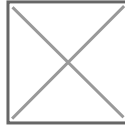


Q&A

VRC 2019-2020: Tower Takeover

Tagged: G11



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

Please review the [Q&A Usage Guidelines](#) before posting. This system is only intended for specific VRC Tower Takeover rules questions.

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 - For VEX technical support, contact support@vex.com or sales@vex.com.
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969: Forced into penalty with Disablement during Auton

9-Dec-2021

G3 G11 G14

In the autonomous period, if two robots grab a goal and the Red robot pulls the Blue robot across the alliance line.

1. is this a violation for the Blue robot?

Rules say that a robot may not be forced into a penalty.

But what if the Blue robot still in auton then Disables the Red robot? Is there any penalty by either robot?

Answered by Game Design Committee

Please review the [Q&A Usage Guidelines](#) before posting, specifically point 3, "Quote the applicable rule from the latest version of the manual in your question".

In this case, the applicable rule is SG5, quoted below, with a portion bolded for emphasis.

<SG5> Enter the Neutral Zone during Autonomous at your own risk. Any Robot who engages with the Neutral Zone during the Autonomous Period should be aware that opponent Robots may also choose to do the same. Per <G11> and <G12>, Teams are responsible for the actions of their Robots at all times.

- a. For the purposes of this rule, "engages with" means any combination of:

- i. Contacting foam tiles within the Neutral Zone

- ii. Contacting Neutral Mobile Goals

- iii. Contacting Rings that begin the Match on the double white tape line in the center of the Neutral Zone

- b. If opposing Robots contact one another while both engaging with the Neutral Zone, and a possible <G12> violation results (i.e. damage, Entanglement, or tipping over), then a judgment call will be made by the Head Referee within the context of <G12> just as it would if the interaction had occurred during the Driver Controlled Period.

- c. If opposing Robots contact one another while both engaging with the Neutral Zone, ****and an incidental violation of <SG4> occurs, **no penalty will be assessed on either Alliance.**

- d. <G15> does not apply during the Autonomous Period.

- e. Intentional, strategic, repeated, or egregious offenses of points "b" or "c" may still be deemed a violation of <SG4>, <G12>, <G13>, <G14>, <G1>, and / or <S1> at the Head Referee's discretion.

As well as the following portion of the "red box" underneath SG5:

The Neutral Zone is intended to be a zone that Robots from both Alliances can utilize during the Autonomous Period. This will inevitably result in Robot-on-Robot interactions, both incidental and intentional. The overarching intent of <SG5> is for the vast majority of these interactions to result in no rule violations and / or penalties for either Alliance, just as no rules violations occur in 99% of Driver Controlled interactions.

So, with those quotes in mind...

if two robots grab a goal and the Red robot pulls the Blue robot across the alliance line. is this a violation for the Blue robot?

This sounds like an incidental violation of SG4. Therefore, point "c" would apply, and no penalty would be assessed on either Alliance.

But what if the Blue robot still in auton then Disables the Red robot? Is there any penalty by either robot?

This sounds like a possible violation of G12. Therefore, point "b" would apply, and the Head Referee will make a judgment call within the context of G12 just as if the interaction had occurred during the Driver Controlled Period. In most cases, this would be considered "no violation".

As stated in G11, G12, and SG5, Teams are responsible for the actions of their Robot at all times. Robots who choose to engage with the Neutral Zone during the Autonomous Period should be aware that opponent Robots may also choose to do the same, and prepare for the risks associated with doing so.

447: Autonomous bonus - both alliance commit a violation

9-Dec-2019

G11

<G11> All rules still apply in the Autonomous Period. Any infractions committed during the Autonomous Period that are not Match Affecting, but do affect the outcome of the Autonomous Bonus, will result in the Autonomous Bonus being automatically awarded to the opposing Alliance. a. Teams are responsible for the actions of their Robots at all times, including during the Autonomous Period. Any infractions committed during the Autonomous Period that are Match Affecting can result in a Disqualification, if warranted by the rule. b. If both Alliances cause infractions during the Autonomous Period that would have affected the outcome of the Autonomous Bonus, then no Autonomous Bonus will be awarded.

Autonomous Bonus - A bonus awarded to the Alliance that has earned the most points at the end of the Autonomous Period. The Autonomous Bonus consists of six (6) points added to the score at the end of the Match, and two (2) Match Loads that may be entered any time during the Driver Controlled Period. Note: If the Autonomous Period ends in a tie, each Alliance will receive an Autonomous Bonus of three (3) points and one (1) Match Load.

If both alliance commit a violation in autonomous, it would result in no autonomous bonus being awarded. In this case, does each alliance receive one match load (same as tie) or will no alliance receive match load(0 match load given out) (since there is no autonomous winner)

Answered by Game Design Committee

Per the definition that you quoted, the Autonomous Bonus includes both the six points *and* the Match Load Cubes.

If no Autonomous Bonus is awarded due to G11-b, then no points are awarded, and no Match Load Cubes are distributed.

405: Indirect Cube movement while Autonomous

2-Nov-2019

G11 SG2 SG7

During the Autonomous period, if a red robot causes a cube from the vertical stack of four to fall while trying to get cubes from that stack and one or more of the cubes in that stack crosses the autonomous line and causes the other vertical blue alliance stack of four to fall is that a violation of any rule?

Additionally, if the other team is not running autonomous, is the answer the same?

The robot is not directly touching the cube that crosses the line-e.g. trying to get the bottom 2 cubes of the stack.

Answered by Game Design Committee

It is impossible to issue a blanket ruling based on a snapshot description of a hypothetical Match. In general, SG7 and SG2 would be the primary rules that a Head Referee would have to look at in this case:

<SG2> Stay on your side in Autonomous. During the Autonomous Period, Robots may not contact the foam tiles, Towers, or Cubes which are on the opposing Alliance's side of the Autonomous Line.

Violations of this rule will result in the Autonomous Bonus being awarded to the opposing Alliance. Intentional, strategic, or egregious violations, such as intentional contact with an opposing Robot while completely across the Autonomous Line, will result in a Disqualification.

Note: Towers and Cubes which begin the Match in contact with the Autonomous Line are not considered to be on either side, and may be utilized by either Alliance during the Autonomous Period. If attempting to utilize these Towers or Cubes, Teams should be cognizant of the possibility that opponent Robots may attempt to do the same. <SG7>, <G10>, <G11>, and <G12> will be taken into account when these types of Robot interactions occur.

<SG7> Use Cubes to play the game. Cubes may not be used to accomplish actions that would be otherwise illegal if they were attempted by Robot mechanisms. Examples include (but are not limited to):

- Encroaching upon an opponent's Protected Zone per <SG3>.
- Interfering with an opponent's Autonomous Period per <SG2>.

Causing Cubes to interact with foam tiles, Towers, or Cubes on the opposing Alliance's side of the Autonomous Line would be considered a violation of SG2 via SG7. Per SG2, violations could range from the Autonomous Bonus being awarded to the opposing Alliance, to a Disqualification, depending on the context of the interaction.

344: Can a part of the robot be moving before a match?

3-Sep-2019

G7 G11

I had trouble finding an applicable rule.

<G7> Drivers switch Controllers midway through the Match. In a given Match, no Driver shall operate a Robot for more than thirty-five (0:35) seconds. The two Drivers must switch their controller between twenty-five (0:25) seconds and thirty-five (0:35) seconds remaining in the Match. The second Driver may not touch his/her Team's controls until the controller is passed to him/her. Once the controller is passed, the first Driver may no longer touch his/her Team's controls.

Can a team start a motor moving before the match? For example, have the robot start a flywheel so it is spinning when the match starts? There is no version of <G11> for the beginning of the match. It would be possible to start the motor without using the controller.

Answered by Game Design Committee

There is nothing prohibiting this, thus it is legal, provided no other rules are violated in the process.

2517: Clarification on "score affecting"

9-Feb-2025

G11

i would like clarification on what is considered score affecting for rapid relay? Is it only goals and switches? Passes?

In a recent finals match, a team in the winning alliance swapped controller late (with about 13 seconds to go in the match).

Per G11, it is up to the head ref's discretion if this would be considered a minor violation or if it was score affecting. It was deemed as minor since no goals were scored by the incorrect driver. However, passes were completed with the incorrect driver in control. Should passes be considered score affecting in future cases (in this particular case, there were more goals than passes so the pass points did count)? What about the wrong driver loading a ball that was later scored? Is that score affecting?

[<G11>](#)

Answered by Game Design Committee

As stated in the Violation Notes for [<G11>](#), a late Driver switch could escalate to a Major Violation if the Head Referee determines that Score Affecting actions occurred as a direct result of the Violation, "such as the first Driver scoring additional points after 35 seconds of driving."

Scoring a Goal, Clearing a Switch, and completing a Pass should all be considered Score Affecting actions.

As for the wrong Driver Loading a Ball that is later scored, per clauses E & F of [<SG4>](#) and clause g of [<SG5>](#) the improperly Loaded Ball should be retrieved from the Field immediately before it is contacted by a Robot. Per the 2nd Violation Note in [<SG5>](#), "In accidental cases that end up being Score Affecting (i.e., an illegally-Loaded Ball scores a Goal), the first occurrence during a Qualification Match may be treated as a Minor Violation and a "final warning" for any future Violations." Although this note does not appear in [<SG4>](#), it would be reasonable for a Head Referee to apply the same logic for that rule if a judgment call must be made.

2418: Spectators near field perimeter during skills

1-Jan-2025

G11

Rule [<G11>](#) states that

During the Autonomous Period, Drive Team Members are not permitted to interact with the Robots in any way, directly or indirectly. This could include, but is not limited to: [...] Manually triggering sensors (including the Vision Sensor) in any way, even without touching them

However, it is possible for a spectator (a person who is not a Drive Team Member) to stand nearby the field during the autonomous skills match and manually trigger sensors on the robot. Even if this action is accidental, it can still negatively affect the robot's autonomous routine if sensors are triggered when they normally would not be. Spectators interacting with the robot is not expressly forbidden by G11, but we believe that it does go against the intent of G11 and is probably forbidden by [<G3>](#). Are there any safeguards that should be put in place (such as spectators needing to stand behind a minimum distance from the field perimeter) or is this something that should be up to the Head Referee's discretion?

Answered by Game Design Committee

Note 2 for rule [<G8>](#) says, "During a Match, Robots may be operated only by the Drive Team Members and/or by software running on the Robot's control system, in accordance with [<R27>](#) and [<G10>](#)." A spectator triggering sensors on a Robot would be a clear Violation of this rule.

There's not a rule in the game manual that specifies where spectators can and cannot be, although an Event Partner may designate any area as off-limits to spectators under rule [<T4>](#).

2415: 2 Player Team

27-Dec-2024

G11

Dear Vex IQ, I want to ask some situation in skill match(There will be driver A and B, A is the first driver B the second):

1. A put the controller on the ground before 35 seconds, and prepare to rapid reload(before 35 sec), and B pick up the controller
2. A control, and B load the balls, B control A load the balls
3. A control the first 25 seconds, B don't control, so the bot is staying the same position and B become the loader who only loads the ball. Which means that match there is only one driver and one loader, so the bot is moving without any driver contacting to the controller(program).

The second situation is in teamwork: 1.One driver controls the first half of the match or second half, and the other player become the loader. Which means only 1 driver 1 loader(in our team), and the other half of the driving match is run by program(no one touching the controller) 2.Driver A control first half, driver B be loader at first half, Driver B control the second part, Driver A become the loader.

Please clarify which of the situations are legal or some of specific rule for 2 player teams.

Answered by Game Design Committee

For Driving Skills Matches:

1. Student A is still considered the active Driver until the Driver switch occurs, at which point Student B becomes the active Driver. Prior to the Driver switch, Student A can set the controller on the ground and reposition themselves in the Driver Station, but Student A cannot leave the Driver Station or perform other actions restricted to a Loader until after the Driver switch occurs.
2. It is legal for Student A to drive while Student B acts as the Loader until the Driver switch is completed, and then for Student B to drive while Student A acts as the Loader.
3. The Controller must be physically passed between Drivers in a Driver switch, and there must always be a Drive Team Member designated as the active Driver at any given moment in the Match. If Student A starts the Match as the active Driver, then Student B must become the active Driver after the Driver switch, meaning Student B cannot act as a Loader after the Driver switch.

For Teamwork Match scenarios, refer to our previously posted answer for [Q&A 2359: Clarification for 2 person teams](#).

2403: G11: Selecting Program on Controller After Autonomous Begins

19-Dec-2024

G11

[<G11>](#) states (emphasis mine)

During the Autonomous Period, Drive Team Members are not permitted to interact with the Robots in any way, directly or indirectly. This could include, but is not limited to:

- **Activating any controls on their V5 Controllers**

If a team forgets to select the autonomous program on their controller and does so once the Autonomous Period begins, would this be considered a Major or Minor Violation of the highlighted bullet point of G11 above, resulting in the opposing alliance receiving the Autonomous Bonus ([<G12>](#) violation notes?) Or would the highlighted bullet point above only take effect once a team selects a program on their controller?

For purposes of determining when the Autonomous Period begins, would it be once the "3, 2, 1" countdown from Tournament Manager begins before the 15 second (V5RC Head-to-Head match) timer, or only during the 15 seconds

when the Robots can move around the field? The definition of Autonomous Period in the General Definitions section of the Game Manual seems to indicate it would only be the 15 seconds where Robots move around the field, but I would appreciate confirmation on this.

Thank you for your time!

Answered by Game Design Committee

If a team forgets to select the autonomous program on their controller and does so once the Autonomous Period begins, would this be considered a Major or Minor Violation of the highlighted bullet point of G11 above, resulting in the opposing alliance receiving the Autonomous Bonus?

If a Team pushes a button or activates any other control on their V5 Controller at any time during the 15-second Autonomous Period of the Match (whether to select a program or for any other purpose), it should be considered a Major or Minor [G11](#) Violation depending on whether or not the actions by that Robot during the Autonomous Period are deemed Match Affecting by the Head Referee. The Team's Alliance is not eligible to receive an AWP or any portion of the Autonomous Bonus for the Match.

2359: Clarification for 2 person teams

7-Dec-2024

[G11](#)

My 2 person team is trying to figure out how they could deal with the logistics of being paired with another 2 person team. It may be difficult for them to find a temporary loader for the single match since that would disqualify that person from loading for any other teams (including their own team - I have advocated for a rule change to help here). In the case they only have 2 team members for each alliance, they believe their best strategy would be for one of the drivers to forfeit driving and become a loader. I assume that is legal since its not specified. However, per G11d, it indicates a single driver must "cease robot operation after the first 35 seconds". Can the robot continue to operate after this time? For example, if they wrote code to hit a button before setting the controller down to allow the robot to run autonomously the last 25 seconds, is that legal?

[G11](#)

Answered by Game Design Committee

If a 2-person Team is paired with another 2-person Team for a Rapid Relay Teamwork Match and cannot find a substitute Loader as allowed by clause Cii of rule [G4](#), they will be unable to Load Balls during the Match. Coaches and Teams are encouraged to plan ahead to ensure that they are able to field a Drive Team that is capable of meeting the requirements of the game.

Per clause Ciii of rule [G4](#), if two Drive Team Members are at a Match, both must serve as Drivers and cannot operate as Loaders (per clause D of rule [G11](#)).

In the case of a single-student Drive Team, the Robot must cease operation after the first 35 seconds of the Match. This is a slight change from the current wording of the note in rule [G11](#) and is effective immediately. If a Team wishes the Robot to operate autonomously for the 2nd half of the Match, a 2nd Drive Team Member from that Team must be present in the Driver Station and take part in the Driver switch as described in rule [G11](#).

2333: Not running program during Autonomous Period

28-Nov-2024

[G11](#)

In [Q&A 2328](#), it was clarified that teams who have *disabled* their robot during the autonomous period by holding the power button on their V5 Controller are not permitted to operate their robot for the rest of the match including the driver control period. However, if a team strategically decides to not run their program at all during the autonomous period by not pressing run on their controller prior to the start of the match, would they still be permitted to later run their program and operate their robot after the autonomous period has ended? While the ruling in Q&A 2328 was made based on rule [<G11>](#), this action does not seem to be in violation of [<G11>](#) because, by neglecting to run the program prior to the match, the drive team members never actually interact with the robot during the autonomous period.

Answered by Game Design Committee

The game manual does not require Teams to run an autonomous program. Provided no other rules are broken, this would be legal.

2328: Auton Disablement in Driver Control

25-Nov-2024
G11

Hello,

<G11> Autonomous means “no humans.” During the Autonomous Period, Drive Team Members are not permitted to interact with the Robots in any way, directly or indirectly. This could include, but is not limited to: Activating any controls on their V5 Controllers Unplugging or otherwise manually interfering with the field connection in any way Manually triggering sensors (including the Vision Sensor) in any way, even without touching them Note: **In extreme cases, with permission from the Head Referee, Teams may Disable their Robot during the Autonomous Period by holding the power button on their V5 Controller.** This exception is only intended for egregious safety- or damage-related circumstances; disabling an autonomous routine for strategic purposes would still be considered a Violation of <G11>.

Disablement – A penalty applied to a Team for a safety Violation. **A Team that receives a Disablement is not allowed to operate their Robot for the remainder of the Match**, and the Drive Team Member(s) will be asked to place their controller(s) on the ground.

If a team is required to disable their robot during the autonomous period, are they permitted to operate their robot during the driver control period, assuming any potential safety or damage related risks no longer apply?

If a team strategically disables their robot in violation of G11, would they still be permitted to operate their robot during the driver control period?

Answered by Game Design Committee

If a team is required to disable their robot during the autonomous period, are they permitted to operate their robot during the driver control period, assuming any potential safety or damage related risks no longer apply?

No.

If a team strategically disables their robot in violation of G11, would they still be permitted to operate their robot during the driver control period?

No.

232: clarification on trapping.

This question focuses around "trapping", which is defined in the game manual as a robot status where "a robot is trapping if it has restricted an opposing robot into a small, confined area of the field, approximately the size of one foam field tile or less, and has not provided an avenue for escape. Trapping can be direct (e.g. pinning an opponent to a field perimeter wall), or indirect (e.g. preventing a robot from escaping from a corner of the field). <G14> also states that there should be no trapping for more than 5-seconds, and is effectively over once the opposing robot has driven away by 2 feet and has driven away for 5 seconds.

Trapping however, has a loose definition of "avenue of escape" and "confined area of the field". Pinning, has also not been defined. If a robot were to push an opposing robot, this would be deemed legal, because there is open space around the robot. If a robot were to push another robot into the wall, and then back away, leaving enough space in the front and back for the robot to escape, but would push the robot every couple seconds, would this be legal? The defending robot in this instance, is not technically trapping the robot as it has not confined the robot, the robot can escape, however is not doing so fast enough, and the defending robot is pushing (which, is not trapping), the robot ever so slightly. Would this be considered trapping?

A follow up to the above question, what is the definition of an avenue of escape? If there is a robots-width of space between a post and my robot, then that should be sufficient for a count to NOT be held against me. By that sense, if a robot is in a corner, and caps/balls are piled beside them (which should not be hoarding, the caps are not in the corner because the corner is occupied by a robot), and can not escape, it should not be a trap, correct?

We would also like to seek clarification on pushing, there have been many referees at local tournaments who start counting as soon as robot-robot contact has been made (ie, RED1 pushing BLUE1 away from flags so they can not line up for flags), however, as per the rules, this should be legal, correct? Now, suppose a robot, say BLUE1 were to push RED1 into their partner, RED2, in the middle of the field. RED1 has a clear avenue of escape, all RED needs to do is have RED2 drive away, and RED1 can then drive away. Would this still be counted as a trap? Now what if BLUE1 was preventing RED1 from moving, who was then preventing RED2 from moving. If BLUE1 backed away, then returned to trap RED2, should the count be restarted (BLUE1 was never defending RED2) or should the count continue (BLUE1 has been preventing RED2 from moving as well, albeit indirectly). It would be nice if the GDC could give clarifications on these, as the local refs have had very unclear rules, and there has been a lot of variation with the rulings, which means that students are often left confused to as why one team at one tournament could act in such a way, whereas these actions were ruled illegal at another tournament.

The last question, if RED1 were trapping BLUE1 against a perimeter, and BLUE1 was then incidentally trapping RED2, would there also be a count against BLUE1? Even if RED1 were to back away at 5 seconds, it would be almost impossible for BLUE1 to also move away fast enough (especially if the trap has put them in an awkward position) to allow RED2 to move away. Again, this refers to <G13> and <G11>. If BLUE1 were an offensive robot about to score, but then got trapped by RED1 - they should not be at fault, and should not be allowed to be forced into a penalty, correct?

Thank you for taking the time to carefully read and answer these questions!

Answered by Game Design Committee

Your question(s) appear to be answered by [this similar Q&A](#). If this is not the case, please feel free to rephrase and re-submit. Please especially take note of the following portions:

Please remember that the VEX Robotics Competition is a volunteer-driven program with over 1700 events across 50 countries each season. While the Game Design Committee and the REC Foundation strive to continuously improve our training materials, requisite certifications to run an event, and overall consistency between events, providing absolute guidelines for subjective topics is one of the largest challenges that we face each year.

The interactive and dynamic nature of a VEX Robotics Competition game makes it impossible to provide absolutely black-and-white clarifications of inherently non-black-and-white topics, such as defensive interactions. If everything in a game was absolute and explicitly clear, then the role of a Head Referee to provide in-the-moment interpretations would not be needed!

These answers represent the intent of the Game Design Committee within the guidelines and training materials that we have provided for VRC Turning Point referees, not an ultimate expectation or guarantee that all Head Referees will interpret a given edge case in exactly the same way.

231: Blocking Opponent Shots, Vertical Expansion Limit.

3-Feb-2019

G11 G13 SG2

Hi Again,

This is the second question that I have been asked to rephrase and repost.

The game manual states, in <SG2a> that "Once the match begins, a robot which is contacting the expansion zone may expand vertically with no height limit. However, once fully outside the expansion zone (ie, no longer contact it), the robot must return to a height limit of 18" tall." The follow-up info also states that <A robot which interferes with gameplay as a result of violating this rule, such as scoring a high flag or blocking a launched ball while outside the expansion zone, will result in a disqualification, whether the interference is match affecting or not.> The game manual also states in <G11> that <you can't force an opponent into a penalty. intentional strategies that cause an opponent to violate a rule are not permitted, and will not result in an infraction on the opposing alliance.>

The issue then follows: if a robot is designed to block opponent shots, say by expanding horizontally over the opponent robot, and the opponent robot fires a shot, causing the defending robot to expand over 18", who would be at fault? The game manual states through <G13> that offensive robots get the "benefit of the doubt". In this instance, the defending robot is not actively seeking to break the rules, and has taken reasonable measures to prevent this (through proper bracing, good build quality, etc. etc.) If the offensive robot however, then decided to shoot the ball and cause the defending robot to violate the 18" limit (perhaps through a powerful launcher), who would be at fault? The offensive robot could have driven somewhere else and fired the shot, and if they had fired the shot with the intention to cause a rule violation, would also receive scrutiny from <G11>.

Answered by Game Design Committee

If a robot is designed to block opponent shots, say by expanding horizontally over the opponent robot, and the opponent robot fires a shot, causing the defending robot to expand over 18", who would be at fault?

In this hypothetical situation, <G13> would apply, quoted here for reference with a portion bolded for emphasis.

<G13> Offensive Robots get the "benefit of the doubt". In the case where referees are forced to make a judgment call regarding a destructive interaction between a defensive and offensive Robot, **or an interaction which results in a questionable rules violation**, the referees will err on the side of the offensive Robot.

The Robot which is attempting to block the opponent would be considered the defensive Robot, and would be considered in violation of <SG2>.

Furthermore, if the intent of such a "blocker" mechanism (as defined in your question) is to prevent launched Balls from reaching their intended target, and it extends past 18" tall when it succeeds in preventing a launched Ball from reaching its intended target, then the following portion <SG2> would likely apply on its own, even without <G13>.

Note: A Robot which interferes with gameplay as a result of violating this rule, such as Toggling a High Flag **or blocking a launched Ball while outside of the Expansion Zone**, will result in a Disqualification, whether the interference is Match Affecting or not.

We would advise that Teams attempting this type of strategy design their Robot such that they minimize the possibility of any edge cases such as these.

221: Indirect Possession

21-Jan-2019

G11 SG4 SG6

In a recent tournament, an opposing robot shot a ball at a flag. When the ball ricocheted off of the flag, it bounced into our robot into a place on the robot where it couldn't be dislogged. There was also another ball in the robot in a place where it couldn't be dislogged, as well as one more ball in the our robot's intake system or shooter. The referee warned our robot that it was over the possession limit and because the team didn't immediately fire the one ball out of their shooter, the referee made the decision to disqualify them from the match. They didn't get the win points for the match but their teammate did.

My interpretation of Rule G11 is that the other team forced our robot into a "possession" penalty and therefore our team should not have been penalized. The other team did not do this intentionally, so therefore they should not have been penalized either. Here is the exact wording of the rule. <G11> You can't force an opponent into a penalty. Intentional strategies that cause an opponent to violate a rule are not permitted, and will not result in an infraction on the opposing Alliance. 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.

Please clarify whether my interpretation of the rule is correct.

Answered by Game Design Committee

Let's look at the specific rules in question, partially quoted here for reference:

<SG4> Watch your Possession limit. Robots may Possess a maximum of one (1) Cap and two (2) Balls at a time.

<SG6> Keep Game Objects to yourself. Robots may not intentionally drop or place Game Objects on an opponent Robot.

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

All three of these include the standard warning/Disqualification verbiage:

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.

It is impossible for us to provide blanket rulings based on a written description of a specific Match, which is why it's important to defer to the Head Referee who witnessed the interactions in person.

You note that the ricochet of the Ball into your Robot was incidental, so <SG6> and <G11> would not typically apply, as they both include "intentional" verbiage. <SG4> would then be the key rule to consider.

<SG4> does not include any "intentional" or "un-intentional" verbiage; thus, if the Robot in question is objectively Possessing (3) Balls, then it is objectively in violation of <SG4>. To ensure that the penalty for this violation remains a warning, we would advise Teams who find themselves in this situation to avoid doing anything which would be considered Match Affecting, such as using one of those Game Objects to impact their Alliance's score (i.e. shoot a Ball at a Flag).

In general, we would advise Teams to design their Robots to minimize these types of incidental or questionable interactions, thus minimizing the possibility of rulings that you would consider controversial.

1934: Can Teams Have Separate Programs for Autonomous and Driver?

5-Feb-2024

G11

Some of our teams use different programs between Autonomous and Driver and switch the running program from the V5 controller while Autonomous is being scored. I have not found any rules for or against this but [<G11>](#) suggests some restriction on the autonomous program. In this case, both programs are made using the competition template and do correctly respond to field control. Thank you!

Answered by Game Design Committee

Rule [<R26>](#) reads as follows, with a few portions bolded for emphasis:

[<R26>](#) Use a "Competition Template" for programming. The Robot must be programmed to follow control directions provided by the VEXnet Field Controllers or Smart Field Control system.

During the Autonomous Period, Drive Team Members will not be allowed to use their V5 Controllers. As such, Teams are responsible for programming their Robot with custom software if they want to perform in the Autonomous Period. **Robots must be programmed to follow control directions provided by the field controls** (i.e., ignore wireless input during the Autonomous Period, disable at the end of the Driver Controlled Period, etc.).

Teams must use a provided "competition template" or functional equivalent to accomplish this. **This will be tested in inspection, where Robots will be required to pass a functional "enable/disable" test.** For more information on this, Teams should consult the help guides produced by the developers of their chosen programming software.

There are no rules explicitly prohibiting the actions you are describing, provided that it is not involve physically interacting with the Robot ([<G9>](#)), unplugging from the field ([<G10>](#)), any interactions during the Autonomous Period ([<G11>](#)), or circumventing the "disable" signal between the Autonomous and Driver Control Periods ([<R26>](#)).

Teams attempting to use non-standard methods such as this should expect additional scrutiny during inspection and/or Matches to ensure that the Robots are still responding correctly to field control signals. Due to the increased risk of Violating these rules (or confusion over any perceived Violations), we would highly recommend avoiding this practice and instead using a standard competition template.

1869: G11 and related for 2 person team

12-Jan-2024

G11

(https://events.vex.com/storage/game_manual/VIQRC_2023-2024_Full_Volume/rules/G11.html) Please provide guidance on rules surrounding driver time limitations for our two person team. On a team with a total of only two students can the team drive two matches, giving each student a chance to start the drive in the relay portion? Separately, is a two person team limited to driving each type of challenge only once? Clarification would be greatly appreciated.

Answered by Game Design Committee

There are no requirements regarding the order in which Drivers operate the Robot. Yes, it would be fine to "trade off" which Driver starts each Match.

There are no additional restrictions regarding this for Robot Skills Matches.

1819: Drivers leaning on elevated field, and trying to use remote after the buzzer to shut down their robot

9-Dec-2023

G11

In our blended Full Volume VexIQ league there are some drivers who lean on the table just a little bit. Are drivers allowed to "touch" the table by leaning on it? We are concerned that they could shift the board and possibly knock the red block down. Is there a rule against touching and leaning on the edge of the table that could be referenced?

Also, some drivers try to pick up their remote after the match has ended but before the scoring refs and head ref have approved the score. Sometimes drivers argue that they want to turn off a spinning motor. It is explained that they have to do that before the match ends, or wait until scoring is finalized. It would be helpful to site a rule about that too if one exists. <G11> seemed to be the closest.

<G11>

Answered by Game Design Committee

In the future, please review the [Q&A Usage Guidelines](#) before posting, specifically point 4, "Make a separate post for each question."

In our blended Full Volume VexIQ league there are some drivers who lean on the table just a little bit. Are drivers allowed to "touch" the table by leaning on it? We are concerned that they could shift the board and possibly knock the red block down. Is there a rule against touching and leaning on the edge of the table that could be referenced?

Touching a field riser or table upon which a Field is placed is not explicitly disallowed. Many events discourage this behavior by setting Driver Stations a few inches back from the field (an exact distance for this is not specified or required). Contact with a Field directly during a Match may be considered a warning or Minor Violation of rule [<G9>](#).

If the contact results in a Score Affecting action (such as the red Block being Removed), this should be considered a Major Violation of rule [<G9>](#). Please see [this related Q&A](#) for more details.

Also, some drivers try to pick up their remote after the match has ended but before the scoring refs and head ref have approved the score. Sometimes drivers argue that they want to turn off a spinning motor. It is explained that they have to do that before the match ends, or wait until scoring is finalized. It would be helpful to site a rule about that too if one exists. <G11> seemed to be the closest.

There is no rules-bound requirement for Teams to let go of their Controllers at the end of a Match, outside of the Stop Time scenarios described by [<T13>](#) and [<RSC7>](#). Many Teams and events have adopted this behavior for all Matches as a way to clearly demonstrate to Head Referees that driver inputs have ceased (per [<SC1>](#)), but it is not technically required.

With that being said, yes, operating the Robot outside of the allotted time would be considered Violations of [<G11>](#) and/or [<SC1>](#). Please see [this related Q&A](#) regarding the subject of motors continuing to spin post-Match.

149: Tipping off platform leading to a violation of SG2

18-Nov-2018

Center Platform G11 G12 SG2

Is it considered to be a violation of <G11> "You can't force an opponent into a penalty" if in competition for the center platform one robot tips, which causes it to violate <SG2> a) that states that a robot must return to 18" height when outside of the expansion zone. In other words, is it considered to be forcing a robot into a penalty if the opposing alliance's robot is more than 18" when tipped over (not intentionally) in a battle for the center platform, or is this protected as part of Note

Answered by Game Design Committee

Let's look at the specific verbiage of G11:

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

Pushing a Robot off of the Center Platform, such that it accidentally or momentarily ends up expanded beyond 18" tall, is not the same as intentionally forcing an opponent into a rules violation. A better example of forcing an opponent into an 18" height violation would be to grab an expandable Robot mechanism and lift it up beyond 18".

Conversely, if a Robot falls off of the Center Platform and momentarily ends up expanded beyond 18" tall because of its fall, and does nothing else to affect the match in this expanded state, then it would also not receive an SG2 violation; at most, it should only receive a warning.

126: Detached robot piece touching hub at end of match.

26-Oct-2018

Hubs G11

If a piece of the robot breaks off and falls into the building zone, then contacts a hub, is the hub scored? Based on these definitions I would assume that it is not scored.

Low Scored – A Hub is Low Scored at the end of a Match if it meets the following criteria:

1. The Hub is contacting a Barrier or the Floor inside of a Building Zone.
2. The Hub is not contacting the Floor outside of a Building Zone.
3. The Hub is not contacting a Robot.

Robot – Anything that has passed inspection that a Team places on the Field prior to the start of a Match.

Here is an example: <https://i.imgur.com/Htd4Lp0.jpg>

Answered by Game Design Committee

The relevant rule in question here is <G11>, quoted here for reference:

<G11> Keep your Robot together. Robots may not intentionally detach parts or leave mechanisms on the Field during any Match. If an intentionally detached component or mechanism affects game play, the Team may be Disqualified at the Head Referee's discretion.

If a Robot detaches a mechanism or component, it is no longer considered to be a part of that Robot. So, by itself, the detached mechanism does not immediately cause the Hub to violate point 3 of the Low Scored definition. However, it will be at the referee's discretion whether the detachment was intentional (and a violation of <G11>) or accidental.

If the referee determines that <G11> has not been violated, scoring a Hub which is contacting a detached part should follow the same guidelines as listed in Low / High Scored; the detached part is irrelevant. So, because it appears that the Hub in your example image is contacting a Barrier, it would be considered Low Scored.

1241: Yellow dispenser sliding fault. <G11> Don't damage the Field

16-Oct-2022

G11

Hi, We have found that part of the linear slider on the yellow dispenser can still have burrs left over from the manufacturing process that causes the slider to jam up frequently and pop the arms off the pins and such ends up breaking <G11> Don't damage the Field. My question is if we find this fault on the part, are we allowed to clean it up to work as intended or if at a competition is the event partner allowed to fix this?

! [img](https://events.vex.com/storage/markdown/uploads/BxyrTWpnrcSki3JuHI0Vt8xSz48yzCzl08foXY4V.j

Answered by Game Design Committee

Thank you for your question. If you believe the linear slider or any other part of a game element is defective, please [contact VEX Support](#) to have it replaced. Modifying a part should be done only as a last resort.