






| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|--|---------------------------|--------------|-----|--|---|
| Bag #1 | | | | | | |
| | Assorted Terminal Bag 20 x 12-10 AWG fork (PN 80610050058) 20 x 12-10 AWG ring (PN 80610048540) 20 x 14 AWG ring (PN 80610040737) 20 x 18 AWG ring (PN 80610035307) 20 x 18 AWG spade (PN 80610531404) | 3M | Assorted | 1 | No specific source |  |
| | UNIWRAP Cable Ties 4 in., 18 lb, white, bag of 100 | BURNDY LLC | CT18075C | 1 | www.andymark.com |  |
| | UNIWRAP Cable Ties 8 in., 50 lb, white, bag of 100 | BURNDY LLC | CT50175C | 1 | www.andymark.com |  |
| | Wire 06 AWG, Black, 1½ ft. length | James Monroe Wire & Cable | JMH90450-BLK | 1 | No specific source |  |
| | Wire 06 AWG, Red, 1½ ft. length | James Monroe Wire & Cable | JMH90450-RED | 1 | No specific source |  |






2016 Kickoff Kit Checklist






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| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|--|---------------------------|------------------------------|-----|--------------------|---|
| | Wire 10 AWG, Red & Black, 10 ft. length each | James Monroe Wire & Cable | JMH90451-BLK JMH90451-RED | 1 | No specific source |  |
| | Wire 14 AWG, Red & Black, 10 ft. length each | James Monroe Wire & Cable | JMH90452-BLK JMH90452-RED | 1 | No specific source |  |
| | Wire 18 AWG, Red & Black, 10 ft. length each | James Monroe Wire & Cable | JMH90453-BLK JMH90453-RED | 1 | No specific source |  |
| Bag #2 | | | | | | |
| | Throttle Motor | DENSO/ ASMO | AE235100-0160 | 4 | Not available |  |
| | Window Motor | DENSO/ ASMO | 5-163800-RC1 | 2 | Not available |  |







| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|---|-----------------------------------|-------------|-----|--|---|
| Bag #3 | | | | | | |
| | Main Circuit Breaker 120A | Eaton - Bussmann Division | CB185-120 | 1 | www.eaton.com/bussmannseries |  |
| | CAN Wire 22 AWG, Green/Yellow twisted pair, 4 ft. long | International Wire and Cable | N/A | 1 | No specific source |  |
| | NI Software for FRC 2016 LabVIEW | National Instruments | N/A | 1 | frcparts@usfirst.org |  |
| | Shaft Collar ¼ in. | Ruland Manufacturing Co., Inc. | CL-4-A | 2 | www.ruland.com/first |  Photo: Ruland |
| | Circuit Breaker 20A | Snap Action, Inc. | VB3-A20-F57 | 2 | www.snapaction.net www.andymark.com |  |

| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|--|--------------------------|-------------|-----|---|---|
| | Circuit Breaker 30A | Snap Action, Inc. | VB3-A30-F57 | 2 | www.snapaction.net www.andymark.com |  |
| | Circuit Breaker 40A | Snap Action, Inc. | MX5-A-40 | 6 | www.snapaction.net www.andymark.com |  |
| | Constant Force Spring Series H | Vulcan Spring & Mfg. Co. | SH6G25 | 1 | http://info.vulcanspring.com/first-robotics-competition |  |
| | Constant Force Spring Series L | Vulcan Spring & Mfg. Co. | SL6G25 | 1 | http://info.vulcanspring.com/first-robotics-competition |  |
| | Voucher 6 Springs | Vulcan Spring & Mfg. Co. | N/A | 1 | Not available |  |

| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|---|--|------------------|-----|--------------------|---|
| Bag #4 | | | | | | |
| | Industrial RJ45 Modular Plug | 3M | 3R108-0000-000CE | 2 | No specific source |  |
| | Link Connector 4-Position, two pieces: body & cover | 3M | JE150279733 | 10 | No specific source |  |
| | Link Connector 2-Position, two pieces: body & cover | 3M | JE150416673 | 5 | No specific source |  |
| | Link Connector Cable 6 ft. | 3M | JE150399689 | 1 | No specific source |  |
| | Miniature Basic Switch | Honeywell Sensing and Productivity Solutions | V7-2A27E9 | 3 | No specific source |  |






| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|--|--|--------------------------|-----|--|---|
| | Miniature Basic Switch with lever | Honeywell Sensing and Productivity Solutions | V7-2B17D8-048 | 1 | No specific source |  |
| | Robot Radio Dual Band 450 Mbps Wireless Access Point | Open Mesh Networks | OM5P-AN | 1 | www.andymark.com |  |
| | Bumper Material Sample | Robopromo.com | N/A | 1 | Not available |  |
| | Power Cord for Robot Radio, 5.5 x 2.1 x 10mm DC right- angle barrel connector, 24AWG wire | Winfly Power Adapter | N/A | 1 | No specific source |  |
| Bag #5 | | | | | | |
| | Grip Material 18 in. length | 3M | 70006701497 or 300LSE | 1 | No specific source |  |

| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|--|----------|------------------------------------|-----|--------------------|---|
| | Heat Shrink Thin-Wall Tubing, ¼ in., 4 ft. length | 3M | FP-301-1/4-BLACK or 80611600968 | 2 | No specific source |  |
| | Heat Shrink Thin-Wall Tubing, ⅛ in., 4 ft. length | 3M | FP-301-1/8-BLACK or 80611600893 | 2 | No specific source |  |
| | Electrical Tape "Super 33+," Vinyl, Black, ¾ in x 66 ft. | 3M | 34-8715-6256-6 | 1 | No specific source |  |
| | Electrical Tape "35 Red," Vinyl, Red, ¾ in x 66 ft. | 3M | 38-9019-3978-5 | 1 | No specific source |  |
| Bag #6 | | | | | | |
| | Scotch-Weld Plastic & Rubber Instant Adhesive | 3M | PR100 | 1 | No specific source |  |

| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|---|--------------|--------------|-----|--|---|
| | Scotch-Weld Instant Adhesive | 3M | CA8 | 1 | No specific source |  |
| | HYLUG Copper Compression Terminal 6 AWG, bag of 8 | BURNDY LLC | YAZV6CTC14FX | 1 | www.andymark.com |  |
| | Flat Cable 2 wire, 22 AWG, F/F | REV Robotics | REV-11-1134 | 1 | www.REVrobotics.com |  |
| | Flat Cable 3 wire, 22 AWG, F/M | REV Robotics | REV-11-1130 | 8 | www.REVrobotics.com |  |
| | Flat Y-Cable 3 wire, 22 AWG, F/MM | REV Robotics | REV-11-1131 | 2 | www.REVrobotics.com |  |
| | Lazy Susan Bearing 4 in. | Triangle Mfg | 4C | 1 | www.triangleoshkosh.com |  |

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|-------------------------------------|---|----------------------------|---|-----|--|---|
| | Pillow Block Bearing | Triangle Mfg | BDN8 | 2 | www.triangleoshkosh.com |  |
| | Flange Mounted Bearing | Triangle Mfg | FMN6 | 2 | www.triangleoshkosh.com |  |
| Bag #7 | | | | | | |
| | Dual Lock Reclosable Fastener 3 ft. length | 3M | SJ3540 or 70070521052 | 1 | No specific source |  |
| | Battery Connector | Anderson Power Products | SB50-FR (housing) 5900-BK (contacts) | 3 | http://www.andersonpower.com (housing & contacts) http://www.andymark.com (connector assembly) |  |
| | SRX Mag Encoder Kit | CTR Electronics | 15-697867-75 | 1 | www.ctr-electronics.com |  |

| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|------------------|----------|-------------|-----|--------------------|-------|
|-------------------------------------|------------------|----------|-------------|-----|--------------------|-------|

Natural Rubber Latex Tubing
5 ft. length

Kent Elastomer
Products, Inc.

K-100

2

www.kentelastomer.com



MC5e Catagory 5e Modular Patch Cord
colors & lengths vary

The Siemon
Company

MC5-8-T-(XX)-(XX)

1

www.siemon.com



Bag #8

Voucher
16Hertz Leonardo++

16 Hertz LLC

16HZLEOS

1

<http://www.16hertz.com/>



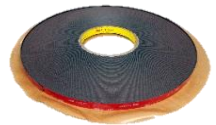
VHB Tape

3M

70006149820 or
70006291440

1

No specific source



Voucher
Autodesk Design Suite 2016







Autodesk







N/A

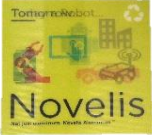





1






Not available




| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|--|-------------------------|-------------|-----|--|---|
| | Alliance Partner Flyer Automation Federation Information | Automation Federation | N/A | 1 | Not available |  |
| | Voucher \$30 at AutomationDirect.com | AutomationDirect.com | N/A | 1 | Not available |  |
| | Voucher 2 cylinders | Bimba Manufacturing | N/A | 1 | Not available |  |
| | Voucher 4 MadeWell Wheels | Bishop-Wisecarver Group | N/A | 1 | Not available |  |
| | Voucher & Sticker \$50 at Digi-Key.com | Digi-Key Electronics | N/A | 1 | Not available |  |
| | Flyer ECIA | ECIA | N/A | 1 | www.ecianow.org |  |

| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|---|---------------|-------------|-----|--------------------|---|
| | Sticker Scholarship | FIRST | N/A | 5 | Not available |  |
| | Graphic Novel | GitHub | N/A | 1 | Not available |  |
| | Sticker Inventables | Inventables | N/A | 1 | Not available |  |
| | Voucher \$35 at MaxBotix.com | MaxBotix Inc. | N/A | 1 | Not available |  |
| | Flyer Modulus | Modulus | N/A | 1 | Not available |  |
| | Alliance Partner Flyer National Center for Women & Information Technology | NCWIT | N/A | 1 | Not available |  |

| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|---|----------------------------|-------------|-----|--------------------|---|
| | Sticker Novelis | Novelis | N/A | 1 | Not available |  |
| | Voucher PTC Creo, PTC MathCAD, PTC Windchill, & ThingWorx | PTC | N/A | 1 | Not available |  |
| | Flyer & Sticker Sapa | Sapa | N/A | 1 | Not available |  |
| | Alliance Partner Flyer SWE | Society of Women Engineers | N/A | 1 | Not available |  |
| | Poster SolidWorks | SolidWorks | N/A | 1 | Not available |  |
| | Voucher Tableau | Tableau Software | N/A | 1 | Not available |  |





| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|--|--------------------------------|-------------|-----|--|--|
| | Voucher \$25 at TEConnectivity.com | TE Connectivity | N/A | 1 | Not available |  |
| | Sticker Wolfram | Wolfram Research | N/A | 1 | Not available |  |
| VEXpro Team Donation Kit | | | | | | |
| | BAG Motor | Innovation First International | 217-3351 | 1 | www.vexpro.com |  Photo: VEX Robotics |
| | CIM Motor | Innovation First International | 217-2000 | 2 | www.vexpro.com |  Photo: VEX Robotics |
| | MiniCIM Motor | Innovation First International | 217-3371 | 1 | www.vexpro.com |  Photo: VEX Robotics |






| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|-------------------------------|-----------|-------------|-----|---|--|
| igus bag | | | | | | |
| | igubal® Spherical Rod End | igus Inc. | EBRI-10R | 2 | www.igus.com Catarina Peixoto, (401) 438-2200 |  Photo: igus |
| | igubal® Spherical Flange | igus Inc. | EFOI-10R | 2 | www.igus.com Catarina Peixoto, (401) 438-2200 |  Photo: igus |
| | iglide® Plastic Sleeve | igus Inc. | JSI-1012-08 | 2 | www.igus.com Catarina Peixoto, (401) 438-2200 |  Photo: igus |
| | iglide® Plastic Flange | igus Inc. | JFI-1012-08 | 2 | www.igus.com Catarina Peixoto, (401) 438-2200 |  Photo: igus |
| | iglide® Plastic Thrust Washer | igus Inc. | MTI-10 | 2 | www.igus.com Catarina Peixoto, (401) 438-2200 |  Photo: igus |

| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|--|-----------|---------------|-----|--|--|
| | iglide® Plastic Clip | igus Inc. | MCI-06-01 | 4 | www.igus.com Catarina Peixoto, (401) 438-2200 |  Photo: igus |
| | iglide® tribo-tape | igus Inc. | A160T5100S305 | 1 | www.igus.com Catarina Peixoto, (401) 438-2200 |  Photo: igus |
| | Drylin® N Low-Profile Linear Guide System | igus Inc. | NK02-40-2-610 | 1 | www.igus.com Catarina Peixoto, (401) 438-2200 |  Photo: igus |
| | Drylin® S Aluminum Shafting 610mm | igus Inc. | AWI-10 | 2 | www.igus.com Catarina Peixoto, (401) 438-2200 |  Photo: igus |
| | Energy Chain® Cable Carrier 3.28 ft | igus Inc. | 05-4-038-0 | 1 | www.igus.com Catarina Peixoto, (401) 438-2200 |  Photo: igus |
| | Energy Chain® Cable Brackets | igus Inc. | 050-20-12 | 1 | www.igus.com Catarina Peixoto, (401) 438-2200 |  Photo: igus |

2016 Kickoff Kit Checklist

GRAY TOTE

| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|---------------------------------------|--|-------------|-----|---|--|
| Loose | | | | | | |
| | Tags | American Casting & Manufacturing Corporation | 9001-16 | 10 | http://www.americancasting.com/info-plastic-strap-seals-9001.asp |  |
| | Active Learning Module, M1K | Analog Devices Inc. | ADALM1000 | 1 | http://www.analog.com/en/design-center/evaluation-hardware-and-software/evaluation-boards-kits/eval-adalm1000.html#eb-overview |  Photo: Analog Devices |
| | Envelope FedEx | FedEx | N/A | 1 | Not available |  |
| | Participation Pin Packet Bag of 40 | FIRST | N/A | 1 | To be announced via email blast |  |
| | Pool Noodle | FIRST | N/A | 2 | No specific source |  |

| <input checked="" type="checkbox"/> | Item Description | Supplier | Part Number | Qty | Where to get more? | Photo |
|-------------------------------------|---|--------------------------------|----------------|-----|---|--|
| | FIRST Robots: Behind the Design | <i>FIRST</i> | N/A | 1 | To be announced. |  |
| | Boulder Gray foam ball, 10 in. | Gopher | am-3276 | 1 | www.andymark.com |  |
| | CIM Motor | Innovation First International | 217-2000 | 2 | http://www.vexrobotics.com/217-2000.html |  Photo: VEX Robotics |
| | Robot Bag | IPS Packaging | 114200 | 2 | No specific source |  |
| | Robot Signal Light (i.e. Panel Signal Device) | Rockwell Automation | 855PB-B12ME522 | 1 | No specific source |  |