

Q&A

VEX V5 Robotics Competition 2026-2027: Override

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

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

- For event, registration, or other competition support questions, please contact your [Regional Support 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

[Number of Students in a Team Clarification](#)

[Clarification on regarding temporary restriction of Toggle movement using a C-Channel](#)

[Legality of Legacy \(SMC\) Pneumatics](#)

[Legality of painted screw heads and anodized aluminum standoffs](#)

[Clarification on and regarding pneumatics with missing identification labels](#)

[R23 and Colored Third Party Parts](#)

[2mm thickness plastic legal?](#)

[V5RC Skills Scoring - Starting Quadrant vs Toggle State](#)

[Possession](#)

[Substituting Colored Field Tape for White Tape](#)

3142: Number of Students in a Team Clarification

15-May-2026

G3

We are a private team with currently two members, but there seems to be a contradiction in the game manual regarding the number of students that make up a team. In Appendix B under the definition of a team it states that "One or more Students make up a Team." However in the first sentence of Appendix D it states, "Three or more Students make up a Team." Which one would be the correct definition of a team so we can recruit another team member if needed?

Since this isn't exactly pertaining to a specific rule listed in the list of tags, I have just chosen G3 so that I am able to submit this.

Answered by committee

The definition in Appendix B is correct.

The statement in Appendix D is an error, and will be corrected in the June 4 game manual update.

3135: Clarification on regarding temporary restriction of Toggle movement using a C-Channel

14-May-2026

GG9 SC4

Rule Quote: <GG9>

Robots may not intentionally grasp, grapple, hook, attach to or otherwise Entangled with any Field Elements. Strategies with mechanisms that react against multiple sides of a Field Element in an effort to latch or hook onto said Field Element are prohibited. The intent of this rule is to prevent Teams from unintentionally damaging the Field and/or from anchoring to or otherwise Entangling themselves with the Field. Whenever possible, Head Referees should alert Teams to potential Violations before they happen to prevent actual Violations. If a Robot takes immediate action to avoid or resolve the issue, and if the Head Referee determines that the issue had no effect on the Match, no Violation should be recorded.

<SC4>

SC4> A Toggle is considered set to a color when it meets all of the following criteria at the end of the Match:
a. The Toggle must be fully seated, such that there is a face of the Toggle in contact and parallel with its mounts on the Field Perimeter at rest. (see Figure SC5-1) b. **The Toggle is not in contact with a Robot from either Alliance.**

Question: In the context of the current game, is it legal for a robot to position a piece of C-channel underneath the Toggle mechanism to prevent it from rotating?

The mechanism is not "clamped" or "grasped" in a way that prevents the robot from driving away (no permanent attachment), but the geometry of the C-channel effectively wedges the Toggle so it cannot be turned by an opponent. Does this "jamming" action constitute "attaching to a field element", or is it considered a legal defensive strategy provided the robot can move away freely?

Video I saw on youtube of this idea: <https://www.youtube.com/shorts/Kyow3GVag-0>

Answered by committee

A Robot mechanism interacting with the Toggle as described is not inherently a GG9 violation.

Provided the Robot does not violate R18 and/or S1, this may be considered a legal gameplay interaction.

The Game Design Committee will continue to monitor Robot interactions with Toggles throughout the season, and this ruling may be subject to change if needed, based on observed gameplay.

3140: Legality of Legacy (SMC) Pneumatics

15-May-2026

R19

[<R19>](#) Rule R 19 lists several Non-VEX components that are allowed. In previous years, both the manual and the knowledgebase listed the specific SMC legacy pneumatics components that were legal for competition use. This year there is no mention of the legacy pneumatics in the manual at all. They are not listed as allowed parts in R 19, but there is also no mention of them not being allowed in R 18, so there is a bit of confusion. Several other rules in the manual (GG3, R25, R26, etc) specifically mention VEX pneumatics parts. Am I correct to assume that this means that the legacy SMC pneumatics components are not legal to use this year and the only legal pneumatic components are the VEX branded ones?

Answered by committee

Legal VEX Parts are listed in the Legal Parts list linked in the Game Manual.

Components not included in that list are not legal for competition use.

3133: Legality of painted screw heads and anodized aluminum standoffs

14-May-2026

R23

[<R23>](#) reads:

Anodizing, painting, dyeing or changing the color of any legal VEX part is prohibited.

Our team has many RoboSource "Color Coded Star Drive Screws" where the screw heads have been painted by the vendor.

Related to this, we also have many RoboSource "Color-Coded Standoffs" which are anodized aluminum.

Technically, none of us painted or anodized the part ourselves - it came brand new painted and/or anodized from a well-known reputable vendor.

Are either or both of these two types of products legal?

Thank you!

Answered by committee

R23a is intended to apply to parts made by VEX Robotics. It does not apply to commercially available hardware.

Provided the screws and standoffs meet the stated criteria in R22, these parts are legal for use in the VEX V5 Robotics Competition.

3136: Clarification on and regarding pneumatics with missing identification labels

14-May-2026

R23

[<R23>](#)

Decorations that cover or obscure identifying features of electronics and/or pneumatics parts are not legal. i. Teams will be asked to either replace the electronics and/or pneumatics part entirely, or remove the decoration if possible. ii. Identifying features include, but are not limited to, VEX logos, part numbers, and other distinctive colors or features of the part that allow an inspector to easily confirm it is a legal part.

Question: Over the course of normal use, the plastic protective wrapping/labeling on V5RC pneumatic reservoirs and cylinders can become frayed, damaged, or fall off entirely, removing the VEX logo and part number. If a pneumatic part is otherwise identical in form and function to an official VEX part but is missing its factory label/logo due to wear and tear, is it still considered legal for competition use and furthermore, what secondary identifying features should a team point to during inspection to "easily confirm" the part is legal if the primary logo is missing?

Answered by committee

Normal wear and tear that damages factory-applied labels does not inherently make an otherwise legal pneumatic component immediately illegal.

Inspectors may use other identifiable characteristics of the part, such as its dimensions, construction, fittings, color, shape, or other distinctive features, to determine whether it is a legal VEX component. Comparing the part to a known-legal component with intact factory labels may help facilitate this process.

The easiest way to ensure inspection of these parts proceeds smoothly is to ensure that factory labels remain clearly visible to Robot inspectors whenever possible.

Teams should expect additional scrutiny if a part cannot be readily identified during inspection, and should understand that inspectors may deem a part illegal if they cannot reasonably verify that it is a legal VEX component.

3141: R23 and Colored Third Party Parts

15-May-2026

R23

How does R23 Effect third party colored parts such as Robosource colored screws?

Answered by committee

Please see our answer to [Q3133](#)

3146: 2mm thickness plastic legal?

16-May-2026

R24

Do 2mm thickness plastic legal?

Answered by committee

2mm Plastic is not legal, per R24.

Plastic thickness is limited to 0.070" (1.78mm)

A metric conversion will be added in the June 4 game manual update.

3150: V5RC Skills Scoring - Starting Quadrant vs Toggle State

18-May-2026

RSC3

I noticed a possible discrepancy regarding Skills scoring for Pins in V5RC Push Back.

When reviewing the Skills scoring system on V5RC-Hub, it appears that red Pins are only counted as scored when they are in a red Quadrant *and* the Toggle is set to red. However, <RSC3> in the game manual states: "Red Pins only score points if they are Placed in a red Quadrant or in the Midfield." The rule does not appear to mention any requ<RSC3>irement for the Toggle to also be set to red in order for the Pin itself to count as scored.

Could the GDC please clarify whether:

1. A red Pin in a red *starting* Quadrant scores regardless of Toggle state, or
2. The Toggle must also be set to the matching color for the Pin to score?

Thank you.

Answered by committee

This was a bug in the V5RC Hub app that was recently fixed, so the scoring behavior within the app should now correctly align with the rules in the game manual.

For future reference, if there are any conflicts between the English-language PDF of the game manual and other supplemental or translated materials, such as the V5RC Hub app, the most current version of the English-language PDF of the game manual takes precedence, as stated in the game manual.

3149: Possession

17-May-2026

SG6

With plowing not counting as possession in this seasons game, What is the definition of 'Possession'?<SG6>

Answered by committee

Game Manual version 0.1 inadvertently omitted a definition for Possession.

This will be added in the June 4 game manual update.

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

This will be added as a permissible Field modification under [<T6>](#) in the June 4 game manual update.

Event Partners should keep [<T7>](#) in mind when making this modification. Fields at a given event must remain consistent with one another.

Note: Load Zones were included on the Field in case rule modifications are needed later in the season to create a more protected area for retrieving Scoring Objects. They are colored to aid referees in understanding Robot interactions if these zones become more critical to gameplay later in the season. If future rule changes utilize these zones more heavily, the red and blue tape lines may become required.