

Q&A

VIQRC 2023-2024: Full Volume

Tagged: T5

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.

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 - 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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3114: Clarification to question 2787, GG4

28-Feb-2026

GG4 T5

In question 2787 it was determined that blocks that are within tolerance should not be adjusted. If a team does make adjustments is that considered a violation? (Major, Minor, DQ) How should it be ruled?

Answered by committee

Because rule [<GG4>](#) does not have specific Violation notes, the guidance in Figure V-2 applies. The Team should receive a Minor Violation unless the Head Referee determines that the Violation was Match Affecting or the Team has already received multiple [<GG4>](#) Violations.

The case you describe, in which the Team reaches into the Field to adjust object positions before the Match begins, probably isn't Match Affecting, and the Head Referee should consider re-adjusting all affected Scoring Objects before the Match begins.

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.

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.

2876: Placement of Pins on the Floor Goal during Skills Matches

25-Oct-2025

GG4 T5

[<GG4>](#) The Note for [<GG4>](#) states, "Any concerns regarding Field Element or Scoring Object starting positions should be raised with the Head Referee prior to the Match. Team members may never adjust Scoring Objects or Field Elements themselves."

Invariably, the placement of the Scoring Objects (Pins) on the Floor Goal will differ from event to event / match to match. These differences could affect a Team's game play especially during Autonomous Skill matches. (1) Is there a more definitive description of where the two (2) red pins and two (2) blue pins should be placed on the Floor Goal other than the picture shown in [<RSC3>](#)? (2) Are Drive Team Members allowed to request Scoring Objects be moved, within reasonable limits, to accommodate their practice field set ups and, if so, how much movement would be considered seasonable? Rule [<T5>](#) **Be prepared for minor field variance** states, in part, "Field Element tolerances may vary from nominal by up to +/- 0.5" [12.7mm], unless otherwise specified." Scoring Objects (Pins/Beams) are not included in the definition of a Field Element.

Answered by committee

Thanks, Team 93558B, for your question!

Rule [<T5>](#) will be revised in the next game manual update to specify that Scoring Object positions also have a +/- 0.5" tolerance. This change is effective immediately.

For consistent setup, the four Pins that begin the Match in positions on the Floor Goal should be in straight lines with the other Pins on the Field.

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.

2789: Long Goal Control Zone Tape Clarifications

15-Sep-2025

G3 GG5 T5

[<T5a>](#) Field Element tolerances may vary from nominal by up to ± 1.0 ".

On long goals for push back, tape is applied manually to define the control zone and may be applied onto goals by young and inexperienced volunteers like children. When taping the long goal control zone, I could see someone starting in the correct spot on the top of the goal (when fully assembled) but wrapping the tape around the goal in a way it slants away and back to the initial correct spot. In this plausible scenario, the long goal control zone would not match figure CZ-1 in Game-Specific Definitions. This brings up the first question,

1. Does the entire tape line define the planes to the long goal control zone (such that the control zone would not be confined to two vertical projections perpendicular to the field) or does just the outermost, correctly-aligned tape at the top of the long goal (the corner of the goal in this example where the volunteer started to apply tape) define the projections to the long goal control zone?

[<GG5>](#) **Match replays are allowed, but rare.** a. Match Affecting "Field fault" issues. i. Field Elements starting in incorrect positions, and out of the allowed tolerances (see [<T5>](#)[<T5>](#)).

[<G3>](#) **Use common sense.** When reading and applying the various rules in this document, please remember that common sense always applies in the VEX V5 Robotics Competition.

If the first question is the first answer and the applied tape for the long goal control zones appears off to those scoring the match (we are assuming the head referee(s) is here to keep calls like these consistent across an event), what should be done in the following,

2. The tape is with the 1" tolerance but is substantially offset (such as 3/4" offset, the entire width of the white tape itself) such that it has changed the state of a block being within the long goal control zone. The tape as is would not give benefit of the doubt the block could be in either state, it is well within one of the states inside or outside the control zone. The tape as it is defined in CZ-1 would give benefit of the doubt and decrease the certainty of calling the block in one state, the tape is not set for the referee to give benefit of the doubt for where the tape should be. The situation could also be flipped such that an unclear call would become clear when utilizing CZ-1's tape lines. Should the block be scored as is defined by the tape due to [<GG5>](#) or can [<G3>](#) be applied in egregious instances of tape technically within tolerance?
3. Take the same situation as 2 above but the tape is outside the 1" tolerance. Should the block be scored as is since the field has been that way all day, can [<G3>](#) be applied in verified instances of tape outside tolerance, or is a match re-play after fixing the field long goal tape lines required, not allowed, as outlined in [<GG5>](#)?
4. Does situation 2 or situation 3 apply differently if the scoring decision in question is match affecting?

Answered by committee

Hi, Karson, and thanks for these questions!

We'll start by saying that the next game manual update will include an additional clause for rule [<T5>](#) that specifies the tolerance for those tape lines is +/- 0.25". This change is effective immediately.

When placing those tape lines, care should be taken to ensure that they align with the edge of the closed portion of the Goal (and repositioned as needed).

To address your specific scenarios:

1. If there is slight variance in tape alignment around a Goal, Head Referees should use the edges of the tape lines on the top surface of the Goal as a "tiebreaker."
2. Same answer as #1.
3. If (during or immediately following a Match) the Head Referee determines that a tape line is out of tolerance, and the incorrect tape position is determined to be Match Affecting, that Match should be replayed after the tape lines are repositioned to be within tolerance.
4. If the misaligned tape line did not affect the outcome of the Match, no replay is needed.

2787: Pre-Match Loader Adjustments

15-Sep-2025

GG4 T5

[<GG4>](#) **Hands out of the Field** d. Any concerns regarding Field Element or Block starting positions should be raised with the Head Referee prior to the Match. Team members may never adjust Blocks or Field Elements themselves.

[<T5>](#) **Be prepared for minor Field variance** b. Block placement at the beginning of the match may vary from nominal by up to $\pm 1"$ (25.4mm). e. The rotation of Blocks is not specified.

For the bottom Block in a Loader, it is easier for a Robot to obtain that Block if it positioned closer to the edge of the opening. I have the following questions as it pertains to teams,

1. So long as it is not disruptive, can a Drive Team Member ask a volunteer to set the lowest Block in a Loader closer to the edge of the opening?
2. Does the volunteer position matter in terms of who is able to make preferential movements for the starting location of Blocks, [<GG4>](#) denotes a Head Referee is responsible for concerns.
3. If no to question 1, can Drive Team Members ask for Loaders to be reset or adjusted by the Head Referee due to concerns of preferential positioning?

I have the following questions as it pertains to Head Referees,

4. Up to the discretion of the Head Referee given element positioning is a gameplay decision, can the field be set such that the Blocks at the bottom of every Loader are all positioned for easier access by robots for matches with more time to reset the field (finals, semi-finals)?
5. Does the answer to 4 change if field resetters, a head ref, or different volunteer roles complete the positioning (All under the approval of the head referee for this question as well)?

Answered by committee

Thanks for your questions, Karson!

In the next game manual update, rule [<T5>](#) will specify that if a Block is within tolerance it should not be adjusted before the Match. Teams must design their Robots and mechanisms to be able to handle the range of possibilities within the legal tolerances. This change is effective immediately.

For your scenarios:

1. No. Objects will only be adjusted if they're out of tolerance.
2. No.
3. No. Objects in Loaders will not be adjusted.

4. No. Volunteers should not consider the specific alignment or rotation of Blocks in Loaders during or after Field reset.
5. No.

We hope this helps!

2443: Special Needs Team Member

16-Jan-2025

T5

<T5><T5><T5> One of my students would like to be a driver at an event, but his hands were not formed correctly at birth and his hands are too weak for him to stand up, hold the controller, and drive at the same time. In order to drive well, he needs to sit down to use his legs to support his hands. Is it allowable for him to sit down while driving? This question would also apply to a child confined to a wheelchair. The definition of "driver" states that the person "stands" in the driver station, while other rules such as T5, just state that the driver needs to be "present" in the driver's station.

Answered by committee

Thank you for your question. A variance like the one you're requesting can be obtained through a [Needs-based Special Accommodation as described in this article in the REC Library](#).

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.

2124: No Show Pass Points

7-Sep-2024

T5

[<T5>](#) If one team in a teamwork event receives a "No Show", does the other team automatically get points for passes, like in a skills match?

Answered by committee

No. Rules and scoring do not change for a Teamwork Match in which one of the Teams is marked as a "No Show." Because there is only one Robot in the resulting Match, only Goals and Cleared Switches can receive points.

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

15-Feb-2024

T5 T6

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>](#)).

1872: No show in Final match

14-Jan-2024

T5

[<T5>](#)[\[<T5>\]\(https://events.vex.com/storage/game_manual/VIQRC_2023-2024_Full_Volume/rules/T5.html\)](#) . 1 team of an alliance doesn't show up in the** final match** so TMO tick no-show in TM app. The result is that both team get 0 point. So [<T5>](#) only applies for Qualification matches or TM app is bugged?

Finals Match # 2

Alliance

	Goal #1	Goal #2	Goal #3
Blocks Scored	20	8	10
Fill Level	3	3	3
Uniform	☐	☐	☐
☐ Cleared Supply Zone	Red Blocks Removed from Starting Peg		3
Robot 1	Partially Parked		Robot 2 Partially Parked

For Finals Tiebreaker Matches Only (See Rule T19)

Match Stop Time

Team 1

Team 1 ☒ No Show ☐ DQ

Final Score: 0

Team 2

Team 5 ☐ No Show ☐ DQ

Final Score: 0

☒ These scores are official, click 'Unscore Match' to make the scores unofficial

Answered by committee

Thank you for bringing this to our attention. Rule T5 is intended to apply for both Qualification and Finals Matches. We have passed this along to the REC Foundation & Tournament Manager developers, and this should be fixed in an upcoming release.

In the future, questions relating to possible TM issues can always be directed towards your [REC Foundation representative](#).

1522: <T5> Restrictions on Late Arrival for a Match

6-Jun-2023

T5

<T5> A Team's Robot and/or Drive Team Member should attend every Match. A Robot or a Student member of the Team must report to the field for the Team's assigned Match, even if the Robot is not functional. If no Student Drive Team Members report to the field, the Team will be considered a "no-show" and receive zero (0) WP's, AP's, and SP's.

1. If a Team arrives 10 seconds after a Match starts, will they be considered a "no-show"?
2. If a Team arrives 15 seconds before a Match ends, will they be considered a "no-show"?
3. If a Team arrives while Scorekeeper Referees are scoring, will they be considered a "no-show"?
4. If a Team arrives while the Field is being reset, will they be considered a "no-show"?

Answered by committee

Thank you for your questions. It is impossible to issue a blanket answer beyond what is written in the Game Manual that encompasses all possible hypothetical scenarios. However, in the absence of any other case-by-case context or extenuating circumstances, the answer to all of your questions is "yes, all of these are no-shows."

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. Not receiving a "no-show" is an acknowledgment that the Team still made it to the field on time and did not delay the event.

<T5> is not intended to be an allowance for a team showing up late to their scheduled match.