

Q&A

VIQRC 2023-2024: Full Volume

Tagged: R6

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.
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995: Commercially Available Standoffs

5-Jan-2022

R6 R7 R8 R12

Hello,

This question comes with the changes to "identical parts" and standoffs not being considered under R12.

R12

Robots may use any commercially available #4, #6, #8, M3, M3.5, or M4 screw up to 2.5" (63.5mm) long (nominal), and any commercially available nut, washer, and / or non-threaded spacer (up to 2.5" (63.5mm) long) to fit these screws.

R6, R7 and R8 do not mention standoffs as an exception for what can be used from a third party.

Are standoffs purchased from third parties legal if they are identical in all ways besides color to what VEX Robotics / VEX Robotics resellers provide?

Thank you for your time!

Answered by committee

Yes. R12 will be updated to include standoffs in the February 1 Game Manual update.

942: Does using 393 motor controllers to control LED Strips violate rule R31c or R6b?

22-Nov-2021

R6

Hello,

Our team has wired up 5v LED strips to work with the vex v5 system. The LEDs are being run by the motor controllers for 393 motors, with LED cabling soldered to the output wires, and the neutral spliced into one of the 3 wire ends. Is this Legal? Would this be considered a violation of rule R13c, or R6b?

Thanks!

Here is R13c for reference: "VEX electronics may not be used as non-functional decorations"

And R6b: "Electronics from the VEX Cortex control system are not permitted. This includes the VEXnet Joystick, VEXnet Partner Joystick, VEX ARM® Cortex-based Microcontroller, VEXnet Key 1.0 and 2.0, 2-Wire Motor 393, and any other electronic components which are not compatible with the VEX V5 system"

Answered by committee

Thank you for quoting the relevant rules in your question. Per R13-c and R6-b, no, this would not be legal.

874: Problems with the new Cortex rule in VRC due to V5 system backordered

1-Oct-2021

Background

We registered and activated an independent VRC team this season, but ran into some troubles. We bought an EDR super kit a few years ago before V5 was released, so the kit came with Cortex. New rules this season state that we are not allowed to use electronics from the Cortex system. I understand that VEX requires upgrade as technology advances and this will result in older versions to become obsolete. However, V5 EDR super kit, system bundle, and some separate electronics are backordered. I searched through the forum to see if other people encountered similar problems and this is what I found: <https://www.vexforum.com/t/problems-with-the-new-cortex-rule/93623>

They ordered V5 products before September 24 and the product will not arrive before M

Question

Is there any chance to allow Cortex for at least this year so VEX has more time to manufacture and ship V5, or is there anything we can do to get a V5 system bundle in time? Thanks.

Answered by committee

Is there any chance to allow Cortex for at least this year so VEX has more time to manufacture and ship V5, or is there anything we can do to get a V5 system bundle in time? Thanks.

There are no plans to change rule R6-b at this time. We would recommend contacting sales@vex.com or your [REC Foundation Team Engagement Manager](#) for assistance.

754: Dyeing Rubber

1-Mar-2021

R6 R13

Hello,

There has been debate in the community about the legality of dyeing rubber.

R6

Robots are built from the VEX V5 or Cortex system. Robots may be built ONLY using official VEX V5 and Cortex components, unless otherwise specifically noted within these rules. Teams are responsible for providing documentation proving a part's legality in the event of a question. Examples of documentation include receipts, part numbers, official VEX websites, or other printed documentation.

R6-D

Any parts which are identical to legal VEX parts are permitted. For the purposes of this rule, products which are identical in all ways except for color are permissible. It is up to inspectors to determine whether a component is "identical" to an official VEX component.

R13

Decorations are allowed. Teams may add non-functional decorations, provided that they do not affect Robot performance in any significant way or affect the outcome of the Match. These decorations must be in the spirit of the competition. Inspectors will have final say in what is considered "non-functional". Unless otherwise specified below, non-functional decorations are governed by all standard Robot rules.

2013 Q&A <https://www.vexforum.com/t/answered-boiling-wheels/23048>

Recently it has come to my attention that there is a way to modify the opaque green rubber of the dual roller omni wheels and high traction tires through the process of submerging the wheel in a pot of boiling water.

Dyeing Rubber wikiHow (Method 1) <https://www.wikihow.com/Dye-Rubber> Step 2

Fill a pot with water and heat it on a low to medium stove setting. The water should be hot, but not boiling—close to, but less than 212 °F (100 °C) is ideal.

Step 4

Place the object in the bowl and leave it to soak. Keep it in the pan for up to 2 hours, depending on how strong or bright you want the new color to be.

The 2013 Q&A states that “hyper-hydrating” rubber is illegal for use in VRC because it is ‘not safe’. Hyper-hydrating rubber only requires boiling water while teams are allowed to use more dangerous power tools like bandsaws and dremels.

The community would like an official test done by the GDC to see how “hyper-hydrating” 3.25, 4” and the different durometers of flex wheels modifies their properties.

1. **Does “hyper-hydration” change the properties of rubber enough to affect the outcome of a match (and to break R13)?**

a) If the answer to the bolded question is no, is boiling wheels with the intent of “hyper-hydrating” with no intent of modifying color legal?

b) If the answer to the bolded question is yes, is there a specified amount of time and water temperature that would be considered “hyper-hydration”? There have been teams who get a nice rubber color with water at 190F and a higher dye concentration.

2. Is there a preferred way teams should dye their omni-wheels and flex wheels that doesn’t cause it's properties to be changed enough to break any rules?

Thank you for your time

Answered by committee

First, thank you for the well-organized question and for quoting the relevant rules from the Game Manual.

is boiling wheels with the intent of “hyper-hydrating” with no intent of modifying color legal?

Yes.

708: <VUR6> Clarification

7-Dec-2020

R6 R7 R8 R10 R12 R20 R22 VUR2 VUR3 VUR5 VUR6 VUR8

In this previous ruling, it was determined that <VUR5> takes priority over <VUR6>:

<https://events.vex.com/VEXU/2020-2021/QA/674>

However, this is contradictory to every other instance of past rulings regarding <VUR6> and the wording of <VUR6> in the game manual.

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For example, consider a typical custom sensor such as the pixy camera:

<https://www.robotshop.com/en/charmed-labs-pixy-2-cmucam5-image-sensor.html>

This sensor violates <R6>, <R7>, <R8>, <R10>, <R12>, <R20>, <R22>, as well as <VUR3> and <VUR8>.

VUR3 restricts the materials allowed, but this sensor violates the allowed materials.

VUR8 restricts the screw sizes allowed, but this sensor may have smaller screws than the allowed limit.

As another example, consider a vex IQ sensor: <https://www.vexrobotics.com/228-3014.html>

This sensor would violate <R6>, <R7>, <R8>, <R10>, <R12>, <R20>, <R22>, as well as <VUR3> and <VUR2b>.

<VUR2b> restricts teams from using any vex IQ electronics, which would include this sensor.

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Because <VUR6> specifically states "There is no restriction on sensors and other additional electronics that Robots may use for sensing and processing" it has been understood by most VexU teams that <VUR6> takes priority over all the other rules in the game manual. Logically this would also mean <VUR6> would take priority over <VUR5>.

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Several other Q/As over the years have verified this as correct as the wording on <VUR6> has not significantly changed since these rulings:

<https://www.vexforum.com/t/answered-vexu-speakers-as-part-of-custom-sensor/42312>

<https://www.vexforum.com/t/answered-vex-u-old-college-q-a-updates/23810>

<https://www.vexforum.com/t/answered-custom-sensor-housing/19582/2>

These three Q/As verify that <VUR6> would take priority over <VUR3> and <VUR8> as well as all the regular game manual rules mentioned above.

Furthermore, the following Q/A shows that <VUR6> would also take priority over <VUR5>:

<https://www.vexforum.com/t/answered-vex-u-non-vex-servo-motors-for-a-custom-sensor/35538>

This allowed external non vex motors used solely for manipulating custom sensors.

If this were the case, it would agree with the wording of <VUR6>. There are numerous sensors and processing boards that rely on motors to operate.

For example, many full field lidar systems such as:

<https://www.robotshop.com/en/rplidar-a1m8-360-degree-laser-scanner-development-kit.html>

rely on an integrated motor to spin the lidar enabling it to map the field. VexU teams have legally used similar lidar systems in the past and may plan to do so again this season.

Another example would be the Nvidia Jetson Xavier NX listed below:

<https://www.nvidia.com/en-us/autonomous-machines/embedded-systems/jetson-xavier-nx/>

This processing board has a built-in fan on its heatsink that is critical to its function as a processing unit.

A third example is the pixy tilt and pan kit: <https://pixycam.com/pixy2-pan-tilt-kit/> (ruled legal in the above Q/A linked).

Without these integrated motors, none of these sensors or processing units could function as intended.

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Therefore, which rules, if any, restrict the "no restriction" clause of <VUR6>?

Furthermore, if <VUR5> does not apply to <VUR6>, then was the previous ruling in QA#674 an error?

If <VUR5> is applicable, are 360-degree Lidar sensors and the Nvidia Jetson processing boards also illegal? If all VexU appendix rules also apply to <VUR6>, then does that mean that there are no legal VexU custom sensors?

Answered by committee

If all VexU appendix rules also apply to <VUR6>, then does that mean that there are no legal VexU custom sensors?

Please see rule G3:

<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.

The intent of the answer in the linked Q&A was to prohibit using VUR6 as a loophole to install cooling fans on a Robot.

Sensors containing an internal motor which is integral to their operation, such as a LIDAR or pan-tilt Pixy, would be permissible. It would not be feasible for an inspector to take apart a LIDAR module to see if there is a motor inside of it. It is, however, feasible for an inspector to check if a fan is being used to cool a V5 Smart Motor.

To prevent confusion, we would advise Teams with external processors that require thermal protection to utilize a [passive heat sink](#) instead of an active cooling fan.

3087: R17 Is the 2x8 smooth plate allowed as a decoration with your robots name on it?

9-Feb-2026

R6 R17

I know you can not use the 2x8 smooth plate as a license plate, but can they be used as a decoration? Thank you.

Answered by committee

Placing a sticker or writing with marker on the 2x8 Smooth Panel would be considered non-functional decorations, provided they do not violate any aspect of [R17](#).

2991: Securing License Plates

12-Dec-2025

R6

If a license plate were to become detached from the robot during a match, would that be considered a violation of [R6](#)? As a head referee, it has been an issue in previous matches when a team's license plate became detached from the robot and I was not able to identify the alliance color of the robot when trying to complete a holding count. The rule states the license plates must be placed in fixed locations on two horizontally opposing sides and must remain visible, legible, and attached for the entirety of the match. I have seen license plates placed with rubber band(s), velcro, and screws. Is there a guideline for what is to be used for attachment of license plates to ensure the fixed location as stated in the rule?

Answered by committee

If a license plate were to become detached from the robot during a match, would that be considered a violation of [R6](#)?

Yes, but a [GG8](#) might be even more appropriate. A detached License Plate should be recorded as a Minor Violation, and repeated Minor Violations may lead to a Major Violation and Disqualification at the Head Referee's

2976: R6 Custom License Plates and Tape

8-Dec-2025

R6 R24

I want to check the validity of using white tape to make the letters of a license plate more visible. Consider the following arrangement:

1. A plate of VEX structural material is cut to the appropriate size and painted/powder-coated per the example provided in Figure R6-2.
2. White tape is applied over the white paint of the numbers to make them more legible. [<R6>](#)

I ask because honestly the plate in figure R6-2 is painful to look at, I think I would struggle as Head Ref to easily identify the numbers because of the pattern of holes across the plate. Adding the tape would cover the holes, breaking up the pattern and making the numbers easier to read.

What would be the ruling regarding the intersection of R6 and R24 in the following cases:

1. White tape is applied on top of white paint. I believe this would be a non-functional decoration because removing the white tape simply exposes the white paint beneath.
2. White tape is applied on top of unpainted metal. I believe this would be a violation of R24 because the team number would ONLY be written in white (R6.f) if the tape was not removed, making the tape a functional decoration.
3. White tape is applied on top of metal painted the color of the license plate (i.e. the plate is painted a solid color and removing the tape means it looks functionally the same as a blank license plate). I believe this is a violation of R24 because removing the tape removes the team number, making the tape a functional decoration.
4. Any other color tape applied in place of white in the above examples. I believe this is a violation because of R6.f (team numbers must be written in white).
5. What if red and blue tape were used to color the plates rather than paint or powder-coating. I believe this is a violation of R24 because the tape is functional.

Answered by committee

Rule [<R22>](#) provides a few legal uses of tape, and does not include license plates or Team numbers on license plates.

However, the white number/letter stickers provided with the standard license plate kit are legal for use on Robots. Similar white, legible letter/number stickers, whether purchased or team-created (e.g., cut from adhesive vinyl using a cutting machine), are also legal options. We'll attempt to make this guidance clearer in a future game manual update.

2939: License plate question

22-Nov-2025

R6

[<R6>](#) more do a question of license plate, the GDC announced that license plates should be a single color, and with options for mounting limited we reverted back to an old style we use to do but instead of 2 colors, we use 2 different sets with a single color. would this be allowed? going off the verbage from the gdc,

License plates help observers identify what team and alliance a robot belongs to. Referees rely on license plate colors and legibility to make rules calls (like holding). Emcees depend on license plates for accurate in-match commentary. When a license plate falls off during a match, team and alliance information becomes lost and everyone's experience suffers as a result. Limiting each robot to a single color of license plate and encouraging stronger mounting methods will help ensure that the correct plates remain visible

throughout the match. Given the importance of license plates in these situations, we felt it was appropriate to reconsider their status as 'non-functional', as well.

<https://share.icloud.com/photos/018Gf3EjmuRZj44jFISfMed4A>

Just to clarify, we use two sets, one on each opposing side of the robot.

Answered by committee

As described in clause A of rule **<R6>** (bold text added here for emphasis),

License plates must be placed in fixed locations on exactly two (2) horizontally opposing sides of the Robot and must remain visible, legible, and attached for the entirety of the Match. The top of a Robot is not considered a "side" for these **two** license plates.

Your example uses extra license plates, which is specifically disallowed by clause E of rule **<R6>**.

2938: License plate clarification

22-Nov-2025

R6

<R6><R6><R6> needing clarification on license plate placement. define sides, can license plates be on the front and back being covered during match play r6 sides are not clearly defined

Answered by committee

Please review the [Q&A Usage Guidelines](#) before posting, specifically point 3, "Read and search the manual before posting." Often, you'll find that by quoting the rule, you'll answer your own question.

Rule **<R6>** requires that the two License Plates be mounted on opposing sides of the Robot, and clause B requires that the License Plates be "clearly visible at all times" and not easily obstructed by a Robot mechanism during standard Match play. License Plates can legally be mounted to the front and back of the Robot, but only if they meet the requirements of clause B in those locations.

2900: V5 Robot Brain parts uses elsewhere on robot as functional elements.

6-Nov-2025

R6 R25 R28

<G3> I have seen posts about using V5 Brain accessories on other parts of the robot not related to mounting or protecting the V5 Robot Brain.

1. Screen protector used as part of intake mechanism - is this permitted?
2. If it is permitted, does it count against plastic use? If not, how many screen protectors may be used on the robot?
3. Can the magnets be used from screen protector as functional use on robot? 4. if magnets be used from screen protectors, how many may be used by a team?
4. Flanges from V5 Brain may they be used on other parts of the robot not related to mounting of V5 Brain?
5. If they are permitted to be used, any limit on number of flanges used on robot?
6. If they are permitted, may they be used as substitute for IQ pins to mount License Plates?

Robot rules does not prohibit these cases, nor limits it. Yet, it seems that V5 Brain parts should be used for the Brain, as screen protectors and flanges do not individual SKU with V5RC legal designation.

Answered by committee

Thanks for these questions, Pascal!

The December 4 game manual update will include two new clauses to reflect Q&A guidance from prior seasons. These changes are effective immediately.

- A new clause in rule [<R8>](#) will specify that V5 Robot Brain accessories (short flanges, long flanges, and the magnetic screen protector) are part of the V5 Robot Brain and are only legal for use on Robots as part of the V5 Robot Brain.
- A new clause in rule [<R28>](#) will specify that all V5 Robot Brain accessories (short flanges, long flanges, and the magnetic screen protector) are considered "part of the V5 Robot Brain" and cannot be modified.

The answers to your questions are therefore:

1. Screen protectors can only be used to protect the V5 Robot Brain screen as intended.
2. The one screen protector used to protect the V5 Robot Brain does not count against the custom plastic limit. Only one screen protector can be used per V5RC Robot Brain.
3. Because the screen protector is part of the V5 Robot Brain, it cannot be modified in any way, including removing the magnets.
4. Magnets cannot be removed from the screen protector for other uses on the Robot.
5. Flanges are part of the V5 Robot Brain and cannot be used for other purposes on the Robot.
6. Each V5 Robot Brain includes two Short Flanges and two Long Flanges, all of which can be used to mount the V5 Robot Brain on other materials. Flanges are not required.
7. The V5 Robot Brain flanges cannot be used for other purposes on the Robot, including attaching License Plates.

2896: License Plate Clarification

2-Nov-2025

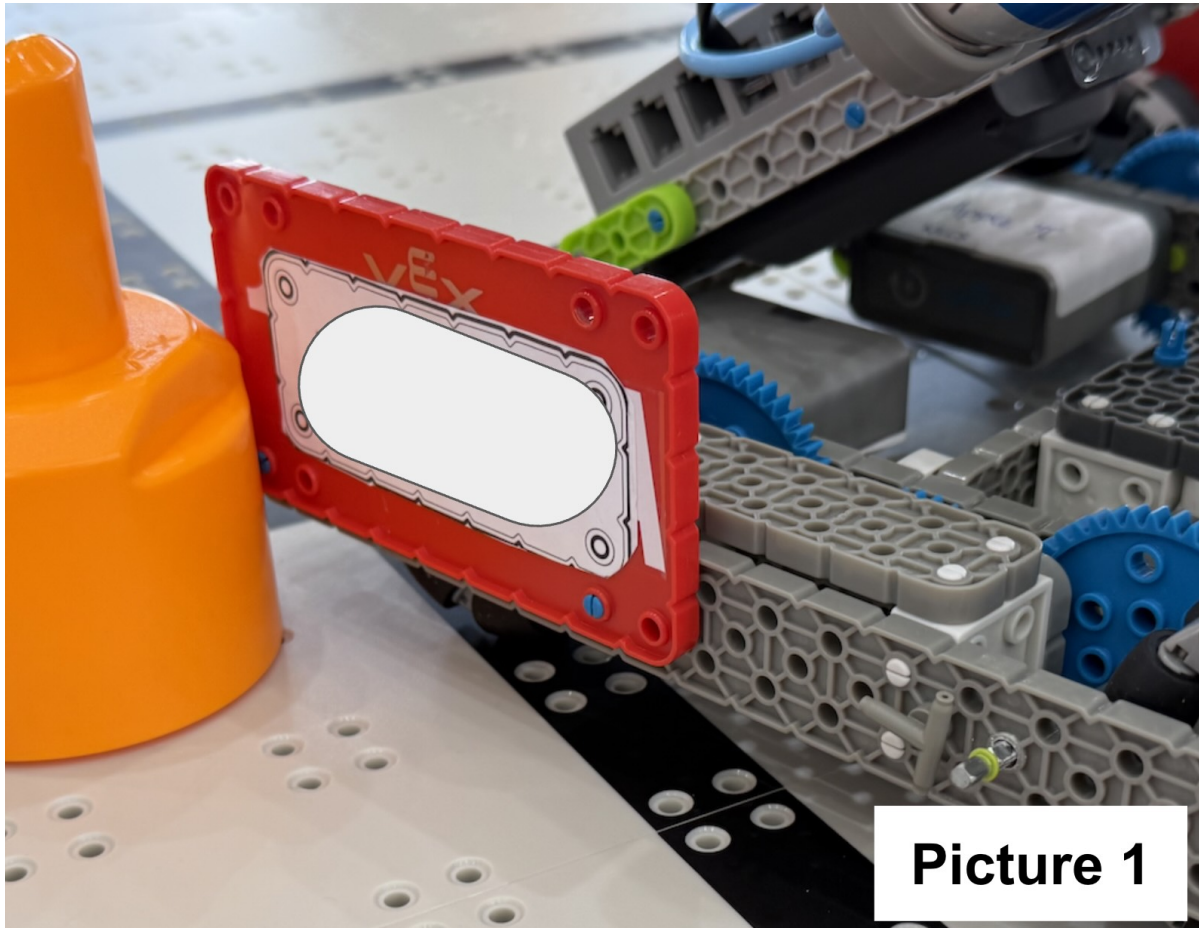
R6

[<R6>](#)

First off, thank you, GDC, for the work that you do!

I have a few clarifying questions regarding license plates:

1. Picture 1 below shows a robot using the printable VEX IQ Robotics Competition License Plate attached to a V5 license plate. Would this be considered legal based on rule R6 (or any other rule)?
2. Picture 2 below shows a 2x8 Smooth Panel, 228-2500-524. I have observed a few teams using this as a license plate at events. It appeared that teams would use a label maker to print their team number and stick it to this part. Would this be considered legal based on rule R6 (or any other rule)?
3. Clarification on [2870: Printed numbers on Licence plates](#), would it violate R6 or any other rule if the Printable VEX IQ Robotics Competition License Plate were laminated? I have observed many teams with paper license plates that are very tattered and torn, making them difficult to read.



Picture 1



Picture 2

Answered by committee

Thanks for your question, Bo.

None of the examples in your question and photos are legal as License Plates for VIQRC Robots. As described in the 2nd paragraph of rule [<R6>](#),

Teams may use the official VEX IQ Robotics Competition License Plate (VEX Part Number 228-7401) or a plain paper version of matching size, such as this template in the REC Library.

If plain paper License Plates become tattered or torn, they should be replaced as needed between Matches to ensure they remain legible. Paper License Plates cannot be laminated or taped.

2870: Printed numbers on Licence plates

23-Oct-2025

R6

[<R6>](#) specifies that a License plate can be a "plain paper version of matching size"

Assuming it is made by students:

Q1) must team numbers be hand written on paper/official license plates?

Q2) is the following a legal lumber plate: a custom digital team number graphic and add it onto the license paper plate template, this combination is then printed out and attached. (eg. adding the team number to the template in word)

Q3) can this a custom number graphic be attached to a legal license plate with pins and this combination be considered a legal license plate?

Q4) can you use something like label tape to print the team number as a label and attach that to a the non-paper license plate

Apologies if some of these questions are redundant and thank you for answering this oddly specific set of questions.

Answered by committee

Thanks, ST, for your questions.

Team numbers can be added to License Plates in a variety of ways, including marker, number stickers, custom cut adhesive vinyl, or label printers. If needed, a printed number can be attached to a standard VEX IQ plate with legal materials (e.g., IQ pins). Team numbers must be clearly legible, regardless of the method used to put them on plates.

Any of your examples would be legal if the base License Plates are either the standard VEX IQ plates or plain paper versions, and if the method of adding the Team number doesn't significantly increase the overall thickness of the License Plate.

2847: IQ pins for RCV5 License Plates

11-Oct-2025

R6

according to rule [<R6>](#) part B, "License plates must be attached to the Robot using materials that are legal for Robot construction. VEX IQ pins are no longer legal for mounting license plates on Robots."

However, I have observed teams mounting a license plate to the robot using screws and nuts, but attaching the other color plate on top of mounted plate using IQ pins. Is this legal since the plate is attached to the robot using legal materials?

And to traverse the rule R6.C of one color license plate visible at a time, the edges and back of legally mounted license plate have been blacked out and it is mounted against metal structure which allows no color to be visible other than the open, unmodified face of the plate. (To which the opposite color plate is attached to with IQ pins.)

Answered by committee

Thanks for your questions, Team 99299A!

Although the techniques you've noted were legal in prior competition seasons, the rules regarding license plates changed significantly for V5RC Push Back. What you've observed is illegal for a couple of reasons:

1. VEX IQ pins are not legal Robot parts for the VEX V5 Robotics Competition. The use of VEX IQ parts is prohibited under rule [<R19>](#) clause E. As you pointed out in your question, clause B of rule [<R6>](#) specifically states the VEX IQ pins are no longer legal for mounting license plates on Robots.
2. [<R6>](#) clause C states, "Robots may only include license plates that match their Alliance color for the current Match (i.e., red Alliance Robots must have only red plates installed for the Match)." Clause A specifies that the Robot must include two plates in fixed locations on two horizontally opposing sides. Clause E states, "Additional license plates cannot be used on the Robot for any purpose." A Robot on the red Alliance cannot have a blue license plate anywhere on the Robot, visible or not. A Robot on the blue Alliance cannot have a red license plate anywhere on the Robot, visible or not.

2814: Tape for "Paper License Plates"

24-Sep-2025

R6 R15

<R15> Prohibits the use of Tape and/or any other material that adheres to or changes a legal part, other than non-functional decorations. <R6> Requires teams to have 2 license plates on their robot and provides options for using a paper printed license plate in replacement of the plastic license plate: <https://viqrc-kb.recf.org/hc/en-us/articles/28277975906199-Printable-VEX-IQ-Robotics-Competition-License-Plate>

Context: All of the participating teams are fully registered with robotevents and have paid for their registration; however, many teams choose not to accept the welcoming package which gives the physical plastic license plates because it costs money to have it shipped.

Since the license plate serves a function for the robot, as an identifier for the judges, can tape be used for the sole purpose of affixing the paper license plate to the robot?

Answered by committee

Hello, Jon, and thanks for your question!

As you pointed out in your question, rule [<R15>](#) prohibits tape except as part of non-functional decorations. This includes attaching a Team's License Plates, which per clause C of rule [<R6>](#) are functional Robot components.

If a Team uses plain paper versions of License Plates, they must be attached using other functional parts that are legal for use on VIQRC Robots. [Capped connectors](#) are a great choice, and [standard connector pins](#) work well, too---especially when used in combination with [IQ beams](#) to "sandwich" the edges of a paper License Plate on a Robot. Teams that use paper License Plates should have extras on hand to replace copies that become damaged or illegible during a Match.

We hope this gives you some ideas of how Teams can legally attach paper License Plates to their Robots!

2539: Illegal Part Question

16-Feb-2025

R6

If a robot that has already passed inspection is later found to have an illegal part—specifically one that is part of its scoring mechanism—when we are already 60% into the tournament, what happens to their previous matches? Are their scores retroactively adjusted, or do the matches stand?

Answered by committee

As described in clauses D & F of rule [<R3>](#),

D: If a Robot is determined to not be legal before a Match begins, the Robot will be removed from the Field. A Driver may remain so that the Team does not get assessed a "no-show" (per T5).

F: If a Robot has passed inspection, but is later found to be in Violation of a Robot rule during or immediately following a Match, then they will be Disqualified from that Match and R3d/T6 will apply until the Violation is remedied and the Team is re-inspected.

This is the only Match that will be affected; any prior Matches that have already been completed will not be revisited. R4d will apply until the Violation is remedied and the Team is re-inspected.

Additionally, if the Head Referee determines that the illegal part is a willful Violation of a Robot rule as described in [<R17>](#), it should be considered a Violation of [<G1>](#) and the Code of Conduct. As described in [<R17>](#),

A Team that circumvents a Robot rule for a competitive advantage should receive an immediate Disqualification for the current Match and be reported to the Event Partner for discussion with the REC Foundation Regional Support Manager. As a result of that discussion, the Team may be Disqualified from the event. The Violation should also be reported to the REC Foundation Rules and Conduct Committee following the event.

2506: (228-5583-1381) Part Legality

5-Feb-2025

R6

There were Hexagonal plates of 3 colors and part numbers ie:(228-5583-1381) included in the field kit for Rise Above that don't appear in the VEX IQ Robotics Competition 2024-2025 Legal Parts or the VEX IQ Robotics Competition or 2024-2025 Illegal Parts appendix documents. Are those legal for competition use on robots? [<R6>](#)

Answered by committee

Thank you for your question. The part you're asking about is simply an alternate color of part 228-2500-1381, which is found on page 11 of the VEX IQ Legal Parts Appendix and is legal for use on Rapid Relay Robots.

For reference, parts are coded in a format like "228-WXYZ-ABCD." WXYZ is a color code and does not matter for legality. The last set of digits (ABCD) is a part identifier that is important for legality.

2189: Is PET film from 2023-2024 Full Volume goals legal to use?

11-Oct-2024

R6

Is the large PET film labled with "VEX IQ" from 2023-2024 Full Volume goals legal to use? I can not find it in the legal parts list but they are truely from VEX IQ product line. please advise. Thank you!

Answered by committee

No. The PET goal walls from Full Volume are listed on the last page of the [VEX IQ Illegal Parts Appendix](#). We will add this link to the game manual in the next update.

2155: Rubber band issue in competition kit

25-Sep-2024

R6

<R6>

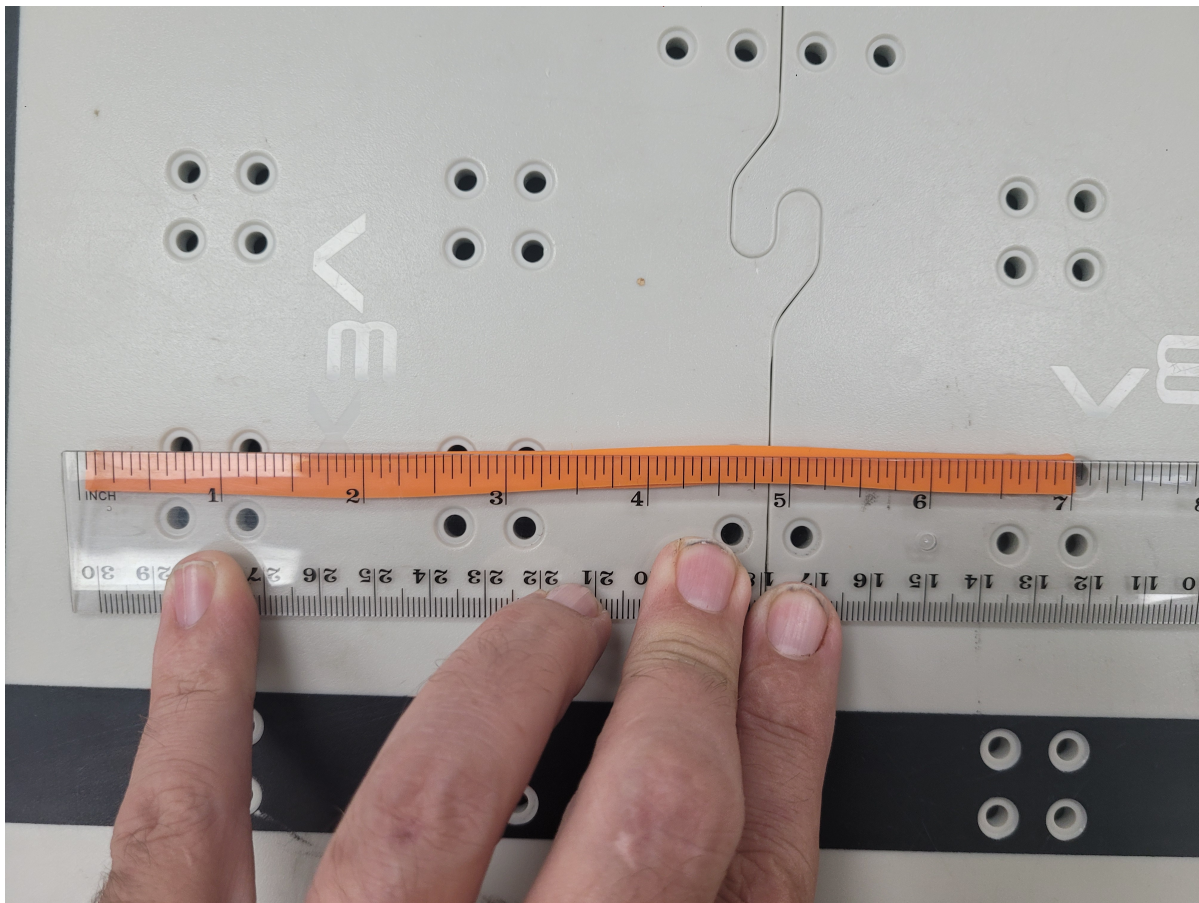
A local team has a set of Gen 2 competition kits with the expansion/upgrade kit. This kit includes 2 'large silicone rubber bands' in the competition kit. These rubber bands at first appear to be 117b rubber bands which are legal in Vex IQ. However, when I was checking them, the rubber bands are not actually 117B size. They are the correct 7" long, but are 1/4" wide, not 1/8" wide.

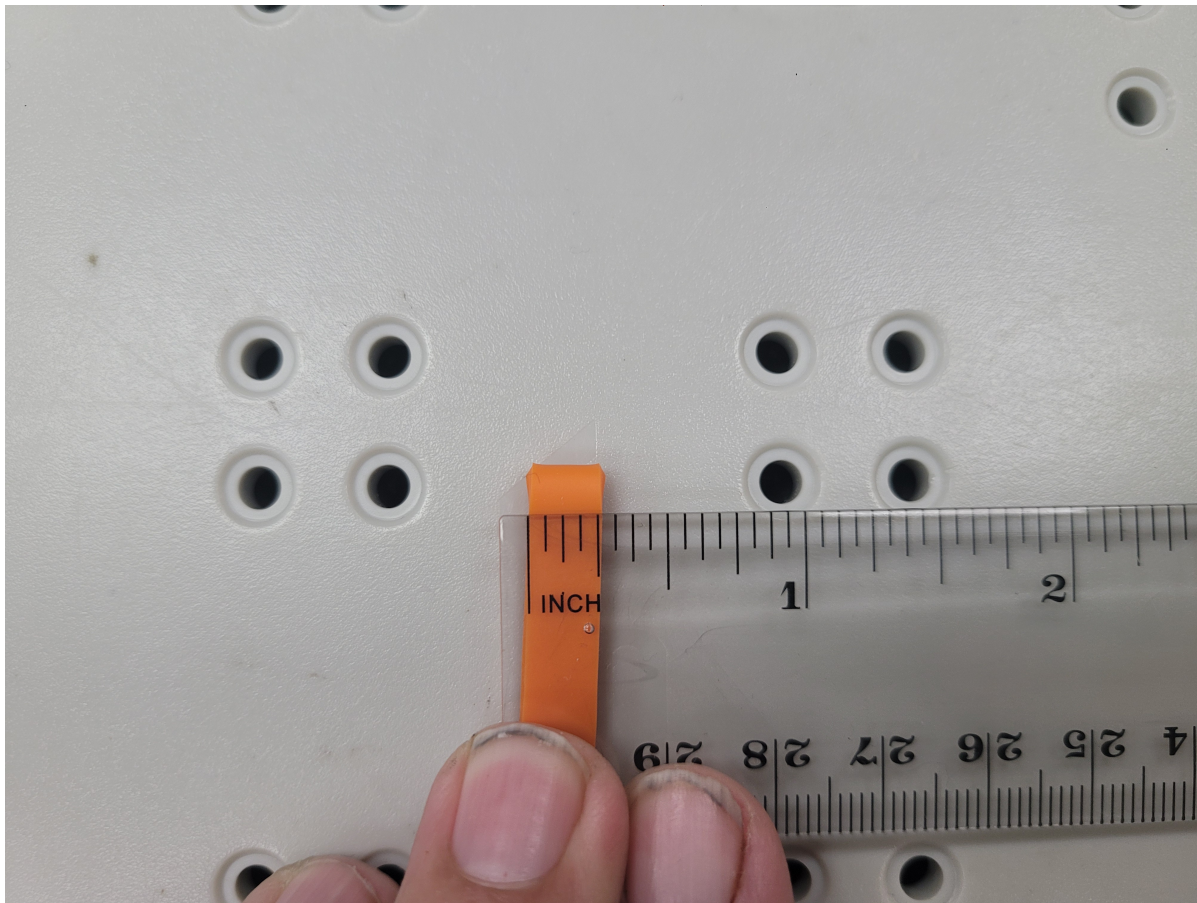
I double checked the most recent legal/illegal parts lists and only standard 117B rubber bands (7" x 1/8") are on the list. I also checked the Vex website, and that size (7" x 1/4") bands are not for sale anywhere on the website, except it would appear, in the competition kit.

I need to know if these rubber bands are considered legal for competition. As it stands now, I can see having to disqualify a lot of teams who purchased the competition kit thinking everything in it was a legal part.

So my questions are:

1. Is the 7"x1/4" band that comes in the competition kit legal?
2. When will that part be added to the legal parts list so I will not have issues as an EP when someone uses one? (Or the QA? I may have missed it if this has already come up)
3. Where can teams get these 1/4" wide 7" rubber bands?





Answered by committee

Thank you for your question! We agree that part number 228-2500-470, Silicone Rubber Band #117B, was named incorrectly and that it should be updated to denote the correct size, #170.

1. Is the 7"x1/4" band that comes in the competition kit legal?

Yes, the band that comes in the competition kit is legal for use in the VEX IQ Robotics Competition.

2. When will that part be added to the legal parts list so I will not have issues as an EP when someone uses one? (Or the QA? I may have missed it if this has already come up)

Clause A of rule [<R7>](#) will be revised in the next game manual update to include #170 rubber bands.

3. Where can teams get these 1/4" wide 7" rubber bands?

This Silicone Rubber Band (228-2500-470) is not currently available for purchase from VEX Robotics as a standalone part. With the addition of #170 to the allowable rubber band sizes found in clause A of [<R7>](#), teams may purchase #170 rubber bands as an equivalent size, although performance may vary based on the specific material of the rubber band.

2098: 3x20 beam (228-2500-039) Part Legality

13-Aug-2024

R6

There are two (2) 3x20 beams (228-2500-039) included in the field kit for Rapid Relay that don't appear in the **VEX IQ Robotics Competition 2024-2025 Legal Parts** or the **VEX IQ Robotics Competition 2024-2025 Illegal Parts** appendix

documents. Are those legal for competition use on robots?

It would appear R6 i. might address this but wanted to clarify here and possibly get an update to the respective appendix document above.

R6 1. Additional VEX IQ products that are released during the season are legal for use, unless otherwise noted on their product pages and/or in the VEX IQ Robotics Competition Legal Parts Appendix.

Answered by committee

Thank you for your question! Yes, the 3x20 beam (228-2500-039) is legal for use on competition Robots and will be added to the Legal Parts Appendix.