

# Q&A

## VRC 2021-2022: Tipping Point

?????: R26

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 Tipping Point 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 Tipping Point rules questions.

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

??????

[VEX Pressure Gauge must goes on the robot?](#)

[Using pneumatic tubing as a spacer](#)

[R26 Brain Placement](#)

[Inspection in reference to rule 26](#)

[V5RC Inspection Rules Clarification](#)

[Custom License Plates Text Color](#)

## 3152: VEX Pressure Gauge must goes on the robot?

18-May-2026

R26

VEX Pressure Gauge on the e high pressure side count as part of the robot or it can arbitrary disassembly like a pump?

?? ???? ?????? committee

The VEX Pressure Gauge must be plumbed to the High Pressure side of the pneumatics system, and must remain on the robot during the match.

## 3057: Using pneumatic tubing as a spacer

24-Jan-2026

R26

According to the red box under rule [<R26>](#), it states that "using pneumatic cylinders and/or tubing without any air reservoirs is also in Violation of the spirit of this rule". Does this include using pneumatic tubing as a custom spacer, or does that not fall under the classification of using it as pneumatics?

?? ???? ?????? committee

One intent of the red box below [<R26>](#) is to prevent teams from using excess pneumatic tubing as additional storage on the Robot beyond the allowable reservoirs. The specific language you have called out pertains solely to that intent. There are no rules governing the use of pneumatic tubing outside of the pneumatic system, as long as the tubing used is legal for use on Robots.

## 2341: R26 Brain Placement

3-Dec-2024

R26

[<R26><R26>](#) Would lifting the conveyor to where you can access the brain make this legal? I saw this post and noticed the conveyor was flat on the brain so I just wanted to make sure. <https://events.vex.com/V5RC/2024-2025/QA/2258>

This picture is a proposed solution by my team, the brain power button is obviously accessible and not obscure.

<https://drive.google.com/file/d/1njOUh0-AhPgJ0J8SPLNhL9EK4JzzDoP/view?usp=drivesdk>

<https://drive.google.com/file/d/17xrd8rWag1RG-tyhXFGJq-7O5JlnpXoP/view?usp=drivesdk>

?? ???? ?????? committee

It is impossible to issue a blanket answer beyond what is written in the Game Manual and [Q&A 2258](#) that encompasses all possible situations based on a snapshot description of a hypothetical Robot or mechanism.

The final determination of whether a specific Robot meets the Robot rules can **only** be made by the Head Referee at an event, with consideration of the safety of the design.

## 2309: Inspection in reference to rule 26

18-Nov-2024

R26

The following Q and A addresses brain accessibility and was addressed at this weekend's event.

<https://events.vex.com/V5RC/2024-2025/QA/2258>

The head referee stated that the brain must be accessible on the outside of the robot. You cannot reach around a moving part or through a part that moves to power on/off the robot. I showed him a picture of Axel and inquired if that violates rule 26. He said yes, post a question for clarification. The example robot in the video had the brain in the middle of the conveyor. I understand the concern. The screen was not easy to see, and the button was covered by a moving part. Can the brain be within the robot as long as it is accessible and not covered by a fixed or moving part [<R26>](#)?

?? ???? ?????? committee

Being placed below a moving part is not the entire basis for determining legality, rather an example for why the V5 Brain in [Q&A 2258](#) was not legal; it was not easily accessible because of the moving part.

Axel's V5 Brain does not violate rule [<R26>](#). A volunteer could safely and easily reach inside of Axel to turn off the V5 Brain. The V5 Brain can be legally placed inside of the Robot, but must be easily accessible in order to be turned off.

The final determination of whether or not a specific Robot meets the requirements of rule [<R26>](#) must be made by the Robot inspector and/or the Head Referee with safety in mind.

---

## 2258: V5RC Inspection Rules Clarification

5-Nov-2024

R26

[<R26>](#) I'm reaching out on behalf of our team regarding a technical inspection issue we encountered during last week's V5RC competition.

One of our students designed a robot inspired by a YouTube video featuring team 229V, where the brain was placed inside the conveyor mechanism as the video shows. However, during inspection at the event, we were informed that this configuration was not allowed due to safety concerns – specifically, because the power button was obstructed, which raised concerns about safe access.

Our student noted that, since team 229V's robot could compete, this brain placement might be acceptable in some regions. We are concerned about the possibility of having to redesign our robot's brain placement for our regional events, only to find that other teams are permitted to use this configuration in Signature or other competitions. This discrepancy could create a sense of unfairness for teams preparing under different guidelines.

Could you please clarify whether this brain placement is indeed permissible under VEX Robotics rules? If this configuration is prohibited, we will adjust our design accordingly. However, if it is allowed, we would like to inform the local signature event partners to ensure consistent application of the rules.

Reference Robot: [https://www.youtube.com/watch?v=3O\\_d37-M9c0&ab\\_channel=Lukedoesrobotics](https://www.youtube.com/watch?v=3O_d37-M9c0&ab_channel=Lukedoesrobotics) (0:00-1:22)

?? ???? ?????? committee

This placement of the V5 Robot Brain does not appear to meet the requirements of rule [<R26>](#), and should probably not pass inspection. That said, the final determination of whether a Robot meets the Robot rules can only be made by the Head Referee at an event.

R26 - Keep the power button accessible. The on/off button on the V5 Robot Brain must be accessible without moving or lifting the Robot. All screens and/or lights must also be easily visible by competition personnel to assist in diagnosing Robot problems.

Based on our interpretation of the image you provided, the Team would have to manipulate/move the Robot's conveyor (which may potentially be moving at the time) to access the on/off button on the V5 Robot Brain. Additionally, the screen appears to be entirely obscured by the conveyor.

We understand the potential frustration from an engineering / Robot packaging perspective, but this rule is in place for safety concerns. Teams and volunteers must be able to troubleshoot and easily turn off a Robot. We take safety rules with the utmost seriousness, and give most of them precedence over just about everything else. In a safety-related situation, volunteers must be able to safely and easily cut power to the V5 Robot Brain without having to understand the intricacies of the specific Robot and its operations.

## 1010: Custom License Plates Text Color

21-Jan-2022

R26

Hello,

R26 A - D

- a. Robots must use the colored plates that match their Alliance color for each Match (i.e. red Alliance Robots must have their red plates on for the Match). It must be abundantly clear which color Alliance the Robot belongs to.
- b. License Plates must fulfill all Robot rules (i.e. they must fit within the 18" cube per <R5>, they cannot functionally change the stability of rigidity of the Robot, cause entanglement, etc.)
- c. Team numbers must be in white font.
- d. Plates must be at least 2.48 inches (63.2mm) tall and 4.48 inches (114mm) wide, i.e. at least the size of the plates in the VRC License Plate Kit ignoring thickness

R26 Red Box

The intent of this rule is to make it very easy for Head Referees to know which Alliance and which Team each Robot belongs to. Being able to "see through" a Robot arm to the wrong color License Plate on the opposite side of the Robot would be considered a violation of <R26a>.

It will be at the full discretion of the Head Referee and inspector at a given event to determine whether a given custom license plate satisfies the criteria listed in <R26>. Teams wishing to utilize custom plates should be prepared for the possibility of this judgment, and ensure that they are prepared to replace any custom parts with official VEX License Plates if requested. Not bringing official replacement plates to an event will not be an acceptable reason for overlooking a violation of one or more points in <R26>

Assuming a custom license plate in question follows R26 A, B and D, can a Head Referee / inspector okay a custom license plate that violates R26 C (eg. red/blue text, or black text on a red/blue background) if the team number and alliance color are obvious?

Thank you for your time!

?? ???? ?????? committee

Assuming a custom license plate in question follows R26 A, B and D, can a Head Referee / inspector okay a custom license plate that violates R26 C (eg. red/blue text, or black text on a red/blue background) if the team number and alliance color are obvious?

No, a custom license plate with any color of text other than white would be in violation of R26-C. Head Referees / inspectors do not have the latitude to choose which inspection rules should be enforced or ignored.