Team Update 03

General

N/A

Competition Manual

6.3 Team Judged Award Descriptions

6.3.4 Reach Award

Table 6-5 Reach Award Criteria

Reach Award Criteria		
Required	1	Team must discuss, describe, display, or document their outreach objectives and how their outreach activities support the *FIRST* community.

10.8 Other Logistics

SCORING ELEMENTS that leave the FIELD will be returned to the closest available DRIVER or HUMAN PLAYER ~~DRIVE TEAM member~~ at the earliest safe opportunity by FIELD STAFF. Reintroduction of SCORING ELEMENTS must follow rule G433.

11.2 Conduct

G202 ***DRIVE TEAM Interactions.** ~~Opposing ALLIANCES'~~ DRIVE TEAM members cannot distract/interfere with the opposing ALLIANCE. This includes taunting or other disruptive behavior.

11.4 In-MATCH

11.4.1 AUTO

G402 **No AUTO opponent interference.** …

Violation: MAJOR FOUL per instance of ROBOT contact in G402.A and MAJOR FOUL per ARTIFACT in G402.B.

11.4.4 ROBOT

G417 **ROBOTS only operate GATES as directed.** ~~**may not contact the opposing ALLIANCE'S GATE.**~~ ROBOTS may not:

A. contact, either directly or transitively through a SCORING ELEMENT, an opposing ALLIANCE'S GATE, or
B. apply any closing force to either GATE.

Violation: MAJOR FOUL and the opposing ALLIANCE is awarded the PATTERN RP if G417.A.

11.4.6 Human

G433 **Humans may not yeet SCORING ELEMENTS.** DRIVE TEAM members may only enter ARTIFACTS onto the FIELD as follows:

A. only during TELEOP,
B. without LAUNCHING, bouncing, or rolling,
C. without using a tool ~~unless allowed under G302~~, and
D. only ~~via the LOADING ZONE~~ by either:
   i. directly placing the ARTIFACT into the LOADING ZONE such that it does not leave the LOADING ZONE before coming to rest, or
   ii. into a ROBOT that is in the LOADING ZONE such that the ARTIFACT is fully supported either directly or transitively by the ROBOT.

Violation: MAJOR FOUL per ARTIFACT.

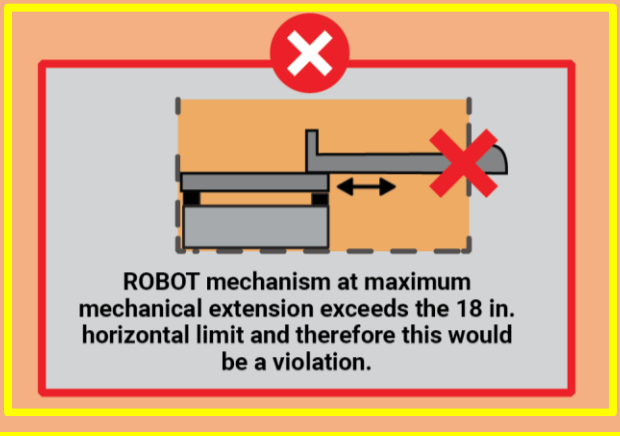
12.1 General ROBOT Design

R105 **There are expansion limits.** …

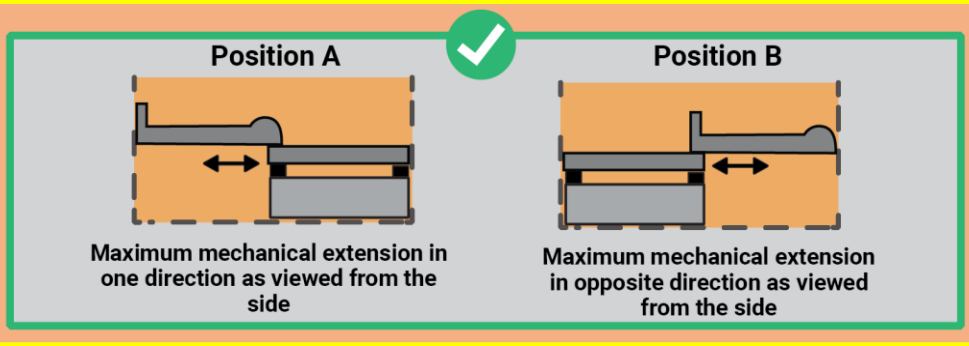
Any extension beyond the maximum expansion limit during ROBOT operation is considered a violation of this rule. This includes flexible extensions (e.g., surgical tubing flappers, star intakes) that cause the ROBOT to exceed the expansion limit.

Teams should be prepared to show compliance with this rule and demonstrate their ROBOT expansions during the inspection process. During inspection, each team will be asked to show the ROBOT'S STARTING CONFIGURATIONS and additionally its configurations at maximum mechanical extensions. Software limits are not sufficient to demonstrate maximum extensions.

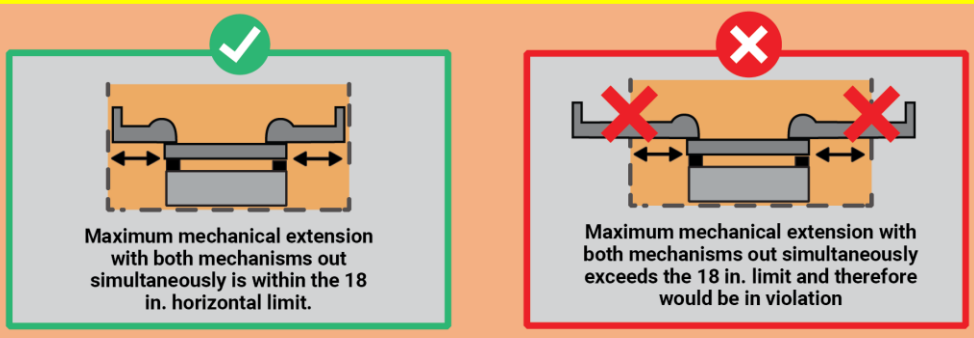
ROBOTS must show their maximum mechanical extensions during the inspection process. A ROBOT that can mechanically exceed the horizontal limit would be in violation even if the ROBOT has software limiting the position of the extension during the MATCH.



A ROBOT with a single mechanism that can extend out of both sides of a ROBOT would be allowed as long as the overall horizontal dimension at maximum mechanical extension does not exceed 18 in.



A ROBOT with multiple mechanisms that are not mechanically linked that can extend out of both sides of a ROBOT simultaneously would NOT be allowed if the overall horizontal dimension at maximum mechanical extension exceeds the 18 in. limit.



At maximum extension, a ROBOT in compliance will not exceed the maximum allowable vertical extension of 38 in. (96.50 cm) in one direction while maintaining the horizontal expansion requirements of 18 in. (45.70 cm) length and width perpendicular to the vertical height.

Teams are responsible for maintaining compliance with expansion limits and subject to penalties listed in G414 and G415 for any violations during the MATCH.

Team Update 02

General

Animation Awards Blog and Information

2025-26 season information about the Digital Animation Award sponsored by Worcester Polytechnic Institute (WPI) and the Safety Animation Award sponsored by UL Solutions has been published. For more details see additions to the Competition Manual in section 6.6 Project-Based Global Awards as shown below and read the Animation Awards for the *FIRST* AGE Season Blog.

Competition Manual

6.6 Project-Based Global Awards

6.6.1 Digital Animation Award sponsored by Worcester Polytechnic Institute (WPI)

This award, sponsored by Worcester Polytechnic Institute (WPI), celebrates STEAM (Science, Technology, Engineering, Art, and Mathematics) and emphasizes the ability to tell a story through animation that integrates technological, social, and humanistic concepts.

The 2026 Digital Animation Award is offered to help encourage students to cultivate skills in design and creation of animation while telling a story about the impact of technology on society. This award is open to all *FIRST* Robotics Competition teams and *FIRST* Tech Challenge teams and is optional. More information can be found on the Digital Animation Award webpage.

~~Specific award criteria and deadlines will be available after Kickoff. Check out last year's submission requirements and the 2025 Digital Animation Award Winners to learn more about this award.~~

6.6.2 Safety Animation Award sponsored by UL Solutions

The 2025-26 theme for the Safety Animation Award, sponsored by UL Solutions, is: Unearth Safety! For this animation teams are invited to dig deep to uncover impactful ways to implement safe and sustainable practices. Use bold storytelling and imaginative artistry to create a memorable message that inspires responsible exploration and careful stewardship of our resources. More information can be found on the Safety webpage.

~~**NEW!** For the 2025-26 Season, each *FIRST* Tech Challenge team will also be able to submit for the Safety Animation Award sponsored by UL. Specific submission details will be available after Kickoff.~~

~~To learn more now, check out the 2025 *FIRST* Robotics Competition Safety Animation Award winner details.~~

9.10 AprilTags

Figure 9-18 has been adjusted to correct error in TAG ID from 33 -> 23.

11.3 Pre-MATCH

G301 ***Be prompt.*** …

> …
> In general, good faith efforts to quickly become MATCH ready are entirely for the purposes of transitioning the ROBOT into a MATCH ready state (i.e., not attempts to significantly alter a ROBOT'S capabilities.) Examples of good faith efforts to quickly become MATCH ready include but are not limited to:
> A. walking safely towards the FIELD with a ROBOT that a team is not actively modifying.
> B. applying quick fixes such as tape or cable ties to make the ROBOT compliant with STARTING CONFIGURATION requirements.
> C. waiting for a DRIVER STATION device to boot.
> D. actively working with field technical staff, including the FTA, to resolve an issue in a reasonable amount of time.
> E. performing a MOMENTARY "wiggle test" to confirm communication between the DRIVER STATION and the ROBOT CONTROLLER. The ROBOT should not drive or interact with SCORING ELEMENTS (except contact with pre-loaded ARTIFACTS) while performing this test.

11.4.4 ROBOT

G418 **ROBOTS may not meddle with ARTIFACTS on RAMPS.** ROBOTS may not contact, either directly or transitively through a SCORING ELEMENT CONTROLLED by the ROBOT, ARTIFACTS on a RAMP, including their own RAMP. Additionally, ROBOTS may not:

A. ~~descore~~ remove an ARTIFACT from their own RAMP except by operating the GATE, or
B. ~~descore~~ remove an ARTIFACT from the opponent's RAMP.

Violation: MAJOR FOUL per ARTIFACT, and the ALLIANCE is ineligible for the PATTERN RP if G418.A, or the opposing ALLIANCE is awarded the PATTERN RP if G418.B.

G432 **Humans only take from the LOADING ZONE.** DRIVE TEAM members may only retrieve or move ARTIFACTS from the FIELD as follows:

A. only ARTIFACTS that are in the LOADING ZONE, and
B. only during TELEOP.

Violation: MINOR FOUL per ARTIFACT.

> DECODE is a fast-paced game and teams should practice coordination and communication between the DRIVE TEAM members to avoid unintentional contact between the ROBOT and any humans in violation of G431.A.
>
> ~~This violation can stack. A DRIVE TEAM member that retrieves an ARTIFACT from outside the LOADING ZONE during AUTO would receive 2 MINOR FOULS.~~

G433 **Humans may not yeet SCORING ELEMENTS.** DRIVE TEAM members may only enter ARTIFACTS onto the FIELD as follows:

A. only during TELEOP,
B. without LAUNCHING or rolling,
C. without using a tool unless allowed under G302, and
D. only via the LOADING ZONE by either:
   i. directly placing the ARTIFACT into the LOADING ZONE, or
   ii. into a ROBOT that is in the LOADING ZONE such that the ARTIFACT is fully supported by the ROBOT.

Violation: MAJOR FOUL per ARTIFACT.

DRIVE TEAM members may load SCORING ELEMENTS into a ROBOT. DECODE is a fast-paced game and teams should practice coordination and communication between the DRIVE TEAM members to avoid unintentional contact between the ROBOT and any humans, in violation of G431.A.

~~This violation can stack. A DRIVE TEAM member that enters an ARTIFACT into the FIELD outside the LOADING ZONE during AUTO would receive 2 MAJOR FOULS.~~

G434 **The ALLIANCE AREA has a storage limit.** During TELEOP, each ALLIANCE may not store more than 6 ARTIFACTS off the FIELD. DRIVE TEAM members making a good-faith effort to immediately enter additional ARTIFACTS into the FIELD is an exception to this rule.

Violation: MINOR FOUL per ARTIFACT over the limit and an additional MINOR FOUL per ARTIFACT over the limit for every 3 seconds in which the situation is not corrected.

The intent of this rule is to prevent an ALLIANCE from starving the FIELD of ARTIFACTS during TELEOP. During AUTO and transition, this rule is not enforced. Upon the start of TELEOP, DRIVE TEAM members must make a good-faith effort to immediately enter ARTIFACTS into the FIELD until compliant with G434.

Teams will not be in violation of this rule if FIELD STAFF return ARTIFACTS to the DRIVE TEAM that have left the FIELD per section 10.8 Other Logistics such that the ALLIANCE holds a number of ARTIFACTS over the limit. However, if the DRIVE TEAM does not then make a good-faith effort to immediately enter ARTIFACTS into the FIELD until compliant with G434, they will be in violation of this rule.

DRIVE TEAM members must keep ARTIFACTS accessible. DRIVE TEAM members intentionally losing access to ARTIFACTS, e.g., by purposefully removing them from the FIELD and ALLIANCE AREA, will be considered egregious behavior and handled per G211.

Team Update 01

General

N/A

Competition Manual

9.3 Areas, Zones, & Markings

– BASE ZONE: an 18 in. +/- 0.125 in. (45.70 cm +/- 0.30 cm) wide by 18 in. +/- 0.125 in. (45.70 cm +/- 0.30 cm) deep infinitely tall volume bounded by ALLIANCE colored tape. The BASE ZONE is an ALLIANCE specific zone belonging to the matching color ALLIANCE. The BASE ZONE includes the tape lines (Figure 9-3).

10.5.2 PATTERN Scoring Criteria

The randomization of the OBELISK ~~during AUTO~~ prior to the start of the MATCH selects the MOTIF which is repeated 3 times to define the PATTERN colors for each of the 9 indices on the RAMP (Figure 10-4).

11.4.4 ROBOT

G418 **ROBOTS may not ~~contact~~ meddle with ARTIFACTS on RAMPS.** ROBOTS may not contact, either directly or transitively through a SCORING ELEMENT CONTROLLED by the ROBOT, ARTIFACTS on a RAMP, including their own RAMP. ~~Exceptions are granted for inconsequential and inadvertent contact while operating a GATE.~~ Additionally, ROBOTS may not:

A. descore an ARTIFACT from their own RAMP, or
B. descore an ARTIFACT from the opponent's RAMP.

Violation: MAJOR FOUL per ARTIFACT, and the ALLIANCE is ineligible for the PATTERN RP if G418.A, or the opposing ALLIANCE is awarded the PATTERN RP if G418.B.

> Exceptions are granted for inconsequential and inadvertent contact made by a ROBOT while operating a GATE.
>
> Example 1: A red ROBOT that contacts an ARTIFACT on the blue RAMP is in violation of this rule and is assessed 1 MAJOR FOUL under G418.
>
> Example 2: A red ROBOT that LAUNCHES an ARTIFACT at an ARTIFACT on the red RAMP, removing it from the RAMP is in violation of this rule. The red ALLIANCE is assessed 1 MAJOR FOUL and is ineligible for the PATTERN RP under G418.A.

G419 **ROBOTS ~~only~~ ~~score~~ LAUNCH into ~~the~~ their own GOAL.** ROBOTS may not:

A. intentionally place or LAUNCH ARTIFACTS directly onto ~~the~~ their own RAMP, or
B. place or LAUNCH ARTIFACTS into the opponent's GOAL or onto the opponent's RAMP.

Violation: MAJOR FOUL and the opposing ALLIANCE is awarded the PATTERN RP if G419.B.

> The ~~game~~ intent is for ROBOTS to score by LAUNCHING into the open top of ~~the~~ their own GOAL. Attempts to intentionally score points with actions that enter the

ARTIFACT further down on the RAMP are considered violations of this rule. Attempts to score points for the opponent either through the opponent GOAL or with actions that enter an ARTIFACT further down on the opponent RAMP are also considered violations of this rule.

There is no violation for scoring in an opponent's DEPOT.

G425 **Keep out of opponent's SECRET TUNNEL** A ROBOT in the opponent's SECRET TUNNEL ZONE may not contact, directly or transitively though a SCORING ELEMENT, an opponent ROBOT ~~while in the opponent's SECRET TUNNEL ZONE~~, regardless of who initiates contact.

12.1 General ROBOT Design

R105 **There are expansion limits.** After the MATCH has started, ROBOTS may expand beyond the STARTING CONFIGURATION but are still subject to sizing constraints relative to the ROBOT, based on the initial STARTING CONFIGURATION. ROBOTS must be physically constrained to fit within these limits without the use of software. The sizing constraints are:

A. After the start of the MATCH, ROBOTS may expand horizontally but must remain within a fixed 18 in. (45.70 cm) by 18 in. (45.70 cm) when fully expanded per G414.
B. After the start of the MATCH, ROBOTS may expand vertically up to 18 in. (45.70 cm).
C. Within the limitations per G415, ROBOTS may expand vertically up to 38 in. (96.50 cm).

Any extension beyond the maximum expansion limit during ROBOT operation is considered a violation of this rule. This includes flexible extensions (e.g., surgical tubing flappers, star intakes) that cause the ROBOT to exceed the expansion limit.

Teams should be prepared to show compliance with this rule and demonstrate their ROBOT expansions during the inspection process. During inspection, each team will be asked to show the ROBOT'S STARTING CONFIGURATIONS and additionally its configurations at maximum mechanical extension. Software limits are not sufficient to demonstrate maximum extensions.

At maximum extension, a ROBOT in compliance will not exceed the maximum allowable vertical extension of 38 in. (96.50 cm) in one direction while maintaining the horizontal expansion requirements of 18 in. (45.70 cm) length and width perpendicular to the vertical height.

Teams are responsible for maintaining compliance with expansion limits and subject to penalties listed in G414 and G415 for any violations during the MATCH.

Team Update 00

General

Team Update 00 is provided as a quick reference of evergreen rule changes from last season, and updates from the V0 Preview Release.

The approach taken in this Team Update is to describe changes to content only. Editorial changes to verbiage, rule and section references, game specific examples that relate to evergreen content, and formatting changes are not described. As always, it's important to read the whole Competition Manual at least once and become an expert on sections of the manual that directly relate to your role and responsibilities on your team.

Teams are welcome to view existing questions and answers and to ask thoughtful and informed questions through the official Q&A system opening September 22, 2025, 12:00p.m. ET. Before asking a question, please review section 1.9 in the Competition Manual for information on what types of questions should be asked.

Notable Changes from Last Season:

Advancement

- New points-based advancement model in Competition Manual section 4 – Advancement. See the Advancement & FIRST Championship blog for details

Awards

- The Formal or Presentation Interview has been renamed to the Structured Interview. The format of the interview has not changed.
- The Motivate Award has been retired. It is replaced by the Reach Award and the Sustain Award.
- PORTFOLIOS for this season may only include content from January 1, 2025 or later.
- A204-C Allows for "show and tell" demonstration items which may include the team's ROBOT
- Updated descriptions and criteria for other awards

Robot Construction Rules

- Maximum number of allowed servos reduced to 10
- Expansion limits are back. See details in R105, G414, and G415.

Changes from V0 Preview:

Section 4 Advancement

- Changed "Qualification Round" Terminology to "Qualification Phase" for clarification
- Corrected references to "ALLIANCE lead"
- Corrected references to "structured interview"

6.2 Team Judged Award Rules

A214 ***Teams cannot win the Inspire Award at multiple Qualifying or League Tournaments.** Teams are only eligible to win 1st place Inspire Award once per season from any Qualifying or League Tournament. ~~Teams who have won 1st place Inspire may not be considered for 1st, 2nd, or 3rd place Inspire at subsequent Qualifying or League Tournaments.~~

> Teams who have won 1st Place Inspire are eligible to win 2nd or 3rd place Inspire Award at subsequent Qualifying or League Tournaments.

12.1 General ROBOT Design

Details about DECODE expansion limits have been added. Additional expansion rules G414 and G415 are located in section 11 Game Rules (G).

R105 **There are expansion limits.** After the MATCH has started, ROBOTS may expand beyond the STARTING CONFIGURATION but are still subject to sizing constraints relative to the ROBOT, based on the initial STARTING CONFIGURATION. The sizing constraints are:

A. After the start of the MATCH, ROBOTS may expand horizontally but must remain within a fixed 18 in. (45.70 cm) by 18 in. (45.70 cm) when fully expanded per G414.
B. After the start of the MATCH, ROBOTS may expand vertically up to 18 in. (45.70 cm).
C. Within the limitations per G415, ROBOTS may expand vertically up to 38 in. (96.50 cm).

> Any extension beyond the maximum expansion limit during ROBOT operation is considered a violation of this rule. This includes flexible extensions (e.g., surgical tubing flappers, star intakes) that cause the ROBOT to exceed the expansion limit.
>
> Teams should be prepared to show compliance with this rule and demonstrate their ROBOT expansions during the inspection process. During inspection, each team will be asked to show the ROBOT'S STARTING CONFIGURATIONS and additionally its configurations at maximum extensions.
>
> At maximum extension, a ROBOT in compliance will not exceed the maximum allowable vertical extension of 38 in. (96.50 cm) in one direction while maintaining the horizontal expansion requirements of 18 in. (45.70 cm) length and width perpendicular to the vertical height.
>
> Teams are responsible for maintaining compliance with expansion limits and subject to penalties listed in G414 and G415 for any violations during the MATCH.

Figure 12-1: Horizontal Expansion Limit

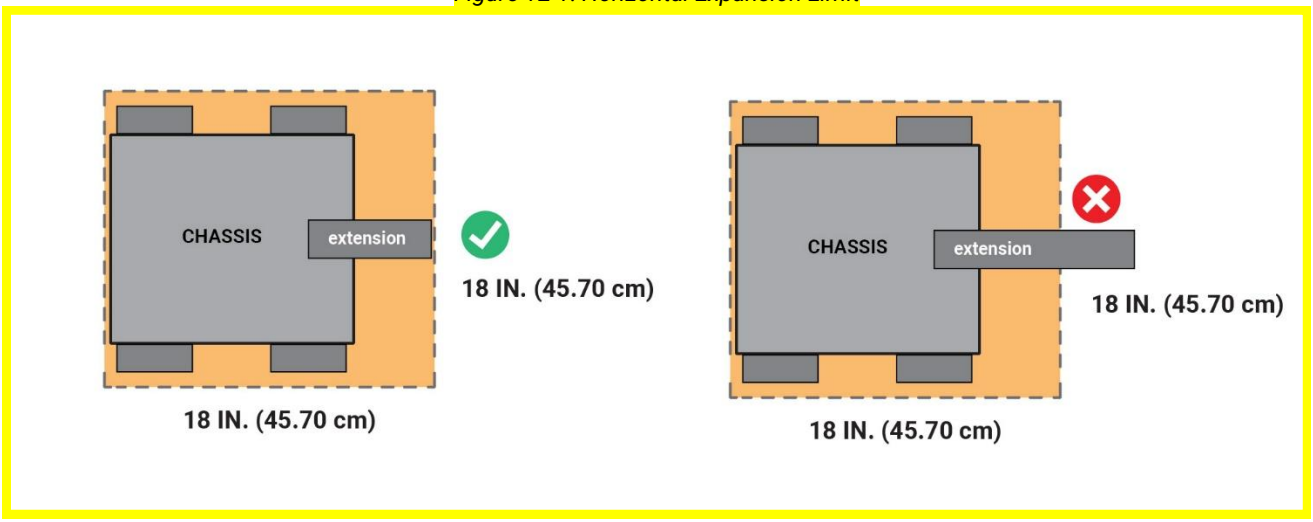
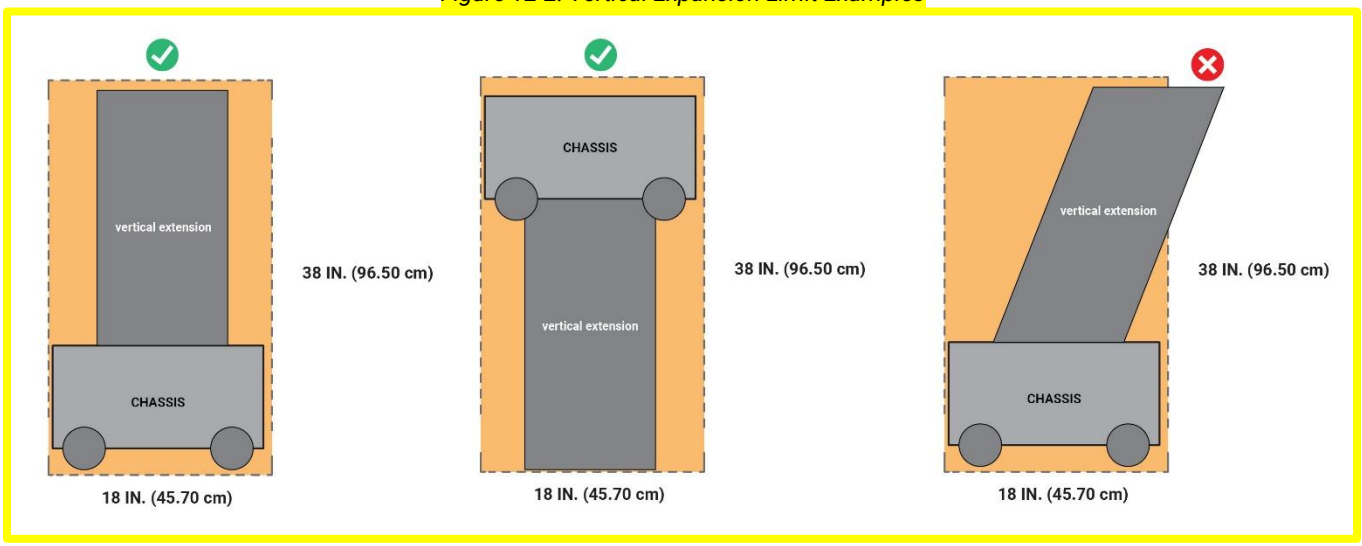


Figure 12-2: Vertical Expansion Limit Examples



12.5 Motors & Actuators

G501 ***Allowable motors.**

Table 12 1: Motor allowances

Motor Name	Part Numbers Available	Notes
NFR Products Yuksel 12V DC	NFR-600-100-000	
SWYFT Robotics SWYFT Spike Motor	SR-MOTOR-DC-01	

12.6 Power Distribution

R601 ***Battery limit – everyone has the same main ROBOT power.**

Table 0-1: Legal ROBOT Main Power Battery Packs

Battery Pack	Part Number	Notes
WATTOS 12V Battery	WT-NMH1230	

R609 ***Connect the ROBOT battery though the Main Power Switch.**

Table 0-2: Legal Power Switches

Power Switch	Part Number
goBILDA Floodgate Power Switch	3103-0005-0001
WATTOS Power Switch Kit	WTS-SW1220

R615 ***Use appropriately sized wire.**

In order to show compliance with these rules, teams should use wire with clearly labeled sizes if possible. If unlabeled wiring is used, teams should be prepared to demonstrate that the wire used meets the requirements of this rule (e.g., wire samples and evidence that they are the required size).

Combining multiple smaller wires in parallel cannot be used to create an equivalent larger wire which meets minimum wire cross section requirements.