Q&A

VEX V5 Robotics Competition 2024-2025: High Stakes

Tagged: SG5

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

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

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2602: Loading within boundary of the robot

4-Mar-2025 SG5

Our robot has an empty area between two spinners, and we plan to rapid load a ball on the floor in this empty area, as soon as the autonomous match starts. We will make sure that the ball does not touch any parts of the robot when we load, and the ball will be picked up by the robot's intake. It does not seem to us that this violates any rules, but we want to double check this is legal.

Answered by committee

This strategy could be legal if the Team is careful to meet the requirements of all clauses of rule <SG5>. Teams that use this strategy must accept the risk that it won't be abundantly clear (as described in the first Note following <SG5>) that they're meeting these requirements, and risk unfavorable judgment calls and related Minor and/or Major Violations and Disqualifications.

2553: question about the ball position during rapid loading

18-Feb-2025 SG4 SG5

Does the ball need to be 3 dimensional in the designated starting zone? Or it is fine as long as the ball doesn't touch the floor or wall outside the start zone?

Answered by committee

Please review the <u>Q&A Usage Guidelines</u> before posting, specifically point 2, "Read and search existing Q&As before posting." We believe the following previously answered post answers your question; if it does not, please feel free to rephrase and re-submit.

The answer in this previous Q&A applies to Rapid Loading in all Match types.

Q&A 2192: Skills Challenge - Rapid Loading Placement- RSC4

2550: Question about rapid load with the long intake

18-Feb-2025 SG5

With the Game Manual update to version 3.0, rolling a ball during the rapid load process is no longer permitted. However, many teams continue to use the long intake rack for rapid loading. We would like clarification on the legality of the following scenario: If the robot remains stationary, places the ball down, and then uses the intake to collect the ball, does this violate SG5, which states that 'Balls may never be in contact with both a Robot and a human Loader at the same time'? Alternatively, should the robot move back and forth to ensure the ball does not simultaneously contact both the loader and the robot? For reference, in this video (https://www.youtube.com/live/Aq0K4jyupWc?si=iaQdwdozdCGhbNCH), at 58:24, a team performs a rapid load using the long intake while keeping the robot stationary. Is this considered a legal load? Additionally, at 1:59:04, another team moves the robot back and forth to load the ball, seemingly to comply with SG5. Could you clarify which method aligns with the current rules?

Answered by committee

If a Robot is not driving to the Ball or actuating some mechanism in order to reach the Ball each time a Ball is Rapid Loaded, then the Rapid Loading method is very likely violating either <SG5> clause B or C.

Consider a scenario involving a Robot using rubber bands for an intake roller. With a large enough intake roller and wide gaps between rubber bands, it is technically possible for a Ball to be legally Rapid Loaded (Ball is stationary, Ball never touches both Robot and Loader simultaneously, etc.) in the gaps between rubber bands as the intake roller spins, such that neither the Robot nor the Ball needs to move to achieve contact. In reality, this is highly unlikely given the size of the Ball, common sizes of rubber band roller intakes used by Teams, and the speed/precision required to make this Loading method legal.

It should be clear to the Head Referee that a Team's method of Rapid Loading does not violate <SG5>. If the Head Referee doubts the legality of a Team's Rapid Loading method, that Team should not receive any benefit of the doubt when determining whether <SG5> violations have occurred.

2501: Question regarding ball loading during rapid loading

4-Feb-2025 SG5

<SG5>

We have seen the video where loader forcefully roll the rapid loading ball into the robot which leads to above 1000 points in skills. We have also seen more gental version of that on most of the competitions and online resources. especially, when the second ball is loaded into the robot. We understand all these loading is a violation of updated rule 3.0. But under time pressure, we are not quite sure what situation of the rapid loading ball after being loaded on the field by a loader would be considered as stationary especially giving the fact the rule aknowledges the ball could roll or move after the loader releases his/her hand from the ball. I don't have a good example, but attached is a video (starting from 17 seconds) which shows a reasonable loading into robot, the ball is primarily moved by the motor on the robot, is this loading skill would be considered as a violation under the updated rule 3.0?

https://www.youtube.com/watch?v=TaaXSEce-QI

Answered by committee

As described in the first note in rule <SG5>:

Although it is not required, Robots are highly recommended to remain some distance away from the Ball entirely until the Loader's hand has clearly been removed. This will make clauses "B" and "C" abundantly clear to Head Referees, and help them to verify clauses "A" and "D".

While the final decision is up to the Head Referee, we feel that the Rapid Load method shown in this video does NOT meet the requirements of rule <SG5>, and the Ball is being rolled into the Robot by the human Loader. Methods like this should result in a Score Affecting Violation and a Disqualification for the Match.

Loaders are advised to make it abundantly and visually obvious that they are not rolling or bouncing Rapid Load Balls, that the Ball is never in contact with both the Loader and Robot at the same time, and that the Ball is being removed from the Starting Zone by a Robot action.

2478: Rapid Load in v3.0

For the Rapid Load revision in 3.0 (SG5b, SG5d and SG5) - can you please confirm it applies to all gameplay? Alliance AND Skills (driver and autonomous) rapid loading? Thanks!

<SG5>

Answered by committee

As stated in <a href=

This means that the revised <SG5> clauses requiring Rapid Load Balls be placed in a stationary position apply to both Teamwork and Skills Matches. Rapid Load Balls can no longer be rolled by the Loader in any Match type.

2471: Loading Balls During Autonomous Programming

28-Jan-2025

SG5

Can I please get a clarification on the loading of the balls for autonomous programming?

Revised <SG5b>, <SG5d> and Note 2 of <SG5> to state that Rapid Load Balls must be placed by a Loader in a stationary position, and may not be rolled or bounced into a Robot

So according to this the balls cannot be rolled to the intake. So can the balls be placed directly in front of the intake by a human loader from outside the field in a continuous method for the robot to intake the balls and shoot from one position on the field?

<SG5>

Answered by committee

So can the balls be placed directly in front of the intake by a human loader from outside the field in a continuous method for the robot to intake the balls and shoot from one position on the field?

If Rapid Load Balls are introduced in a way that meets the requirements of all rules, including <<u>SG5></u>, there are no guidelines for the speed at which Balls are introduced or how the Robot operates.

2457: Ball feeding

24-Jan-2025

SG5

There is lot of inconsistency observed regarding the ball feeding rule during several events we participated till now. In one of the event there were 3 fields and we found the inconsistency between the fields as well. To make sure that the rule is clear to all. we captured 3 videos in which we could feed the robot during autonomous or 2nd half of manual skill event. I have already seen the similar questions asked earlier but there was no video was shared.. since video will be very easy to explain I am attaching the videos here. Pls let me know which video method of feeding the robot is allowed?<SG5>

- 1. https://drive.google.com/file/d/1inScGSUQzxIHN37YzURaMpy6BQsJeV9G/view?usp=drivesdk
- 2. https://drive.google.com/file/d/1VPIXpNWXvthacCDxdSRjVxsGmASwdGlv/view?usp=drivesdk
- 3. https://drive.google.com/file/d/1D2eyEmjFpWQe1U5zlrM6uL7NeGJq917M/view?usp=drivesdk

Here is the another video reference of 71638 https://www.youtube.com/watch?v=WoO0y_FWusQ which is similar to (1) video case. This clarification is very important to all the teams as this impact the scoring the way drivers feed the robot.

Answered by committee

With the changes to <SG5> and Rapid Loading in the January 28, 2025, game manual update, only your 3rd example is legal. Rapid Load Balls must be placed by a Loader in a stationary position, and may not be rolled or bounced into a Robot.

2450: Forcefully Rolling Balls Into Robot During Rapid-Loading

20-Jan-2025 SG5

A video has started making the rounds that shows a team getting 484 points during a driving skills match and 532 points for autonomous. For "1016 skills points"

The team's strategy relies on forcefully rolling the ball from starting zone 2 into the intake on the robot, which is positioned just at the edge of the starting zone 2.

This seems to violate <SG5>d:

Rapid Load Balls may only be removed from the Starting Zone by a Robot action (e.g., picked up by an intake, pushed by a moving Robot, etc.). Rapid Load Balls cannot be bounced or rolled out of that Starting Zone by a Loader).

The primary force removing the ball from the starting zone is the force applied by the loader, not the robot mechanism. If the robot was not present the ball would clearly be capable of travelling much further than the distance to the goal, and without the loader rolling the ball, the robot would have a much more difficult time removing the ball from the starting zone, if it would even be capable of doing so.

Q&A 2367 states:

A motor-driven, moving part of the Robot could be considered a Robot action. Removing a Rapid Load Ball from the Starting Zone with a moving part of the Robot would generally not be a Violation of SG5.

But it's not clear in this video how much the motor is contributing to the removal of the ball vs the action of the loader.

<SG5> Note 2 seems to further indicate that this type of loading is not acceptable:

Note 2: Although it is not required, placing the Ball gently down onto the Field without any additional motion is highly recommended. Unorthodox strategies, such as "tossing" or "rolling" the Ball, will not receive any "benefit of the doubt" if the Head Referee cannot clearly confirm that all criteria have been met (especially clauses "B" and "D").

Is this method of loading allowed? As a head ref I would like to be able to make a fair and correct ruling if a team uses this strategy in one of my competitions.

Answered by committee

Note: As of the January 28, 2025, game manual update, Rapid Load Balls cannot be rolled or bounced, and must be placed in stationary positions. Parts of our original answer to this question no longer apply.

We believe the strategy you describe would not meet the guidance provided in our answer to Q&A 2367 (the pertinent portion of that answer is included below), and should be considered a Score Affecting and/or intentional <SG5> Violation that results in a Disqualification for the Match.

From Q&A 2367: The final decision of whether a specific Robot and mechanism meets the requirements of rule <SG5> must be made by the Head Referee at the event. Some factors that can help Head Referees make this

decision are:

- Would the Rapid Load Ball still be removed from the Starting Zone if the Robot wasn't turned on? If the
 answer is yes, then that motor-driven, moving Robot part is not much different from a passive mechanism and
 is probably not removing Balls from the Starting Zone. Even when that part is moving, the Ball is being
 removed due to some other action, such as being rolled by the Loader, which would be a Violation of <SG5>.
- Could the Robot obtain the Rapid Load if it was put in a stationary position by a Loader? If rolling or some other motion caused by a human Loader is required for the Robot to obtain the Ball, that Ball is probably not being removed by a Robot action, and it's a Violation of <SG5>.

2414: Rapid Loading During Elimination and Finals Matches

26-Dec-2024 RSC4 SG5

<SG5> Q&A 2137 addresses <RSC4> Rapid Loading differences during Skills Matches (Autonomous and Driving) and states that the balls must be removed from the zone they are introduced into (Zone 2) by robot action. Does this apply to Elimination and Qualification matches as well or is it legal to introduce a Ball in one starting zone and have the robot remove it from another starting zone (i.e., introduce the ball into Starting Zone 2 and roll it into Starting Zone 1 where, by robot action, it is removed from Starting Zone 1)?

Answered by committee

A Ball introduced into Starting Zone 2 has left / been removed from Starting Zone 2 once the Ball has fully left the vertical projection of Starting Zone 2.

If the Ball is introduced into Starting Zone 2 by the Loader and rolls fully out of Starting Zone 2 into Starting Zone 1, the Ball has been removed from Starting Zone 2 via means other than a robot action, making this a violation of <SG5>.

2392: Final Clarification on Rapid Load location (hopefully) - Qualification and Final rounds

16-Dec-2024 RSC4 SG5

For rule <SG5> Loading During the Rapid Load Period, it states that loaders "have the option to introduce Balls directly onto the Starting Zone (i.e. without using the Loading Station)." Please clarify that the teams can rapid load into EITHER starting Zone 1 or 2, or just starting Zone 2. Rapid Loading from Starting Zone 1 seems to give a decided advantage in terms of proximity to the Goals so I just wanted to verify WHERE teams can rapid load during the Rapid Load period, from Starting Zone 1, 2, or either. Thank you for your guidance.

Answered by committee

<SG5> does not restrict Rapid Loading to one Starting Zone or the other. During Teamwork Challenge Matches, Teams can Rapid Load into either Starting Zone 1 or Starting Zone 2.

For Driving Skills Matches and Autonomous Coding Skills Matches, <RSC4> restricts Rapid Loading to only Starting Zone 2.

2367: Rapid loading clarification

<SG5>

Dear VEX IQ, Due to the rule SG5 d, the rapid load ball can only be remove from the loading zone by the robot. Here is some situation:

- 1. The ball is placed by the loader, and a rolling roller intake the ball.
- 2. The ball is placed by the loader, a one way gate go through it, and pull back the ball which let the ball roll toward the robot itself
- 3. The ball is roll by the loader, but it touch some part of the robot that is not moving, for example a plastic sheet and leave the load zone
- 4. The ball is roll by the loader, but it touch some part of the robot that is not moving but can be move, for example a roller unconnecting to the motor and leave the load zone
- 5. The ball is roll by the loader, but it touch some part of the robot that is moving(connecting to the motor) and leave the load zone

Please clarify the situation above

Thank you, by 5491M

Answered by committee

Note: As of the January 28, 2025, game manual update, Rapid Load Balls cannot be rolled or bounced, and must be placed in stationary positions. Portions of this answer no longer apply.

The final decision of whether a specific Robot and mechanism meets the requirements of rule <<u>SG5></u> must be made by the Head Referee at the event. Some factors that can help Head Referees make this decision are:

- Would the Rapid Load Ball still be removed from the Starting Zone if the Robot wasn't turned on? If the answer is yes, then that motor-driven, moving Robot part is not much different from a passive mechanism and is probably not removing Balls from the Starting Zone. Even when that part is moving, the Ball is being removed due to some other action, such as being rolled by the Loader, which would be a Violation of <SG5>.
- Could the Robot obtain the Rapid Load if it was put in a stationary position by a Loader? If rolling or some other motion caused by a human Loader is required for the Robot to obtain the Ball, that Ball is probably not being removed by a Robot action, and it's a Violation of <SG5>.

To address your examples:

- 1. A motor-driven, moving roller intake could be considered a Robot action. Removing a Rapid Load Ball from the Starting Zone with a moving roller intake would generally not be a Violation of <SG5>.
- 2. We're not 100% certain what is being described in this example. A Robot that retracts a mechanism to grab the Ball or drives with the Ball in its control could be considered a Robot action. Removing a Rapid Load Ball from the Starting Zone via one of these methods would generally not be a Violation of <SG5>.
- 3. Contacting a Ball with a passive part of a Robot does *not* qualify as a Robot action. Removing a Rapid Load Ball from the Starting Zone via means other than a Robot action would result in a Violation of <SG5>.
- 4. Contacting a Ball with a passive roller on a Robot does *not* qualify as a Robot action. Removing a Rapid Load Ball from the Starting Zone via means other than a Robot action would result in a Violation of <SG5>.
- 5. A motor-driven, moving part of the Robot could be considered a Robot action. Removing a Rapid Load Ball from the Starting Zone with a moving part of the Robot would generally not be a Violation of <SG5>.

2352: SG1/SG5 question - Both robots touching the same preload to start match

6-Dec-2024 SC8 SG1 SG5

SG1-b states that to start a match a robot can be touching 1 preload and SG1-c states that they can not be touching any other robots. My question is can both robots be touching the same preload?

Scenario that I have seen is where robot 1 had no autonomous and robot 2 could complete all steps to get AWP by themselves minus robot 1 breaking the plane of the starting line. So they lined both robots up with both touching one

preload. Robot 2 started the autonomous by more less pushing robot 1 off the line by pushing the preload that both robots were touching and then robot 2 went and completed the other 3 steps to get AWP. Is this allowed or a rule violation? <SG1><SG5>

Answered by committee

Clause A of rule <SG5> requires that each Robot have a preload placed such that it is (bold added here for emphasis), "Contacting **one** Robot of the same Alliance color as the preload."

Each preload may only be in contact with one Robot, and each Robot may only be in contact with one preload.

2226: <SG5> Starting a match with a preload touching the wall

26-Oct-2024 SG4 SG5

At a recent event, a robot started a match with their preload ring touching the top of the field perimeter wall, as pictured in the link below. $\frac{\text{https://imgur.com/a/G60BP15}}{\text{Monther of the preload ring meets}}$ The preload ring meets all of the criteria for $\frac{\text{SG5}}{\text{SG5}}$, as the ring is touching one alliance robot, not contacting the same robot as another preload, and is not touching a scoring element. Would this placement of the preload ring be legal if it is touching or is being supported by the top of the field perimeter wall? Are there any concerns in this scenario for $\frac{\text{SG4}}{\text{SG4}}$?

Thank you for your time.

Answered by committee

No rules prohibit this, therefore it is legal.

2208: Rapid load question - Team alliance

21-Oct-2024 SG5

<SG5>

There is a <u>previous question</u> which discusses that during last 15 seconds (Rapid load) of an alliance matches team can choose to use the loading station instead of starting zones, can the team then pass the balls to get the passing points instead of gaining 1 point per goal?

Let's say team has knocked off 4 switches and in the last 15 seconds of rapid load time loading station is used. Each ball can be passed and then scored to get 12 points per goal instead of 1 point per goal?

Please also point out any rule that is covering this scenario?

Answered by committee

Once the Rapid Load Period begins, Teams may choose to Load Balls via the Loading Station (making them eligible to count for Passes) or via Rapid Loading directly into a Starting Zone (not eligible for Passes). Teams may freely switch between the two Loading methods during this period.

<SG5> states (bold added here for emphasis):

Loading during the Rapid Load Period. During the last fifteen (15) seconds of the Match, Loaders have the **option** to introduce Balls directly onto the Starting Zone (i.e., without using the Loading Station).

2050: Rapid Load Period

27-Jun-2024 SG5

If you load a ball through the Loading Station during the Rapid Load Period, are you still eligible to score points by passing with the ball that was loaded through the Loading Station?

Answered by committee

Yes.

192: Blocking Opponent Shots

20-Dec-2018 G14 SG5

Hi There,

Would it be legal for a team, let's say BLUE1, to have a large piece of legal material, provided they have passed inspection and are within the expansion limits (18"x18"x18"), on field used *solely* with the intent to block opponent shots. In this hypothetical scenario, RED1 has lined up to take a shot at two flags, and BLUE1 has driven in front of RED1. From here, there are a few scenarios that can occur, I will outline them below.

Scenario 1) BLUE1 is holding a ball and actively pushing RED1, while RED1 is not showing any attempt to escape (eg. no drive motion on joysticks). RED1 fires two balls, both of which hit BLUE1's plate and then bounce off. Would this be legal, or would it go past the possession limits outlined in rule SG5?

Scenario 2) BLUE1 does not have any game objects and is actively pushing RED1, while RED1 is not showing any attempt to escape. Both balls are fired, again bouncing off. Would this be legal?

Scenario 3) BLUE1 has game objects and is actively pushing RED1, while RED1 is actively fighting back. RED1 is approximately 1 tile away from the platforms, and BLUE2 is behind RED1, however they are just "passing through", on their way to score their own game object and in no way showing an intent to block RED1. RED1 fires, again both balls bouncing off BLUE1's blocker. Would this violate SG5 for hoarding, as well as G14 for trapping. Would BLUE be called for trapping if this situation passed 5 seconds? There is an open avenue for espace on both sides of the RED1 robot, RED1's robot may not however, be capable of 'strafing', or sideways motion and are thus unable to back away.

Scenario 4) This is similar to Scenario 3), however BLUE1 is not holding any game objects (scenario 4 is to scenario 3 as scenario 2 is to scenario 1).

Scenario 5) BLUE1 has game objects, and is pushing both RED1 and RED2. RED is being pushed towards the alliance platforms, RED1 and RED2 both fire two balls and both are blocked by BLUE1 - what call (if any) would be made?

Last question - if BLUE1 has this blocker, but RED1 comes underneath and forces the blocker above 18" (for example, by bending a piece of metal). What is the ruling here? Would it be different if RED1 bent it with for example, an arm or lifting mechanism, or if RED1 bent it with the sheer force of hitting it repeatedly with a ball.

Thanks, Anthony.

We apologize, but it is always difficult to rule absolutely on hypothetical scenarios, and we are having a hard time understanding the root of the question that you are attempting to ask.

Please review the <u>Q&A Usage Guidelines</u>, specifically points 1, 3, 4, and 5, and re-submit your question. It will be much easier to provide a clear interpretation if you phrase your question concisely and in terms of a specific rule.

1850: Re moving triball from the top of the goal

1-Jan-2024 SG5

<SG5>

If a robot pushes or pulles the triballs from the top of the goal without touching the net, does it violate SG5?

Answered by committee

If a robot pushes or pulles the triballs from the top of the goal without touching the net, does it violate SG5?

If there is no interaction or Entanglement with the net, then no, an SG5 Violation is not likely. However, although we cannot comment absolutely on hypothetical scenarios, this interaction sounds more like <SG8> would be the rule to apply.

1808: <SG5> Lifting the Goal in an attempt to add or remove triballs

3-Dec-2023 SG5

Hello, Reading through <SG5>, we can see that in the attached note, "Lifting the net structure in an attempt to add or remove Triballs is considered a Violation of <SG5>", recently QA1684 had highlighted that pretty much all VRC rules are only intended to apply to one Team / Robot.

Given that lifting the net without adding or removing triballs is a legal action as per the note and shooting triballs is also a legal action, by this logic one robot may lift the net structure to open a goal for another robot to shoot directly into it.

In regards to <G3>, there are no obvious typographical errors, and no rule is prohibiting this action and we are assuming that as it stands it is currently legal, given that there was leeway left for the net to be opened provided no triballs were added or removed, would it be correct to assume that this is not governed by <G3>?

Assuming that this is logic is sound, we would like to ask the following:

Provided that a robot does not contact the net, and lifts the net only by contacting the net structure, Is the strategy described above legal in VRC and VEXU?

In regards to the above, I want to also clarify how this would relate to QA1685, in which it is stated that in safety or damage related circumstances robots may be disabled in the autonomous period, leading on to the following question:

If a net is open, it may lead to unanticipated risks of entanglement and damage to the field in autonomous, should robots that are heading in the direction of an open goal in the autonomous period be disabled before contact?

Lastly, regardless of whether a net was opened strategically or not, in the event that a net is open, how should triballs be considered scored in the following scenarios?

1. Triballs within the PVC pipes that are no longer underneath the net, as per <SC3>:

at least (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.

Therefore, when a net has been opened, as the triballs are no longer underneath the net (but within the PVC pipes), are they considered scored in the goal? Based on Figure 24 under <SC3>, it is shown that two corners are in the goal, not underneath the net and considered scored. Would it be correct to assume that triballs still count, and that they are not physically required to be under the new location of the net. 2. If the net is open, would triballs underneath the open net be considered scored? Would the PVC pipes of the net structure be an extension of the "within the PVC pipes" part of <SC3>?

Cheers and thank you for your time, Southern Hemi-Spencer

Answered by committee

Provided that a robot does not contact the net, and lifts the net only by contacting the net structure, Is the strategy described above legal in VRC and VEXU?

No. As described in clause a of rule <T10>, "Field Element tolerances may vary from nominal by up to ±1.0." Sheet 8 of 15 on page A13 of Appendix A illustrates that the nominal position of the Goal puts the Goal in contact with the top of the field perimeter. Cases in which a Robot intentionally moves a stationary Field Element out of tolerance should be ruled as Violations of rule <S1> and result in a DQ for that Robot (or Alliance, if the Violation occurs during an Elimination Match).

If a net is open, it may lead to unanticipated risks of entanglement and damage to the field in autonomous, should robots that are heading in the direction of an open goal in the autonomous period be disabled before contact?

No. The disablement described in the Note for rule <G11> and Q&A 1685 is *only* intended for cases where a Robot is exhibiting an immediate safety hazard. It is not possible to accurately predict the severity or duration of a hypothetical future entanglement.

Lastly, regardless of whether a net was opened strategically or not, in the event that a net is open, how should triballs be considered scored ...?

If the Goal moves out of tolerance during a Match, a Triball should be considered scored in that Goal if it is not contacting a Robot of the same color Alliance as the Goal and if at least 2 corners of the Triball have broken the plane of the outer edge of the PVC pipes that define the Goal volume (i.e., would meet the requirements of <SC3> if the Goal were within tolerance).

Cases in which the Goal moves out of tolerance during normal gameplay or not due to Robot interactions may be eligible for a Match Replay as described in rule <T7>.

1738: Proper Action if Net Clamp comes loose?

31-Oct-2023 SG5

During our matches there have been situations where a robot bumps into plastic clip of the goal causing it to come loose even after we added tape inside the clip. It does not fall onto a robot or cause entanglement. Are the matches to just continue as normal with a fallen net? Should a team be disabled due to <SG5>?

Answered by committee

A fallen net could warrant a Match replay under clause A of rule <T7> if the Head Referee determines that it was Match Affecting, and if both the Head Referee and Event Partner agree that a replay is appropriate. If no Robots are

1685: <SG5> Net Entanglement in Auton

9-Oct-2023 SG5

Hello!

Recently at an event, we had an interaction in the neutral zone which had resulted in a robot driving inside of the net, whilst underneath the net it fired its catapult repeatedly which began hitting the net,, as per <SG5> normally this type of interaction would result in the Disablement of the Entangled robot, or due to the risk of damage to the field, but as this interaction occurred during autonomous, there was no way to disable the robot without aborting early.

If this had happened at the beginning of autonomous, this could lead to serious damage to the field, and under normal conditions this interaction should not have occurred, what should Head Referees do if this situation arises, and what team would be responsible for entanglement with the net?

Cheers

Answered by committee

Teams are responsible for the actions of their own Robots at all times, including during the Autonomous Period.

In an extreme case such as the one described in your post, or if the Robot is exhibiting an immediate safety hazard (e.g. leaving the field) Teams may disable their own Robot by holding the power button on their Controller.

It should be noted that this exception is only intended for egregious safety- or damage-related circumstances; it is **not** acceptable for strategic purposes, such as disabling a Robot before it crosses the Neutral Zone.

As such, it would generally be assumed that Robot is in an unsafe/damage-prone state where it would be expected to stay Disabled for the rest of the Match. However, if the Head Referee wishes to grant the 5-second grace period allowed by <SG5>, the Team may re-start their Robot's program during the pause between the Autonomous and Driver Control Periods. This must be done from the Controller; Teams must still abide by <G9>.

This is a specific (and hopefully rare) exception to rule <G11>, that will be added in the next Game Manual update.