

Q&A

VIQRC 2023-2024: Full Volume

Tagged: T6

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

Please review the [Q&A Usage Guidelines](#) before posting. This system is only intended for specific VIQRC Full Volume 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

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3165: Field reset pins

16-Jun-2026

T6

[<T6>](#)[<T6>]

To enable faster Field reset, would it be legal for an Event Partner to use coloured pins to identify starting positions for each bean bag?

Answered by committee

In the July 2 game manual update, this will be added to [<T6>](#) as a permissible modification.

To prevent Bean Bags and Robots from getting caught on raised pins, you must use either 0x2 or 0x3 pins that are fully inserted to sit flush with the tiles. Using colored pins that match the corresponding Bean Bags is recommended but not required.

This change is effective immediately.

3138: Substituting Colored Field Tape for White Tape

14-May-2026

T6

[<T6>](#) states (emphasis mine):

Fields may be repaired at the Event Partner's discretion. All competition Fields at an event must be set up in accordance with the specifications in Appendix A and/or other applicable Sections. **Minor aesthetic customizations or repairs are permitted, provided that they do not impact gameplay** (see [<T4>](#)).

An example of a permissible modification to the Field listed in the rule is:

Using non-VEX electrical tape to add required lines to the Field

Would substituting the red and blue tape lines that define the Load Zones with white tape lines be a permissible modification to the Field?

Answered by committee

Note: This answer was revised on July 2, 2026.

Following the addition of SG13 Load Zone protections in the July 2 game manual update, using white tape lines in place of red/blue tape lines for the Load Zones is no longer a permissible Field modification under [<T6>](#).

Event Partners must use red and blue tape lines for the Load Zones to denote which Alliance they belong to. This helps referees identify SG13 violations that may occur involving Robots in and around opposing Alliance Load Zones.

3086: Alternatives to velcro straps

8-Feb-2026

T5 T6

[<T6>](#) states “Assembling a VEX Portable Competition Field Perimeter without including the securing straps” is prohibited.

The Vex portable field straps are like the figurative sock in wash that goes missing. Either one or both straps are not where they should be at the start of the next competition. Unless one has a supply of spare straps, an EP is scrambling to find someone with spare straps or run a competition out of compliance with the rules.

As an alternative, I use ratcheting tie down straps, specifically <https://www.homedepot.com/p/Husky-15-ft-x-1-in-Ratchet-Tie-Down-Strap-with-S-Hook-FH0867/31299449>. I found that these are easier to install and provide better wall support than the Vex portable field velcro straps.

My question is simple, may event partners use the same (or similar) tie down straps as a solution? If yes, is the solution temporary or it permissible to always use it?

Answered by committee

This is a reasonable field modification, provided the straps are similar in size and function to the provided straps and do not create any raised areas under the field tiles.

3003: Problems with the holes in the goal templates (red, blue, yellow)

24-Dec-2025

T6

[<SC5><G1><SC5>](#) I have a problem with the goal templates, this is the 4 parts of the center goal in yellow, the two red and the two blue templates. In the 11 sets we got the holes punched into the goal templates is the same size as the head of the pins that are supposed to retain them.

This hole size mismatch lets the edge of the template to pop up and become above the surface.

My easy fix it to take thin double sided tape - like <https://www.amazon.com/Amazon-Basics-Refillable-Permanent-Translucence/dp/B07VYK11V1/fosterworld>

and stick the edges down to the field. It doesn't seem noticeable. the thickness of the tape seems to be under a mm.

Is this legal? If not, what is the path forward? I'm happy to RMA 11 fields worth of templates to RECF for replacement. (Since VEX doesn't offer field replacement parts).

Thanks!

Answered by committee

In cases where the sheet pins don't adequately secure the Goal templates, using double-sided tape to stick the edges of the templates to the Field would be allowed. We'll add this as an allowed modification in rule [<T6>](#) in the next game manual update.

Teams should not expect this modification at any event, and should not request it if the sheets pins are sufficient to secure the templates to the Field.

2933: Allow Use of a Mechanical Level

20-Nov-2025

T5 T6 T7

[<T7>](#)

At a recent event, we were told that using a mechanical level was illegal or against the rules. After reviewing the rules and the official Q&A, I have not been able to find any such rule.

Is there any clarification on whether a device may be used to determine if a field is within the allowed parameters?

Answered by committee

Using a tool to check that Fields are within the allowed parameters isn't expressly illegal, but the Head Referee can disallow it through rule [<GG3>](#) if the Students are delaying the start of a Match. We advise that your Students work with the Event Partner to do this checking on Fields before Matches begin to ensure there's time to address any issues that arise.

2854: Field variance - goal sway tolerance at Worlds

16-Oct-2025

T5 T6

[<T5>](#) <T5> describes the allowable variances in the field. For the goals, the only mention is a 1 inch variance in height. The goals this year are only attached to a metal plate that is not anchored to anything else, only held in place by the foam tiles. They have a large amount of sway during game play, more than 1 inch. Teams are learning to compensate for this dynamic variance throughout game play.

Typically during the World competition, Vex chooses to anchor the field elements directly to the wood on the field platform. This will eliminate nearly all of the sway, causing a big change in game play for all teams. Will this be considered when planning the setup for Worlds? Or do teams qualified to Worlds need to consider this and find a way to mimic it for their practices leading up to the World event?

Answered by committee

The scheduled game manual update on April 2, 2026, will include specific details for Matches at the 2026 VEX Robotics World Championship.

[<T6>](#) allows Event Partners to anchor Field Elements directly to Field risers instead of the metal plates, or anchor the metal plates to the underlying surface with hardware or tape. Teams should be prepared for either of these options to be used at any event.

2801: Color Blindness Concerns

22-Sep-2025

RSC3 T6

[<RSC3><T6>](#)

I have a potential participant this year that has color blindness and has expressed hesitation about joining this year due to this limitation. Would it be possible for us to use sharpie or light colored paint patterns to help him better be able to differentiate the different color in pins during competitions?

Answered by committee

Note: This answer was revised by the GDC on October 3, 2025.

Thanks again for this question, Team 42655A!

When choosing colors and shades for the Mix & Match Pins, we worked with designers to specifically minimize issues with the known range of color blindness types, but it seems there is still a chance of some confusion in some specific cases. We appreciate your raising this concern.

You're welcome to mark your own Team's Pins however you like, but at this time those markings aren't an approved modification for use during competitions (see rule <T6>) unless they're required by an approved accommodation request.

If a Student needs an accommodation for color-blindness, a teacher, coach, or parent/guardian can request that through the process outlined in [this article in the RECF Library](#).

2600: Alignment Aid

3-Mar-2025

G8 T6

[<G8>](#)

I have a team asking if there are any restrictions on what alignment aids they could use during pre-match setup. G8 references that pre-match alignment tools are allowed. In the past I have seen tools made from vex pieces, but this group is wanting to use more traditional tools like squares or levels to understand field conditions and robot placement. As long as T6 is followed and pre-match set up is done promptly would this be allowed?

Answered by committee

As long as T6 is followed and pre-match set up is done promptly would this be allowed?

Yes. However, in the interest of keeping the event running on time, we'd advise that your Students work with the Event Partner to do most of this checking on Fields before Matches begin to ensure there's time to address any issues (e.g., un-level Fields) that arise.

2426: Strategic use of R3

10-Jan-2025

G1 G3 R3 T5 T6

[<G1>](#), [<G3>](#), [<R3>](#), [<T5>](#), [<T6>](#), Code of Conduct

If a team notices a problem with another team's robot, which would likely cause that team to fail a 'spot inspection', do they have an obligation to report that information in a timely manner? Or could they wait until it is strategically advantageous to do so?

Example: During qualification matches, Team A noticed that Team B's robot brain placement probably should not have passed inspection. Fixing the problem would have taken considerable time. Rather than approaching Team B and letting them know so they could fix their robot proactively, or informing the Head Referee directly, Team A waited until they were about to face Team B in a semi-final elimination match before pointing out the problem to the Head Referee.

Should Team B be allowed to play their match since they've played through all the qualification matches and it's at the Head Referee's discretion whether to conduct spot inspections? Or should their robot be removed from the field per R3, T5 & T6. Has Team A violated G1, G3, or the Code of Conduct?

Answered by committee

We believe that this scenario falls under rule [<G1>](#), "Treat everyone with respect." If you see anyone breaking a rule at a Match Field, you should immediately bring it to the Head Referee's attention and let them handle it as they deem appropriate. If you see a Violation away from the Field, you should alert the Event Partner. Teams must use extreme caution when handling these situations, and should remember to remain respectful, civil, truthful, and professional. Once the matter has been reported to the Head Referee or the Event Partner, their decisions and ruling will be final as described in rules [<T1>](#) and [<T4>](#).

If a Head Referee believes a Team is reporting potential Robot rule Violations strategically, maliciously, or speculatively, it should be treated as a [<G1>](#) Violation and immediately brought to the attention of the Event Partner who should then consult with the REC Foundation Regional Support Manager as described in the Violation Notes for [<G1>](#).

If a Team's Robot is found to be in Violation of a Robot rule during an event, rule [<R3>](#) (specifically clauses C, D, & E) will apply.

In the specific case you describe, in which a Team believes another Team's Robot Brain is in an unsafe location, Head Referees must apply judgment to determine whether or not the reported Team should be allowed to continue without modifying the Robot.

2312: <T5> Robots arriving late to a match

18-Nov-2024

G9 T5 T6

In the following scenarios a qualification match is scheduled to start and the head referee is ready. Both blue teams have robots on the field and are ready to go. Red 1 is ready and Red 2 arrives in the driver station:

1. While the 3 2 1 countdown before the match is going on
2. During autonomous
3. After autonomous ends but before driver control starts
4. After driver control starts but before the end of the match

In which of the following scenarios will Red 2:

- a) Be considered a no show per [<T5>](#)?
- b) Be allowed to place their robot on the field and participate in the match, considering [<T6>](#) and [<G9>](#)?

Does the answer change if a drive team member is in the drive station before the countdown starts, but the robot arrives at a later point?

Thanks Matthew and Zach :)

Answered by committee

The Red 2 Robot cannot be placed onto the Field in any of these scenarios. Red 2 is too late, and they have missed their opportunity to drive in the Match.

The intent of rule [<T5>](#) is to provide coverage for situations where a Team knows that their Robot won't be functional before their scheduled Match, or shows up to the Match with an issue that cannot be rectified before the scheduled start time.

[<T5>](#) is not intended to be an allowance for a team showing up late to their scheduled match, and Red 2 should receive a no-show in all of these scenarios unless a Drive Team Member was present in their Alliance Station before the 3-2-1 Match countdown begins.

1959: T5/T6/Head Ref Cert Unit 6 -- Presence of robots on field when nonfunctional in alliance match

15-Feb-2024

Relevant Sources: <T5> Be at your match on time. If no member of a Team is present in the Driver Station at the start of a Match, that Team is considered a “no show” and will receive zero (0) points. The other Team in the Alliance will still play and receive points for the Match.

<T6> Robots at the field must be ready to play. If a Team brings their Robot to the Field, it must be prepared to play (i.e., batteries charged, sized within the starting size constraint, etc.) Robots must be placed on the field promptly. Repeated failure to do so could result in a Violation of <G1> and/or removal of the Robot from the current Match at the Head Referee’s discretion.

Disablement – A penalty applied to a Team for a rule Violation. During Disablement, a Team is no longer allowed to operate their Robot, and the Drivers will be asked to place their Controller on the ground. A Disablement is not the same as a Disqualification.

Head Ref Unit 6 Quiz Question: What is the minimum requirement for a Team to get a score for a Match? Form *Correct* Answer: At least one member of the Team must be present in the Driver Station *Incorrect* Answers: The Team’s Robot must be in the Driver Station or on the Field The Team’s Robot must move during the Match At least one point must be Scored by the Team’s Robot during the Match

We had a rule opinion dispute as a tournament recently between the three Head Ref-certified individuals that were present regarding whether a team **MUST** place and leave their robot on the field for a match, specifically when the robot is nonfunctional.

Two of us felt that having a broken robot on the field was **NOT** a rule requirement and **MAY** be placed on the field, but may also be kept off the field, assuming it is not part of a strategy. Doing so would allow that team to keep the robot off the field as a potential obstacle/entanglement for the functioning robot.

The other Head Ref certified individual stated they and another ref, who worked for REC, had encountered the same issue at a prior event, and the REC representative stated that the nonfunctioning robot **MUST** be placed on the field and would be considered to have disabled status if it was not functioning by the time the match began, which gave the ref discretion to disable the nonfunctioning team and force them to place their controller down for the match.

From the first perspective, and according to the Unit 6 quiz, the only requirement for the team to receive an alliance score is simply to be present in the Driver’s Station on time. The team need not place their nonfunctional robot on the field, and they have committed no violation to be subject to disablement. According to the incorrect answers in the Quiz, the teams robot need not be in the Driver Station or the Field, move during the match, or score a point. This would seem to coincide with the reading of T5.

Alternatively, T6 seems to suggest that if the robot is present, it **MUST** be placed on the field and not being ready to play would be a violation of T6 by bringing a nonfunctional robot to the field. Assuming this is a rule violation, then Disablement could be applied, and with the controller on the ground, the robot isn’t going to move and thus remains on the field during the match.

So is the intent here in the Rules that a nonfunctional robot never be brought to the field, or else the kids are forced to place their nonfunctioning robot on the field? That seems like an odd conflict, as otherwise the Manual-suggested common sense would allow the kids to try their best to repair their robots even up to the point of stepping into the Driver Station for a match, just as we allow them to attempt to repair their robots midmatch.

Thank you for the clarification

Answered by committee

Provided a Drive Team Member is at the field for the Match, there is no requirement that they put the Robot on the field (for example, the Robot could remain in the Driver Station for the Match). Rule <T6> is intended to apply in situations where the Team plans to operate their Robot on the field during the Match and is delaying the event while they work to get the Robot ready to drive.

A Head Referee may require that a Robot be removed from the Field if it is not ready to play at the beginning of the Match (per <T6>) or if it does not meet all Robot inspection requirements (clauses C & D of <R3>).