Q&A

VRC 2022-2023: Spin Up

Tagged: G15

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 Spin Up 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 Spin Up rules questions.

- For event, registration, or other competition support questions, please contact your REC Foundation Manager.
- For VEX technical support, contact support@vex.com or sales@vex.com.
- For game questions, suggestions, or concerns outside of specific and official rules questions, contact GDC@vex.com.

Index

Field setup question

22-Mar-2021
G15

We watched some matches recently this season where teams set field elements in such a way that it made their skills drive or autonomous run easier. Examples include rotating risers so standoffs are off side for easier pickup. Another one is moving the single riser away from the adjacent double stack riser so they can grab the double stack riser without disturbing the single riser making it easier for autonomous routines.

As per Game Definitions, Field is defined as: Field – The entire playing Field, being six (6) field tiles wide by eight (8) field tiles long totalling forty-eight (48) field tiles, surrounded by the field perimeter consisting of four (4) outside corners and twenty-four (24) straight sections

Rule <G15> states "Be prepared for minor field variance. Field tolerances may vary by as much as ±1" unless otherwise specified. Teams must design Robots accordingly."

As field is defined as just the tile field and side walls without mention of field elements, our interpretation is that +-1" does not apply to field elements and as such, manipulating field elements even within +-1" would not be legal. We also assume this rule was in place to address uncontrollable and minor fluctuations in field variances during tournaments. As such, deliberate manipulation of the field elements to gain advantage in skills would be against the spirit of the rule.

Our interpretation of the above rule is that all field elements must be set according to the game manual. Please confirm if our interpretation is correct or if it is indeed acceptable for teams to purposely manipulate field element setup to gain advantage as long as it is within +-1" such as the field setup below.
https://ca01downloadstor.blob.core.windows.net/software/viqc/riser-setup.png

> **Answered by committee**
>
> Your interpretation is correct. Risers should be set up as close as reasonably possible to what is shown in the manual, with regards to both placement and rotation.
>
> That being said, this placement should be feasible without the aid of a measuring device or other unreasonably close scrutiny, thus the allowance for +/- 1".
>
> Intentionally or strategically "pushing the limits" of this allowance would be outside of the spirit of the rule, and would not be permissible. It will be the Head Referee's responsibility and discretion to determine what is considered "intentional" or "strategic".

Tetherbot Pinning

11-Dec-2020
G15

See the previous question defining a "tetherbot".

Regarding trapping and pinning as it pertains to tetherbots. The game manual defines trapping as:

> Trapping – A Robot status. 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).

Rule G15 says:

> No Trapping for more than five seconds (0:05). A Robot may not Trap an opposing Robot for more than five seconds (0:05) during the Driver Controlled Period. A Trap is officially over once the Trapping Robot has moved away and the Robots are separated by at least two (2) feet (approximately one foam tile). After ending a Trap, a Robot may not Trap the same Robot again for a duration of five seconds (0:05). If a Team does Trap the same Robot again, the count will resume from where it left off when the Trapping Robot initially backed off. 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.

Should the robot on an opposing alliance be called for pinning a tetherbot, if part of the tetherbot is still free to move?

Can a robot that occupies a large part of the field ever be considered trapped (or pinned), because it occupies much more than one foam tile?

Answered by committee

> Should the robot on an opposing alliance be called for pinning a tetherbot, if part of the tetherbot is still free to move?

No, this would not fall within the intent of the definition of Trapping. The intent of the Trapping rule is to cover scenarios when a Robot is physically prohibited from playing the game.

> Can a robot that occupies a large part of the field ever be considered trapped (or pinned), because it occupies much more than one foam tile?

It is impossible to provide a blanket answer that would encompass all hypothetical Robot designs and Match contexts. We would not advise using "approximately one foam field tile" as a strict pass/fail for the definition of Trapping. Rather, we would advise reviewing the implications of Trapping and G15 that are described in the associated Referee Training video. Many of the broader definitions of Trapping, such as "actively preventing a Robot from escaping", would tend not to apply if an 18"-wide Robot is playing defense against a 60" wide Robot with multiple moving parts.

<G15> Clarification on when trapping is official over.

23-Feb-2020
G15

<G15> "A Trap is officially over once the Trapping Robot has moved away and the Robots are separated by at least two (2) feet (approximately one (1) foam tile). Should the "two (2) feet" be interpreted as a 3-dimensional volume extending upwards? We've had a few matches where a robot base does seperate by at least two (2) feet, but the the arms, tray anglers, etc. do not.

Answered by committee

Thank you for quoting the relevant rule in your question.

The intent of the 2-foot reference in G15 is to ensure that Robots being Trapped are provided with an ample avenue for escape. If a Trapping Robot has a mechanism that is causing an opponent Robot to be restricted to a small space without an avenue for escape, then the Trapping count should continue.

However, it would not be feasible to expect a Head Referee to visualize four moving 3D volumes and measure their exact distances apart at any given instant. There are situations which may technically result in less than two feet separating two Robot mechanisms, but would not be restricting one Robot to a confined area (such as a tall "tray" hanging over a Clawbot-sized Robot).

> Therefore, we cannot provide an overarching blanket statement that would encompass all hypothetical Robot interactions, while being realistic for a Head Referee to judge during a Match. We are going to use G3 to assist in Head Referee judgments involving this scenario:
>
> > <G3> Use common sense. When reading and applying the various rules in this document, please remember that common sense always applies in the VEX Robotics Competition.

Clarification on Trapping: Game Manual vs. Referee Training Video

3-Feb-2020
G15

Is a robot considered trapped while not attempting to escape? There is a major discrepancy between the referee video on trapping and the game manual. In the referee training video, it is stated multiple times that for a robot to be considered trapped it must be actively trying to get out of the trap. However, in the game manual trapping is defined as " A Robot is considered Trapped if an opposing Robot has restricted it 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 wall) or indirect (e.g. preventing a Robot from escaping a corner of the field)." By definition, a robot is trapped whether or not it is attempting to get out of the trap. This training video causes the referees to rule trapping incorrectly as it would be believed that the training videos would be accurate to the game manual. However, it is stated in the game manual that "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." Useful info Game Manual Link: https://content.vexrobotics.com/docs/vrc-tower-takeover/GameManual-20190816.pdf

Referee Video Link: https://www.youtube.com/watch?v=UsFRgTIkQVg

> **Answered by committee**
>
> To emphasize a few specific portions of the Trapping definition:
>
> > A Robot is considered Trapped if an opposing Robot has restricted it 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 wall) or indirect (e.g. **preventing a Robot from escaping** a corner of the field).
>
> In order to know whether "an avenue for escape" has been provided, the opponent must be attempting to escape. In order to "prevent" an opponent from "escaping", they must be attempting to escape.
>
> The Referee Training video intentionally goes into additional detail on this point to help make the distinction clear, and there was not intended to be any discrepancy. We will be sure to take this into consideration for future Game Manuals.

Entanglement during a trapping call.

29-Jan-2020
G15

During a trapping count, if the bots become entangled, what is the right call?

Here is a scenario that played out this past weekend, more than once.
Blue alliance is trying to score in their goal zone, and gets rammed by red alliance.
Blue does not make an action to leave, continuing to attempt to stack.
However they then try to fight off the defending robot by backing up to push them off, thus causing a trapping count to begin from the referee. It is apparent that in the process of backing up the robots have become entangled, with the anti-tip

mechanism of the defensive red robot getting caught on the frame of the blue bot. Blue still has a set of cubes and is attempting to score, but cannot disconnect from the red robot. As a result their movement is restricted for roughly 25 seconds, but at the same time, blue has been trying to score the whole time.

The training videos stress that even if the offending robot becomes stalled during a trap, the trapping count continues. Is this true for entanglement as well, assuming it to be accidental in nature? What is the proper way to respond to a robot that becomes entangled while trapped.

Additionally if a trapping count starts, and the trapped robot stops trying to escape and attempts to score, is the count continued, paused, or canceled?

> **Answered by committee**
>
> In the specific scenario you have described, G13 would take precedence:
>
> > <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 snapshot description implied that Blue was clearly playing offensively, and Red was clearly playing defensively (Trapping is, by definition, a defensive interaction). A Team is responsible for the actions of its Robot at all times; a Robot which has engaged in objectively defensive behavior has assumed an element of risk under G13.
>
> > The training videos stress that even if the offending robot becomes stalled during a trap, the trapping count continues. Is this true for entanglement as well, assuming it to be accidental in nature? What is the proper way to respond to a robot that becomes entangled while trapped.
>
> Entanglement during Trapping should be handled similarly to a stall. Again, because a Robot is responsible for its own actions at all times, a Robot which chooses to engage in this strategy should be prepared to minimize the risk of any Entanglement, stalling, or other situations which could turn the legal Trap into a G15 violation.
>
> > Additionally if a trapping count starts, and the trapped robot stops trying to escape and attempts to score, is the count continued, paused, or canceled?
>
> This question is answered in the associated Referee Training video, around the 2:00 time.

Attempting to score in the non-protected goal zone

9-Sep-2019
G15 SG3

At a recent tournament, when teams were trying to score in their non-protected goal zone faced near-constant defense (bumping, etc.) before any of the cubes were released and met the definition of scored. Many teams complained that this was a violation and said that it had been called as a disqualification at previous events. We were unable to find anywhere in the rules that this was illegal. The closest two rules that were argued was that it could have constituted trapping

> G15 No Trapping for more than 5 seconds

Or that it could be a violation of the second clause of SG3

> "Robots may not intentionally or accidentally, directly or indirectly, perform the following actions: B Contact any Scored Cubes in either of opposing Alliance’s Goal Zones"

Neither of these arguments seemed to be valid to us, but we didn't know if there was something we were missing.

So to summarize, can you bump a robot that is in the process of scoring in the non-protected goal zone before its cubes have met the definition of scored?

> **Answered by committee**
>
> > can you bump a robot that is in the process of scoring in the non-protected goal zone before its cubes have met the definition of scored?
>
> Please see these two similar Q&A's for reference:
>
> https://www.robotevents.com/VRC/2019-2020/QA/288
>
> https://www.robotevents.com/VRC/2019-2020/QA/296
>
> As well as the Referee Training video that discusses Protected Zone interactions:
>
> https://www.youtube.com/watch?v=Y4nziGzN9ik
>
> These three links all refer to the full text of SG3, so we would advise reviewing that as well, taking note of which parts refer to Goal Zones vs Protected Zones. The only parts of SG3 that refer to the non-protected Goal Zones are B and D:
>
> > <SG3> Stay away from your opponent’s protected areas. Robots may not intentionally or accidentally, directly or indirectly, perform the following actions:
> >
> > B - Contact any Scored Cubes in either of opposing Alliance’s Goal Zones.
> >
> > D - Contact either of the opposing Alliance’s Goal Zones or Barriers.
>
> It is impossible to issue a blanket ruling that would cover all hypothetical robot-to-robot interactions. In most cases, if parts B and/or D have not been violated, then no violation of SG3 has occurred. You are correct that whether or not a given Cube is Scored is the key point to determining if SG3-B is being violated. Other rules, such as G14, G15, or SG6 may still apply, as they do in all robot-to-robot interactions; there is nothing special about them with regard to the hypothetical scenario being asked about here (i.e. "bumping a robot in the process of scoring").

<G15> Trapping Clarification

4-Aug-2019
G15

So with the release of NorCal's wall-bot, a few others and I brainstormed ways to negate its defensive effect. We came up with the idea of after autonomous (since wall-bots can't deploy till after autonomous) keeping one robot in the protected zone to secure access to that scoring zone. We thought that since we are in that corner the wall-bot can't deploy without trapping us but after reading the rules again we noticed trapping states:

> A Robot is considered *Trapped* if an opposing Robot has restricted it into a small, confined area of the field, approximately the size of one foam tile of less and has not provided an avenue for escape. Trapping can be direct (pinning) or indirect (preventing a Robot from escaping the corner of the field).

So the approximately one foam tile or less means we can be trapped in the corner, our protected zone, by their bot based off the rule. However, in In The Zone's ref training it showed an example of trapping and the trapped robot was moving around between three tiles. Could you clarify if this would be trapping or not?

If it is ruled as trapping someone stated that the robot sitting in the protected zone violates <G14> which I believe is incorrect. The robot in the corner isn't forcing the wall-bot to come to the corner and trap it, it is strategically holding open the avenue so their partner can score in the area. Does this fall under G14?

Here are the videos I talked about for reference: NorCal's Wall-bot ITZ Ref Training, 1:10 is the example

There's two links here, formatting is being weird

> **Answered by committee**
>
> > So the approximately one foam tile or less means we can be trapped in the corner, our protected zone, by their bot based off the rule. However, in In The Zone's ref training it showed an example of trapping and the trapped robot was moving around between three tiles.
>
> First, please remember that support materials from previous seasons do not apply to the current competition season, as rules, interpretations, or game-specific contexts may have changed.
>
> > Could you clarify if this would be trapping or not?
>
> Indirect trapping is one of the more difficult calls for a Head Referee to interpret, and is largely dependent upon in-match context. The video clip that you referenced (if we were to assume that we are now interpreting it using Tower Takeover rules, not In the Zone rules) would be considered Trapping.
>
> In this clip, the red Robot was very clearly intending to hold the blue Robot to a small, confined area, without providing any avenues for escape. The definition of Trapping does include the word "approximately" to imply that the Robot being Trapped may not always neatly line up into a specific foam tile without crossing any seams. Head Referees should not need to (and are not expected to) measure the precise area in which the Robot is being held to confirm if it is exactly 24" wide or not. Similarly, the blue Robot is clearly attempting to escape, which is another key thing that Head Referees will look for when determining if a given interaction is a Trap or not.
>
> > If it is ruled as trapping someone stated that the robot sitting in the protected zone violates <G14> which I believe is incorrect. The robot in the corner isn't forcing the wall-bot to come to the corner and trap it, it is strategically holding open the avenue so their partner can score in the area. Does this fall under G14?
>
> It is impossible to issue a blanket ruling based on a snapshot description of a hypothetical match. The Head Referee would need to take into account the context of previous matches, the offensive Robot's intent for being in the corner, if they were attempting to escape, etc.

Forcing your opponent into Double-Zoned status

15-Jun-2023
G15

(https://www.robotevents.com/storage/game_manual/VRC_2023-2024_Over_Under/rules/G15.html)

In this year's game, the rules allow a robot to enter an opponents goal if the opponents' robots are Double-Zoned. Rule G15 says you can't force your opponent into a penalty situation, but it does not penalize forcing your opponents into the alliance status of Double-Zoned.

In playing the game this week, multiple teams have adopted a strategy of pushing an opponents second robot into their Offensive Zone late in the game, forcing the opposing alliance into a Double-Zoned status. Then their partner zooms in and clears the opponents' goal.

Please clarify that rule G15, nor any other rule, prohibits a alliance from forcing their opponents into a Double-Zoned Status.

> **Answered by committee**
>
> You are correct. No rules prohibit an Alliance from forcing an opponent into a Double-Zoned status, assuming no other rules are violated in the process.

SG11 and interactions between two protected robots

12-Jun-2023
G14 G15 SG11

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

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

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

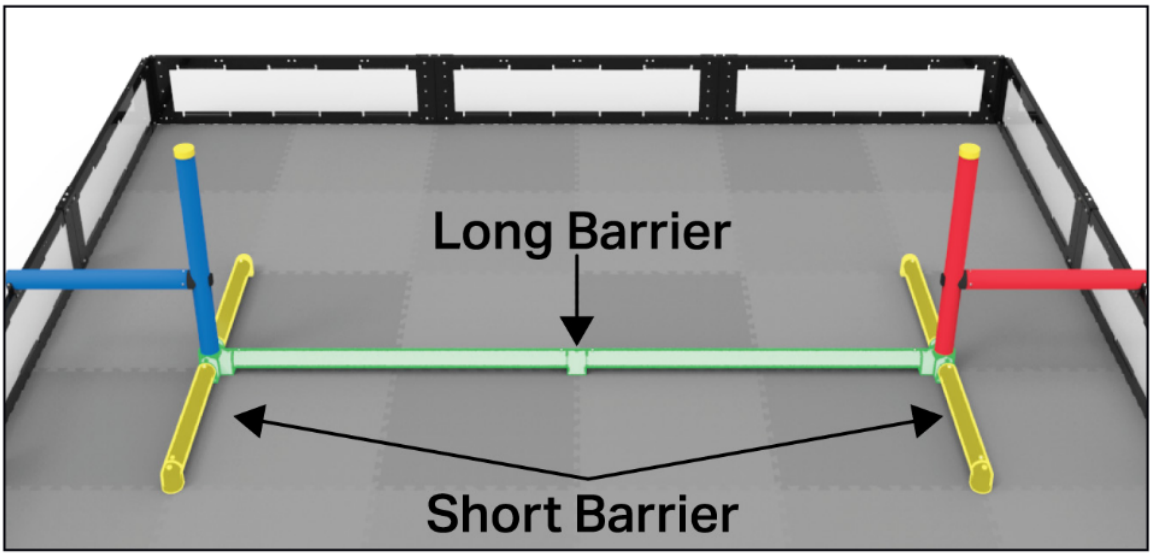

Figure 4: A view of the field, with the Short Barriers (yellow) and Long Barrier (green) highlighted.

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

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

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

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

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

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

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

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

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

Netting thrown over another robot

2-Mar-2023
G15

Is it legal to throw a net over another robot in the end game of spin-up?

> **Answered by committee**
>
> As long as the net is created by the Team using legal materials and deployed only during the Endgame period, this would be legal.
>
> A net that is not manufactured by the Team, or that is made out of string that measures less than 3mm at its narrowest point (or more than 1/4" at its widest point), would not be legal. Teams should be prepared to provide documentation that proves they created the net.
>
> If a net is deployed before the Endgame, it will likely violate rules <G12> (entanglement), <G15> (trapping), and <SG4>/<SG5> (expansion).

Wedge, Trapping, G14

24-Feb-2023
G14 G15

<G14> <G15>

From , QA1359, it is ruled that if robot A lifts robot B off the ground, then robot A is considered to have initiated trapping and would need to back off based on trapping rules.

In the case of robot B running into robot A and got itself wedged(such that it cannot back off from robot A),

- does trapping count start? If so, which side needs to back off? If robot B needs to back off, and robot A does not move(so robot B is kept wedged and unable to back off), would this then be considered a violation of G15? If robot A needs to back off, can they quote G14 and choose not to move, since they were forced into a trapping count?

Thanks

Answered by committee

In this example, because Robot B has wedged itself on top of Robot A, rule <G14> should protect Robot A from a Trapping call. If Robot A is unable to move, a Trapping call may be made against Robot B as described in rule <G15> at the Head Referee's discretion based on the context of the interaction and the Match.

All Trapping calls are made based on what the Head Referee and Scorekeeper Referees see during the Match, and rely on human judgment calls as described in the red-boxed note following rule <T1>.

QA1359, Egregious Entanglement, Trapping

24-Feb-2023
G12 G15

<G15> <G12>

From QA1359, our understanding is that if both sides of the wheels are lifted off the ground,(i.e the wedged robot is unable to move), a trapping count would start, would that be correct?

If only one side of the wheels are lifted, such that the robot **can move for more than 1 tiles**, but only in circles(the robot is kept wedged for the duration, such only one side has contact of foam tiles and is unable to turn), would this be considered trapping, even though the robot is not confined to a space of one tile or less?

If the answer to the previous question is no, would this then be considered entanglement?

<G12> Don’t destroy other Robots. But, be prepared to encounter defense. Strategies aimed solely at the destruction, damage, tipping over, or **Entanglement of opposing Robots are not part of the ethos of the VEX Robotics Competition and are not allowed**.

since wedge QA1442 has been ruled legal, we believe the answer to the previous question is no

However, if the answer to the previous question is yes, could the action of repeatedly lifting **one side** of another robot's wheels be ever considered egregious entanglement and subject to DQ based on head ref's discretion?

Thanks

Answered by committee

Because the "lifted" Robot in your specific scenario is not restricted to a small area of the Field, the interaction may not meet the definition of Trapping (a referee would rule based on full context). Because the "lifted" robot has not been grabbed, hooked, or attached to by the opposing Robot, the interaction also does not meet the definition of Entanglement.

However, any interaction that restricts an opponent's movements may be ruled as Trapping at the Head Referee's judgment based on the context of the Match. See related Q&A 1359 for additional information on wedges and Trapping. Teams are advised to err on the side of caution to avoid violations.

Counting a Trap and Determining Match Affecting Traps

18-Feb-2023
G15

We have a few questions regarding G15-Trapping.

1. G15<G15> states “A Robot may not Trap an opposing Robot for more than five seconds (0:05).” How should referees count a trap? There have been discrepancies between events, and we would like clarification.

Example one: A referee notices a trap has begun; the referee says “Trapping. 1,2,3,4,5.” <note each number is spaced out at 1 second intervals>. *Example two:* A referee notices a trap has begun; the referee says “1,2,3,4,5.” <note each number is spaced out at 1 second intervals>

Our concern is that in example one, it may allow teams an additional second to trap, resulting in a 6 second trap, as opposed to a 5 second trap. If both examples are allowed, at an event, should all referees count in the same way?

2. Is it a violation of G15, if a referee says ‘5’ and the robot backs away? Or is it a violation if the team continues to trap after ‘5’ is stated? If the referee says “Tapping 1,2,3,4,5” would the ‘5’ be considered a ‘5’ second trap or would it be on the ‘4’ as the word ‘trapping’ would be considered the 1st second of the trap?

3.Additional Scenario: A team initiates a trap and the referee counts “1,2,3,4,5,6”; the team backs away and ends the trap on ‘6.’ When determining if this violation was match affecting, should the referees be considering the entire 6 seconds, or only the time after the 5 seconds?

> **Answered by committee**
>
> The Spin Up game manual does not specify how a referee must count Trapping calls. Teams are advised to ask the Head Referee for clarification during the Event Meeting, and to err on the side of caution during Matches.

Low Goal Barrier Trapping Additional Questions - Robot Stuck on Barrier

18-Feb-2023
G15

As per the following Q&A answer: https://www.robotevents.com/VRC/2022-2023/QA/1265, “ Effective immediately (Dec 13, 2022), holding an opponent against a Barrier such that they cannot escape will be considered Trapping as described in rule <G15>.” We would like clarifications on the following situations. Scenario 1: Red robot pins blue robot against a barrier. The trap begins and at 3 seconds, the red robot manages to push the blue robot onto the barrier. The red robot backs away, however the blue robot cannot remove itself from the barrier for the remainder of the match. Would the trap count continue or would the blue robot be responsible for removing themselves from the barrier?

Scenario 2: A red robot pushes blue across the field and onto the barrier (no trap was previously occurring). Blue is now stuck on said barrier for the remainder of the match. Would this be a violation of G15?

Scenario 3: Blue robot is stuck on the barrier and is trying to remove themselves. A red robot is preventing the blue bot from getting off of the barrier either by physically holding them on the barrier or constricting them to being able to move only on the tiles attached to the barrier. Would this be considered as a trap? <G15>

> **Answered by committee**
>
> Scenario 1: The Trapping count ends when the red Robot separates by at least 2 feet, regardless of what happens to the blue Robot (including getting stuck on the Barrier). See Q&A 1351 for more info on how Trapping counts end.
>
> Scenario 2: This does not meet the definition of Trapping, and is not a violation of <G15>.
>
> Scenario 3: This scenario is highly situational, and any ruling would require Head Referee judgment within the larger context of the Match. Q&A 1265 is related, and should be used to make these judgement calls. Generally speaking, "Physically holding them on the Barrier" is more likely to be a <G15> violation than "Constricting them to ... the tiles attached to the Barrier" would be.

Trapping and entanglement

6-Feb-2023
G15

<G15>

I have a question pertaining to ending a trap. I believe this was answered in a previous Q&A for a different game and just wanted to verify this is still the proper ruling. If a robot initiates a trap, and then when it tries to leave it gets entangled on the trapped robot, or looses connection or power, is it held responsible for an extended trap count and guilty of a trapping violation if it ends up past a 5 count? Thank You.

> **Answered by committee**
>
> We believe that your question is answered by our response to Q&A 1351. If you still have questions after reviewing that Q&A, please feel free to rephrase and resubmit your question.

Can trapping be a minor violation

24-Jan-2023
G15

In the past our local referees have always considered trapping beyond 5 seconds to be a major violation. Is that correct or is there a distinction between major and minor violation with trapping depending on whether it was "match affecting", "egregious", or had happened multiple times in a tournament or match?

> **Answered by committee**
>
> Because rule <G15> does not include specific Violation Notes, Head Referees should use the process illustrated in Figure 4 of the Spin Up Game Manual to determine the appropriate penalty for a Violation. To summarize that flowchart for this scenario, violations of <G15> should be considered Minor Violations unless they are Match Affecting (changing the winning and losing Alliance in the Match), include a violation of G1/S1 or the Code of Conduct, or are a repeated violation.

Defensive / Blocking Behavior at the Rollers

24-Jan-2023
G12 G15

<G12> Just looking for clarification on defensive play around the rollers. This is the Scenario: Robot 1 rotates the roller to the appropriate color to score for their alliance. Robot 2 moves in after that robot leaves and spins the color to their alliance. Robot 2 begins to move away, maybe 1 tile away, and as Robot 1 moves in to score the roller again, Robot 2 engages in contact with Robot 1 to prevent the robot from getting to the roller. It is not incidental contact of 2 robots going to the roller but rather a deliberate defensive maneuver to block the robot from being able to reach the roller.

Is this covered under 'trapping'? Or should a warning be given to the robot for the defensive maneuver and to cease the maneuver?

How should this best be addressed. The rollers are increasingly important and many robots who don't have a means to score into the high goal are focused on the rollers and defending them for their alliance.

> **Answered by committee**
>
> Thank you for your question. While it is impossible to provide a blanket answer that would encompass all possible hypothetical maneuvers, the scenario you describe does not appear to meet the definition of Trapping in the General Definitions in Section 2 of the game manual. Neither Robot is restricting the other's movements and neither is attempting to escape.

Using a wedge to prevent a robot from moving

1-Jan-2023
G15

In the following video ([https://www.youtube.com/watch?v=fSprkN2Zd2k]) a team uses a wedge on on the front of their robot to lift its wheels off the ground to prevent it from moving. We believe this is a violation of <G15> and of the trapping defintion.

Trapping - A Robot status. 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).

Since the lifted robot is not able to move and thus restricted to a small, confined area of the field, we believe this is within the defintion of trapping. In that match it was allowed and the trapping team won the match.

Can we get a ruling on this so if it happens again there is a FAQ ruling on it?

> **Answered by committee**
>
> Thank you for your question. The interaction shown in the Match video you included should be considered Trapping, and would be subject to the limitations on Trapping described in rule <G15>.