar Q&A](#) for more thoughts on this topic).

In general, it is a Team's responsibility to ensure that:

- a) Their Robots are designed to mitigate the possibility of controversial rulings (e.g. they cannot Possess more than the permitted Game Object limit), and
- b) Their strategies during a Match mitigate the possibility of controversial rulings (e.g. they do not Toggle Flags while Possessing three Balls).

We typically try not to comment on previous rulings (and appreciate that you did not ask us to). However, given the explanations above, the example that you provided is actually a pretty good one to demonstrate these principles.

At a recent event a team was disqualified for possessing 4 balls at the end of the match that were never used to score. Since the difference in the final score was 4-points and the two extra balls could

have been used to score those 4 points the referee called for the disqualification as the possession was match effecting.

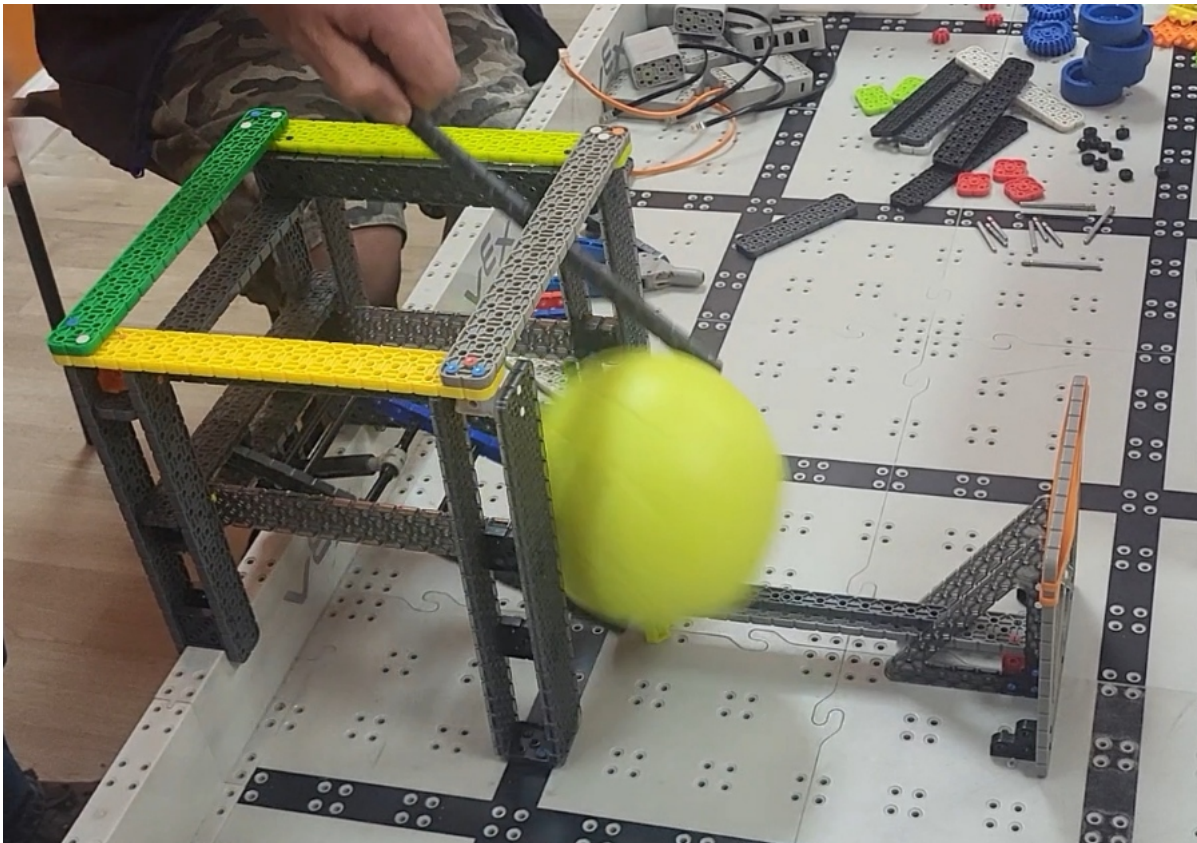
It is always difficult to provide a blanket ruling without the full context of a Match; however, based on the information given in this snapshot, this would be a correct interpretation of the answer provided above.

## 2519: Can a loader use a tool (a 1x20 beam for example) influence the ball to exit the loading station in a particular direction?

9-Feb-2025

G9 SG4

Is the loader allowed to use a something like a beam to influence which way the ball exits the loading station. Example in image:



According to this QA: <https://www.robotevents.com/VIQRC/2024-2025/QA/2428>

"Provided the human Loader meets all requirements of rule <SG4>, there is no rule against Loaders attempting to influence the Ball to exit the Loading Station in a particular direction."

And SG4 b. states: "The Loader must be the last human to contact the Ball before it is released."

Is this covered by G9?: "During a Match, Drive Team Members are prohibited from making intentional contact with any Field Element, Robot, or Ball that has been introduced to the Field, except for the allowances in <G10>, <RSC8>, <SG4> and/or <SG6>."

### Answered by committee

Is the loader allowed to use a something like a beam to influence which way the ball exits the loading station?

No. This is a direct Violation of both [<G8>](#) clause C, which disallows materials that simplify the game challenge, and [<G9>](#), which says that a Drive Team Member cannot contact a Ball after it has been introduced to the Field.

---

## 2514: Clarification on rules

7-Feb-2025

G1 SG4

The latest official ruling in the Q&A have caused some confusion for the kids on our team. Below is how the team have interpreted the game and how they formulated their robot and game strategies.

Referencing the Game Manual Version 3.0

Page 1 — Introduction

The primary objectives of the game are to Pass the Balls between Robots, score Balls through Targets, and Clear Switches. Balls are introduced to the field through the Loading Station or, during the last 15 seconds of a Match, a Rapid Load Zone.

Page 6 — General Definitions

Field – 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.

Page 12 — Game-Specific Definitions

Loading Station – The gray structure, built out of VEX IQ parts, that is attached to the Field Perimeter opposite the Goal Wall. The Loading Station is intended to receive Balls from a human Loader and randomly send them left or right into the Load Zone.

Load Zone – An area of the Field containing the Loading Station, bound by the Field Perimeter and the inside of the second solid black line from the edge of the Field (marked by two yellow VEX IQ beams). The Load Zone is an infinitely tall 3-dimensional volume; "reaching over" the black line without contacting the Floor would still constitute being partially in the Load Zone.

Page 2 — About the Game Manual - A Note from the GDC

Obviously, all Teams must adhere to these rules, and any stated intents of these rules.

In consideration of everything listed above, our team has interpreted the above manual entries as follows:

The team must adhere to all rules and stated intents in the manual, including the intended use of the loading station; it receives balls from a human loader and randomly send them left or right into the 3-dimensional volume of the load zone at which point the robot can pickup the ball.

The team's understanding is any robot action that prevents the completion of the intended use of the Loading Station would be a violation, specifically its ability to randomize.

2052: [<SG4d>](#) - Additional Clarification on Robots in Loading Zone

If the human Loader is no longer contacting a Ball that is being (or has been) Loaded, it is legal for a Robot to enter the Load Zone.

In consideration of Q&A 2052, our team's interpretation of the game remained the same.

When a human loader is no longer in contact with a ball that is being loaded, the robot can enter the load zone and its 3-dimensional volume, including contact with the loading station, as long as the robot does not violate the intended use of the loading station to introduce the ball into the field randomly left or right.

2484: Can a robot extend over the front of the Loading Station

There is no rule prohibiting a Robot from making contact with a Ball in the Loading Station before the Ball is "randomized" by falling left or right onto the Floor.

[<SG4>](#) clause D simply states, "No Robot(s) may be in the Load Zone at the time the Ball is released by the Loader."

The answer to 2484 counters and negates the intended use of the Loading Station per the definition in the manual as highlighted previously.

The definition of "loading station" applies every time "loading station" is referenced in the manual, therefore, it isn't defined under any Rules, but defined in the "Game-Specific Definitions" section of the manual.

The ruling in Q&A 2484 changes the definition and intention of Loading Station.

In this case, would the committee be able to reevaluate the official ruling in Q&A 2484 to match the definition of Loading station per the game manual?

Else, which takes precedence—the definition of Loading Station in the latest version of the game manual or the definition of Loading Station without the intent of randomizing as described in the official ruling in the

### Answered by committee

Per clause D of rule [<SG4>](#), "No Robot(s) may be in the Load Zone at the time the Ball is released by the Loader."

Per [Q&A 2052](#), if the human Loader is no longer contacting a Ball that is being (or has been) Loaded, it is legal for a Robot to enter the Load Zone.

After the Ball is released by the Loader, per [Q&A 2484](#), there is no rule prohibiting a Robot from making contact with a Ball in the Loading Station before the Ball is "randomized" by falling left or right onto the Floor.

Once the Loader has released the Ball into the Loading Station, there aren't any rules that define how and when a Robot can or can't contact the Ball.

---

## 2511: SG4 Intentional Strategy

6-Feb-2025  
SG4

[<SG4>](#) states that "blatantly intentional and/or Match Affecting Violations (especially during Elimination Matches) may still immediately escalate to a Major Violation at the Head Referee's discretion."

My question is how one would categorize an "intentional" violation. In one particular example, a robot is holding a mobile goal and drives directly into the positive corners where 4 rings are currently stacked (as in the initial field setup). They repeatedly back up and drive forward to bash into the rings and make them move. The intention of this robot is to clear the corner of the rings to place their mobile goal.

Should this "bashing corner rings" strategy be considered an intentional violation of [<SG4>](#) if one of the rings leave the field?

In this example, the strategy is intentionally trying to remove rings from the corner, but not intentionally trying to remove them from the field per se. How should this be ruled?

### Answered by committee

Although the underlying rule is different, our logic from [Q&A 2420](#) applies here.

In your example, the Robot is trying to make space for a Mobile Goal, and is not intentionally trying to fling Rings out of the Field. We wouldn't consider this intentional. Similarly, if a Robot is trying to descore an opponent's Top Ring from a Wall Stake and knocks it out of the Field, we wouldn't see that as intentional (it's not what they were *trying* to do).

If a Robot picks up two opponent Rings and tosses them over the field wall, we'd call that blatantly intentional.

As always, the Head Referee is responsible for determining intent within the context of the Match and the violating Robot's actions.

---

## 2484: Can a robot extend over the front of the Loading Station

30-Jan-2025

SG4

[<SG4>](#)

As long as the robot doesn't break the plane of the load zone prior to the ball being released, can a robot extract the ball from the loading station before it is 'randomized' into the load zone.

For example, is this legal? [https://youtu.be/SNF6m3-aY\\_U?si=ibUy6luElcfCgL5A](https://youtu.be/SNF6m3-aY_U?si=ibUy6luElcfCgL5A)

### Answered by committee

There is no rule prohibiting a Robot from making contact with a Ball in the Loading Station before the Ball is "randomized" by falling left or right onto the Floor.

[<SG4>](#) clause D simply states, "No Robot(s) may be in the Load Zone at the time the Ball is released by the Loader."

---

## 2458: Stuck ball in the loading station.

24-Jan-2025

SG4

At a recent competition, the ball being introduced by the loader into the loading station became stuck within the loading station and didn't exit from the randomizer and floor. The loader is not allowed to put their hands in the volume of the loading station when loading, so the loader sat their looking at the referee who had no clue what to do either. After a few seconds the referee told the loader to pull it out and reload. Can this be clarified for what ( and who) is allowed in this situation?

Two side notes: First, the referee is standing behind the goal in order to watch for balls getting stuck in the goal, that expecting a referee to try to run around to the loading station to get it would take a good 5+ seconds.

The second comment which i think is called out already, is if a ball becomes stuck in a loading station, it is likely due to a build error, which it was in this case and fixed after the match. Should this type of build error qualify for a match replay if discovered after the match but before teams scores are agreed on?

### Answered by committee

If a Ball becomes stuck in the Loading Station, the Drive Team Members should notify the Head Referee. The Head Referee should then allow the Loader to remove the stuck Ball from the Loading Station, at which point the Ball can be legally Loaded back into the field.

As always, Match replays are at the discretion of the Event Partner and Head Referee. A Ball becoming stuck in an improperly built Loading Station for a period of time could reasonably be considered a Score Affecting field fault, which could warrant a match replay under clause A of rule [<T7>](#).