



# Team Update 03

## 01/19/2016

## GENERAL

- The Game Manual, Admin Manual, Team Updates, and *FIRST STRONGHOLD* videos are now available in the *FIRST* official app for iOS and Android devices.
- A recommended template for a **Cost Account Worksheet**, required by T16, is available [here](#) (and also linked from the [FIRST STRONGHOLD Game & Season Materials site](#)).
- The part number for the Denso window motor on the [2016 Motor Performance Data](#) sheet posted to the [Mechanical Resources site](#) has changed: ~~262100-3030~~ **5-163800-RC1**
- [Denso Window Motor Specification](#) has been posted to the [Mechanical Resources site](#).

## ADMIN MANUAL

### Section 6.2 Complete Awards List

- Description for the Judges Award: ~~Award recognizes the team that develops and implements the most outstanding digital experience, marketing strategy, and rationale for digital channels to disseminate content to its audience and further the FIRST mission.~~ During the course of the competition, the judging panel may decide a team's unique efforts, performance, or dynamics merit recognition.

### Section 7.4.2.3 Multiple Awards

- District Teams will only be able to be selected for *FIRST* Robotics Competition's most prestigious awards – Chairman's Award, Engineering Inspiration Award, and Rookie All Star Award – once per season **each** at the District level.

## GAME MANUAL

### Official Field Drawings

- GE-16013 updated to specify that the marred side of the "DEFENSE RAMP" is installed down.

### Section 2.2.3.1 CASTLE WALL (SCALING RUNGS)

- Image 2-33 dimension has been updated to match the dimension in GE-16006: ~~1 ft. 9 in.~~ **1 ft 8½ in.**

### Section 3.1.4 TOWER

- A BOULDER is scored in a GOAL if it passes through the opening of a GOAL and exits into the CORRAL, and the points awarded for that BOULDER are assigned based on when the BOULDER passed through the opening of the GOAL.

### Section 3.4.3 General Rules

- **G12** Blue Box: BOULDERS are expected to undergo a reasonable amount of wear and tear as they are handled by ROBOTS, such as scratching or marking. Gouging, tearing off pieces, or routinely marking BOULDERS will be considered in violation of this rule. Humans causing BOULDER wear and tear, e.g. cracking a BOULDER coating, are subject to a CARD per **Section 5.5.4**.

## Section 3.4.7 ROBOT Gameplay

- **G25-E** isolating BOULDERS in the opponent's SECRET PASSAGE from opponents while not contacting the carpet in the opponent's SECRET PASSAGE

## Section 3.4.9 BOULDER Rules

- **G38, Blue Box-D** “launching” (shooting BOULDERS into the air, kicking across the floor, or throwing in a forceful way)
- **G40-B** the ROBOT completes its CROSSING (i.e. e.g. doesn't completely back out of the OUTER WORKS into the NEUTRAL ZONE)

## Section 3.4.10 DEFENSE Rules

- **G43** ROBOTS on the same half of the FIELD as their ALLIANCE TOWER may not interfere with opponent ROBOTS attempting to traverse OUTER WORKS (regardless of direction). A ROBOT is considered traversing the opponent's OUTER WORKS if any part of its BUMPERS are within the opponent's OUTER WORKS and no part of it is in their opponent's SECRET PASSAGE.

## Section 4.2 General ROBOT Design

- **R7 Blue Box**

ROBOTS will not be re-enabled after the MATCH, so Teams must be sure that BOULDERS and ROBOTS can be quickly, simply, and safely removed. Before they arrive at events, Teams should practice removal of BOULDERS from their ROBOTS, and removal of their ROBOTS from FIELD elements such as the TOWER, with the ROBOTS in a powered-off state.

## Section 4.3 Safety & Damage Prevention

- **R9-L** tire sealant

## Section 4.8 Motors & Actuators

- **R29:** Select Automotive Motors (Window, Door, Windshield Wiper, Seat, Throttle)

## Section 4.9 Power Distribution

- **R54:** Servos must be connected only to the PWM ports on the roboRIO, either directly or through the PWM ports on a WCP Spartan Sensor Board. They must not be connected to the MXP, motor controllers, or relay modules.