

Team Update 02

GENERAL

Playing Field Page

A [link to resources to 3D print a RAPID REACT FIELD](#), courtesy of AutomationDirect has been added to the [Playing Field page](#).

Virtual Kit of Parts

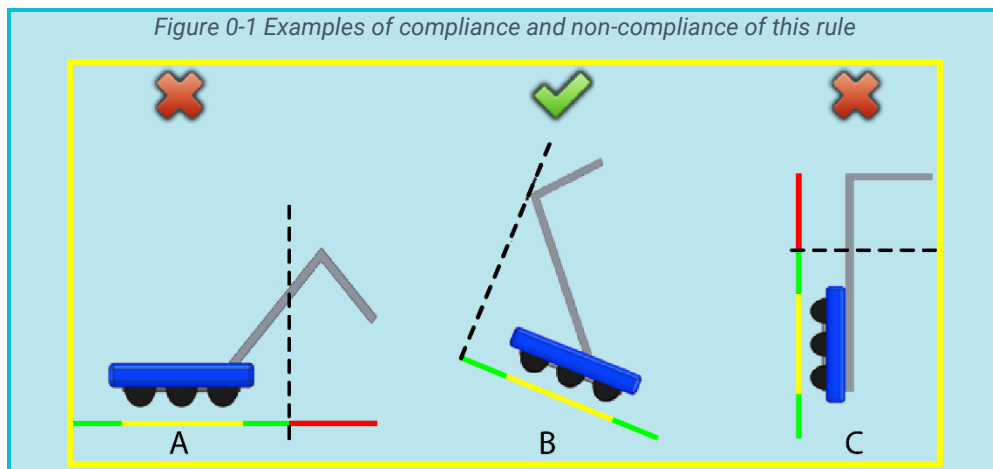
The codes initially loaded for Tableau were corrupted. We've re-uploaded the codes, and initial testing indicates the issue has been resolved. Please retrieve your new code from the Dashboard before authenticating the Tableau software. Our apologies for the inconvenience!

SECTION 5.7 CARGO

CARGO is inflated to 3½ psi. (checked using [this gauge](#) at official events).

SECTION 7.1 ROBOT RESTRICTIONS

G107 Figure 7-2, example C has been modified to show the extension reaching beyond the ROBOT'S FRAME PERIMETER.



SECTION 7.4 CARGO

G405 **Don't catch CARGO.** A ROBOT may not REPEATEDLY score or gain greater-than-MOMENTARY CONTROL of CARGO released by an UPPER EXIT until and unless that CARGO contacts anything else besides that ROBOT or CARGO controlled by that ROBOT.

SECTION 8 GAME RULES: HUMANS

FIRST is committed to [Equity, Diversity, and Inclusion](#) and as such, FIRST makes reasonable accommodations for persons with disabilities that request accommodation. If a participant needs an accommodation for an event, please talk to a volunteer at the event or contact [local leadership](#) before the event so they can help ensure the accommodation is provided. Accommodations are determined reasonable given they do not create an undue hardship or cause safety concerns.

SECTION 9.3 BUDGET CONSTRAINTS & FABRICATION SCHEDULE

Item C is removed from R304 because charging batteries is not considered "work on" the robot and does not apply.

R304 *During an event, only work during pit hours. During an event a team is attending (regardless of whether the team is physically at the event location), the team may neither work on nor practice with their ROBOT or ROBOT elements outside of the hours that pits are open, with the following exceptions:

- A. exceptions listed in R302, other than R302-E-c and
- B. software development, and
- C. ~~batteries may be charged during the designated load-in time.~~

SECTION 9.7 CONTROL, COMMAND, & SIGNAL SYSTEMS

R701 *Control the ROBOT with a roboRIO. ROBOTS must be controlled via 1 programmable NI roboRIO or roboRIO 2.0 (P/N am3000 or am3000a, both versions referred to throughout this manual as "roboRIO"), with image version ~~2022_v2.4~~ 2022_v3.0 or later.

R715 *Control PCM/PH(S) and Servo Hubs from roboRIO. Each PCM/PH and REV Robotics Servo Hub must be controlled with signal inputs sourced from the roboRIO and passed via a CAN bus connection from the built-in CAN on the roboRIO (either directly or daisy-chained via another CAN bus device).

SECTION 12 GLOSSARY

Carriage returns have been fixed in the glossary version of the definition of CONTROL.

Term	Definition
CONTROL	the state of a CARGO if any of the following are true: <ul style="list-style-type: none">A. the CARGO is fully supported by the ROBOT,B. the CARGO travels across the FIELD such that when the ROBOT changes direction, the CARGO travels with the ROBOT,C. the ROBOT is holding CARGO against a FIELD element in attempt to guard or shield it, orD. the ROBOT is preventing a CARGO from leaving a LOWER EXIT.