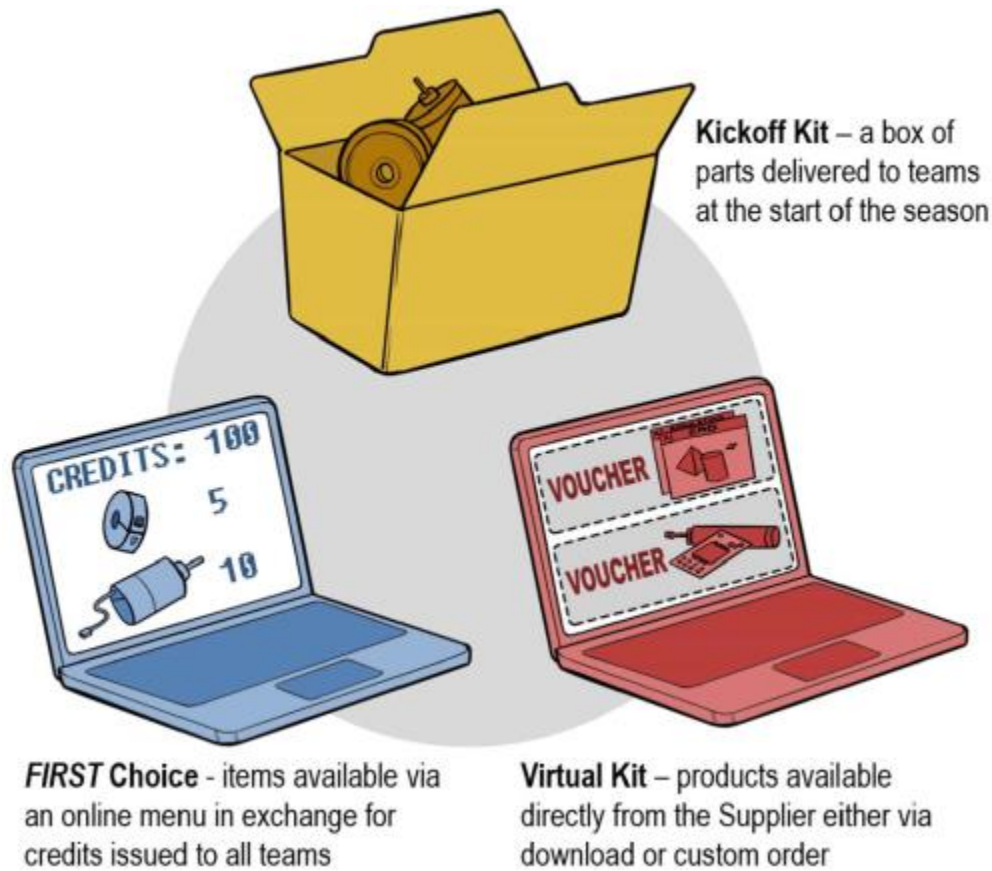


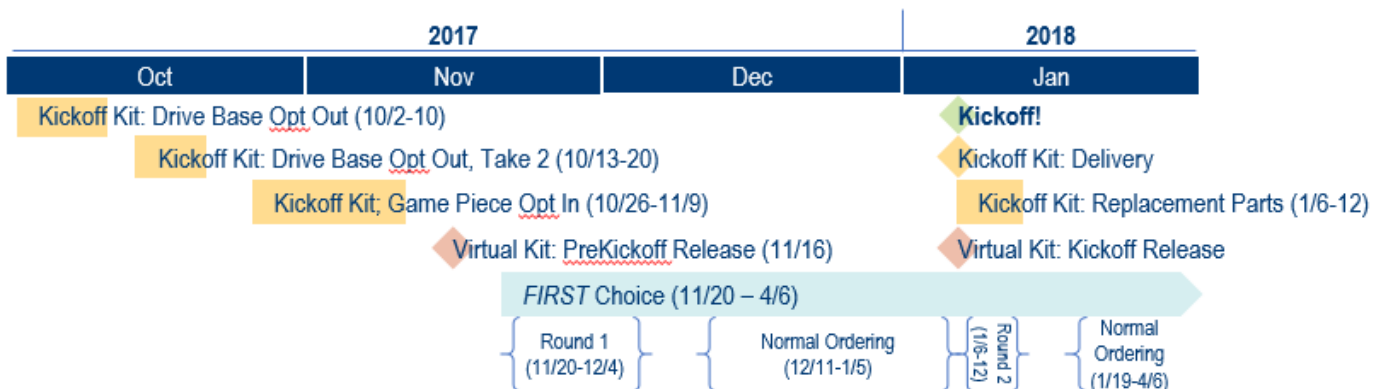
Each season, *FIRST* Robotics Competition teams receive Kits of Parts (KoP). The KoP is not designed to be a "bolt together" solution to play the game, but is a starting point, containing mostly donated components from Suppliers across multiple industries.

[FIRST Robotics Competition Suppliers](#) are an incredibly supportive group who are proud to be involved in the hardest fun you'll ever have! Be sure to thank them when you see them at our events!

The KoP System consists of three parts, available to teams through a variety of sources.



2018 Kit of Parts Timeline



Kickoff Kit Detail

The Kickoff Kit consists of items that we pack in totes (mostly in totes, there are typically exceptions for late or big items) and distributed to Teams on Kickoff Day at local Kickoff sites. There are two permutations of this – one set of items that go to all Teams and a second container that goes to 1st year, aka “Rookie,” Teams.

Here's a deliberately vague “heads up” with to what kind of sizes, weights to expect for Kickoff Kit elements:

- Every team will receive a Black Tote (~12 in. x 27 in. x 17 in., ~34 lbs.) and a set of separate items of assorted shapes and sizes, collectively ~30 lbs. with no one item weighing more than ~14 lbs. Separate items *would* fit in a backpack if it weren't for a few long (48 in.), narrow pieces.
- New (“rookie”) teams will also receive a Gray Tote (~12 in. x 27 in. x 17 in., ~34 lbs.) and a set of separate items of assorted shapes and sizes, collectively ~15 lbs. with no one item weighing more than ~14 lbs, and would all fit in a backpack.
- Teams that did not opt out will also receive a Drive Base Kit (~7 in. x 7 in. x 33 in., ~28 lbs.)
- Non-US teams that opted for the extra set of game pieces will get those too, but we're keeping those sizes/weights under wraps (no need to rent a flatbed trailer though).

Kickoff Kit contents are detailed in the Checklists below:

- [Gray Tote Checklist](#) (Rookie Teams only)
- [Black Tote Checklist](#) (V1 as of Jan. 9, 2018)
- [Drive Base Kit Checklist](#)
- [Separate Items Checklist](#)

Missing or Damaged Kickoff Kit Items

Teams are strongly encouraged to check their Kickoff Kits and their contents upon receipt. In order for any missing or damaged items to be replaced by *FIRST*, Teams must submit a Replacement Parts Request by Noon Eastern on Friday, January 12, 2018. For questions about Replacement Parts, please contact fcparts@firstinspires.org.

FIRST Choice Detail



Teams can get items from [FIRST Choice](#), either using the Priority List system in Rounds 1 and 2 or via a traditional online ordering process.

Priority Lists & Rounds

A Priority List, a prioritized list of *FIRST* Choice items that a team would like, is created by a team in their *FIRST* Choice account and locked at a specific time/date. Each list is assigned a random rank (the order in which individual teams complete their Priority Lists before the deadline does not affect their rank). All teams that add at least one item to their Priority List by the deadline are put in a common pool and then randomly sequenced. This is what we mean by ‘random rank.’

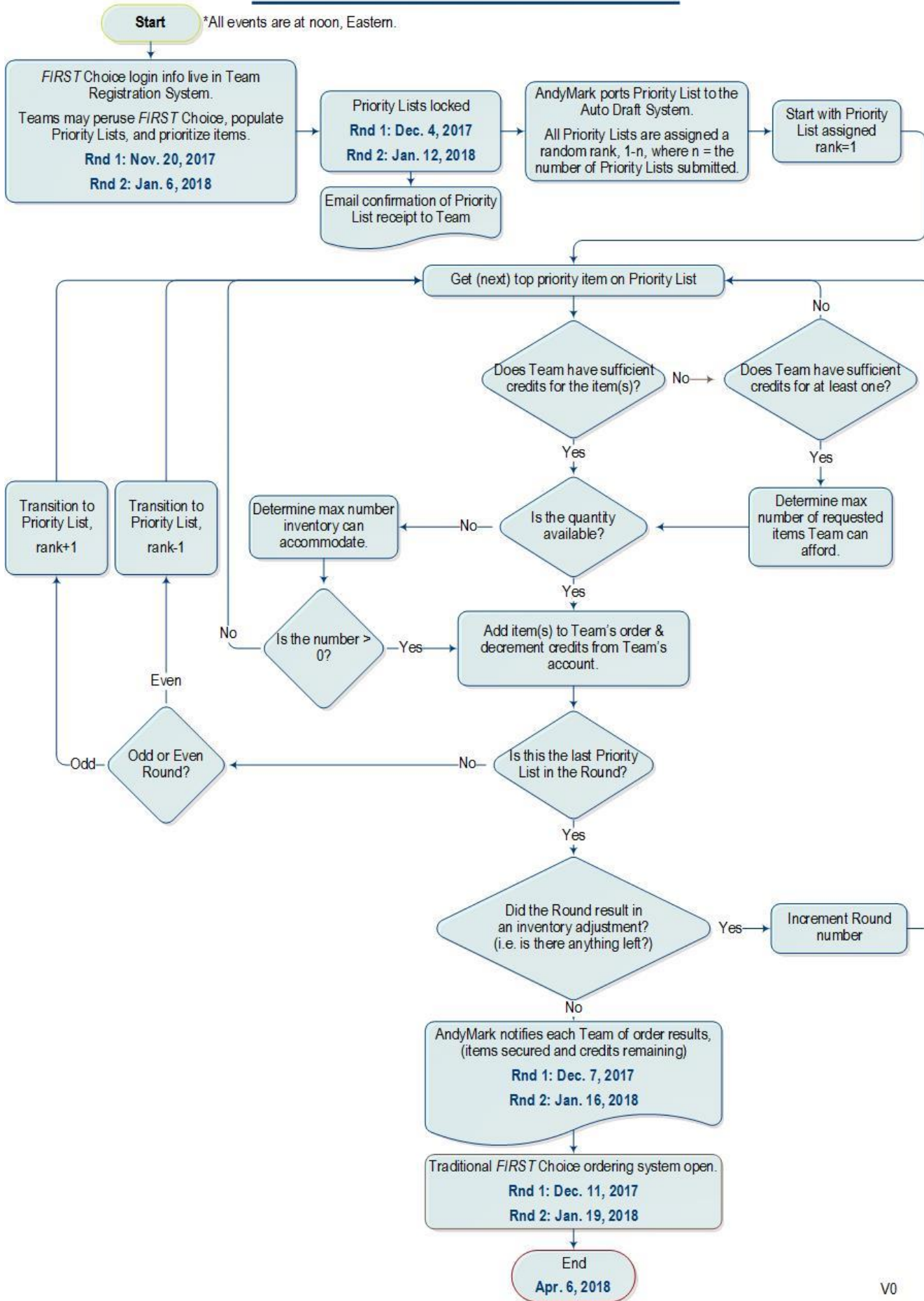
Then, in rank order, AndyMark's auto draft system queries the Team's highest priority item and, provided the Team has the credits and *FIRST* Choice has the inventory, issue the item to the Team. This applies to each Priority List line item as ranked. If the team doesn't have enough Credits to cover the entire amount (but at least one) or *FIRST* Choice inventory doesn't have the entire quantity (but at least one), the team will get as many as their credits/*FIRST* Choice inventory allow. If credits or inventory can't cover one, it will move on to the next ranked item so the team is not skipped for that round.

Once it gets to the last ranked Priority List, the draft system will query that last Priority List's next item and work its way back up the ranks (for Teams that know how we've done Alliance Selection in the past, this serpentine process probably seems familiar). This draft continues until inventory's gone or Priority Lists are exhausted. Inventory is then updated for when *FIRST* Choice opens for traditional "first come, first served" live orders.

A few other notes about the Priority List process:

- Login information will be posted in each team's registration account, and viewable by lead mentors 1 and 2. Only event-registered or secured *FIRST* Robotics Competition teams will have access to their login information, and thus only event-registered teams will be able to create and submit a Priority List.
- Priority Lists will be created using (and only accepted via) the Priority List feature on the [FIRST Choice site](#).
- Priority Lists are saved each time the user clicks "Update," letting teams add, subtract, and reprioritize items until the deadline.
- Shipping charges will apply (details to be posted on the *FIRST* Choice site before Priority Lists are locked), and a billing address, a shipping address, and credit card information must be provided before creating your Priority List. Additional charges may apply for international teams, for which the team is responsible, and AndyMark will address on a case by case basis.
- Upon the deadline, any existing Priority Lists are locked, processed, and no additional changes may be made (we strongly encourage you complete your list at least a day before the due date to avoid unexpected delays or surprises).
- We will not publicly publish teams' Priority Lists, the assigned rankings, or final order contents.
- If you feel overwhelmed by the options, there are sample lists like "pneumatics" or "vision" available for quick selection. You can select a sample list for your priority list – or use it to get started and edit/customize as you see fit. Caution though, when you select one it will wipe an existing list and start fresh.
- Any priority list submitted by a team that has not secured first-event registration payment with *FIRST* by noon, Dec. 4, 2017 will be discarded before lists are ported in to the auto draft system (please anticipate at least one business day for registration payment to be processed and the updated status to be relayed to AndyMark).

2018 *FIRST* Choice Process



Virtual Kit Detail

Product Donation Vouchers (* items were added Kickoff day)

- [*AnchorLabs Voucher](#): 1 custom machined part, up to \$75. Use the code found in your Lead Mentors' 1 and 2 *FIRST* registration accounts. Expires: 12/31/18.
- [AndyMark Voucher](#): \$450 (USD) for teams who [opted out of the KOP Drive System](#). Use the code found in your Lead Mentors' 1 and 2 *FIRST* registration accounts. Expires: 4/30/18.
- [Armbot Voucher](#): \$25 (USD) towards one RS7 encoder individually or a multiple product order that includes one RS7 encoder. Use the code found in your Lead Mentors' 1 and 2 *FIRST* registration accounts (shipping not included). Expires: 4/28/18.
- [AutomationDirect.com](#): \$35 (USD) Important instructions: get your team's code found in your Lead Mentors' 1 and 2 *FIRST* registration accounts, login to your Automation Direct account (or create a New Account [here](#)), then visit [this page](#) to enter your code. **Please note, the code cannot be applied AFTER the order is placed.** One-time use (unused funds forfeited). Shipping is not included. Orders must be placed online (no 'call in' orders), stock items ordered by 6:00pm EST will ship the same day, and orders must ship to a US or Canadian address. The voucher cannot be used towards shipping fees. Orders under \$49 are shipped ground to US addresses for a flat rate of \$6 (a credit card (or PayPal) will be required to pay for shipping). Orders to Canada incur brokerage fees. Larger orders may qualify for free two-day shipping; see [this site](#) for details. Expires: 4/30/18.
- [Bimba](#): 2 Free Cylinders: [Click here](#) to order, starting at Kickoff. Shipping included. Expires: 4/28/18.
- [Clippard Instrument Laboratory, Inc](#): \$20 (USD): Visit [clippard.com](#) to select your products and use the code found in your Lead Mentors' 1 and 2 *FIRST* registration accounts at check out. Please note that you must create an account and be logged in for the voucher to be validated, and shipping is not included. Expires: 4/20/18.
- [Digi-Key Electronics](#): \$50 (USD). Order and see additional detail/restrictions [here](#) (use the code found in your Lead Mentors' 1 and 2 *FIRST* registration accounts). One-time use (unused funds forfeited). Free 2-day domestic and international shipping. Taxes are not included. Expiration Date: 4/30/18.
- [Inventables](#): \$100 (USD). Use the code found in your Lead Mentors' 1 and 2 *FIRST* registration accounts (free shipping on orders of \$100 or more). Expires: 5/1/18.
- [*nextGen Robots](#): CIM Cooler Voucher. Use the code found in your Lead Mentors' 1 and 2 *FIRST* registration accounts. Expires: 4/30/18.
- [*RoboPromo](#): (ROOKIES ONLY) Bumper Material, red and blue, 200 in. x 18 in. (\$36). Use the code found in your Lead Mentors' 1 and 2 *FIRST* registration accounts. Does not include shipping. Expires: 4/1/18.
- [*RoboPromo](#): Voucher for a set of 8 white *FIRST* iron-on logos. Use the code found in your Lead Mentors' 1 and 2 *FIRST* registration accounts. Does not include shipping. Expires: 4/1/18.
- [TE Connectivity](#): \$25 (USD) for [select products](#): To redeem this voucher follow the instructions in the [Quick Reference Guide](#) (shipping is included).
- [*Vulcan](#): Voucher for 6 springs from the menu for FRC teams.

Software

CAD Software: software suites including CAD, simulation, and modeling plus CAD libraries of the *FIRST POWER UP* field and 2018 Kickoff Kit items (season specific content to be released January 6, 2018):

- [Autodesk](#)
- [Onshape](#)
- PTC
 - [Creo](#)
 - [Mathcad](#)
 - [Windchill](#)
 - [Vuforia](#)
- *Siemens
 - [Solid Edge](#) (3D CAD software)
 - [Catchbook](#) (sketching app for any mobile device)
- SOLIDWORKS
 - [SOLIDWORKS 3D CAD software](#)
 - [SOLIDWORKS Electrical](#)

- [SOLIDWORKS Composer](#)

Additional Software Tools

- [Altium Designer](#): 1-5 student licenses are available for your team to create Printed Circuit Board designs. Expires: 12/31/18.
- [American Button Machines](#): Build-a-Button button design software, membership for the 2018 FRC season. Use the code found in your Lead Mentors 1 and 2 *FIRST* registration accounts. Expires: 4/29/18.
- [GitHub](#): Software hosting and collaboration tools via their Team Plan, Student Developer Pack membership, and a swag bag. Visit the [GitHub Education](#) page for details.
 - [GitHub Team Plan](#)
 - [GitHub Student Developer Pack membership](#)
 - [GitHub Swag Bag](#)
- [IBM Bluemix](#): Access to IBM's Bluemix cloud computing platform and ways to develop applications via Java, Web, Mobile, Node Red, IoT, Cognitive computing, etc. [Click here](#) to get started!
- *[Mastercam](#): CAD/CAM software: Expires: 11/30/18.
- *[National Instruments](#)
 - [LabVIEW](#)
 - [Multisim & Multisim Live](#)
 - [Ultiboard](#)
 - [Statechart Module](#)
- [SolidProfessor](#): Library of training and resources for SOLIDWORKS, Autodesk, and Onshape. [Register on their website](#).
- [Tableau](#): [Desktop Professional](#), data analysis and visualization software. Use the product code found in your Lead Mentors' 1 and 2 *FIRST* registration accounts for five activations per team. Don't forget to check out Tableau's [free online resources](#) created specifically for *FIRST* Robotics Competition students.
- *[Wolfram](#): One-year licenses for mentors and students. Expires 6/1/18
 - Wolfram One
 - SystemModeler
 - Alpha Pro