

# Team Update 07

## GENERAL

### FIRST Choice Bonus Item

FIRST Choice Round 2 orders continue to ship (we thank you for your patience!). For those of you who have received them, you've probably noticed a bonus item included in each shipment; a laminated field layout w/ dry erase marker. Thank you to Piedmont Plastics for the strategic donation. We want to let you know that the color pattern on these boards (shown on the left below, clockwise: Y, R, G, and B) are the opposite of the actual field (shown on the right below, clockwise: B, G, R, and Y).

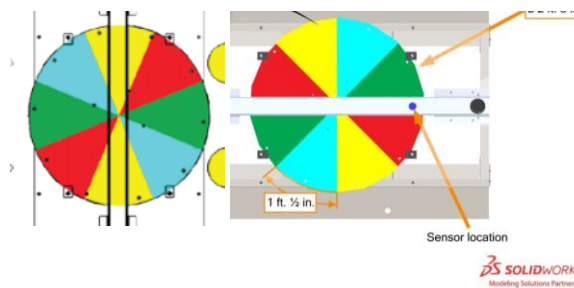


Image from the laminated field layout on left, image from actual field on right

## EVENT MANUAL

No changes.

## GAME AND SEASON MANUAL

### Section 8.1.1

**H10. POWER CELLS go on the rack.** POWER CELLS must be stored on the LOADING BAY racks. An ALLIANCE making a concerted, good-will effort to transport POWER CELLS from the CORRAL to a rack or Chute is not in violation of this rule.

*VIOLATION: FOUL. If repeated, TECH FOUL.*

The LOADING BAY rack holds fourteen (14) POWER CELLS and enables teams and REFEREES to count POWER CELLS in an ALLIANCE STATION. An ALLIANCE holding the fifteenth POWER CELL is not in violation of H10.

H10 means that POWER CELLS may neither be stored in the CORRAL during the MATCH nor are they required to contact the LOADING BAY rack before entering the FIELD.

Teams are encouraged to make it clear to REFEREES that H10 is not violated.

## Section 9.6

- R28.** The integral mechanical and electrical system of any motor must not be modified. Motors, servos, and electric solenoids used on the ROBOT shall not be modified in any way, except as follows:
- A.** The mounting brackets and/or output shaft/interface may be modified to facilitate the physical connection of the motor to the ROBOT and actuated part.
  - B.** The electrical input leads may be trimmed to length as necessary and connectors or splices to additional wiring may be added.
  - C.** The locking pins on the window motors (P/N: 262100-3030 and 262100-3040) may be removed.
  - D.** The connector housings on KOP Automotive motors listed in Table 9-1 may be modified to facilitate lead connections.
  - E.** Servos may be modified as specified by the manufacturer (e.g. re-programming or modification for continuous rotation).
  - F.** The wiring harness of the Nidec Dynamo BLDC Motor may be modified as documented by *FIRST* in the ["Nidec Dynamo BLDC Motor with Controller" article](#).
  - G.** Minimal labeling applied to indicate device purpose, connectivity, functional performance, etc.
  - H.** Any number of #10-32 plug screws may be removed from the Falcon 500.
  - I.** Insulation may be applied to electrical terminals

The intent of this rule is to allow teams to modify mounting tabs and the like, not to gain a weight reduction by potentially compromising the structural integrity of any motor.