


# 2020 Kickoff Kit Checklist

## BLACK TOTE

<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
<b>Bag #1</b>						
<b>Assorted Terminal Bag</b>						
~5 x 10-12 AWG Disconnect F (PN 80610531362) ~2 x 10-12 AWG Parallel Connector (PN 80601385836) ~2 x 14-16 AWG Parallel Connector (PN 80601383724) ~20 x 10-12 AWG Quick Disconnect F (80610531214) ~20 x 14-16 AWG Quick Disconnect F (80601391719) ~20 x 10-12 AWG Quick Disconnect M (80610057806) ~20 x 14-16 AWG Quick Disconnect M (80610056071) ~10 x 10-12 AWG Ring Terminal (PN 80610048540) ~5 x 14-16 AWG Ring Terminal (PN 80610040737) ~5 x 18-22 AWG Ring Terminal (PN 80610035307)						
		3M	TERMINAL_BAG-2020	1	No Specific Source	
<b>Wire</b>						
	06 AWG, Black, 1½ ft. length	Belden	06AWGB-1.5	1	No Specific Source	
<b>Wire</b>						
	06 AWG, Red, 1½ ft. length	Belden	06AWGR-1.5	1	No Specific Source	
<b>Wire</b>						
	12 AWG, Red & Black, 15 ft. length each	Belden	12AWGB-15 12AWGR-15	1	No Specific Source	
<b>Wire</b>						
	18 AWG, Red & Black, 10 ft. length each	Belden	18AWGB-10 18AWGR-10	1	No Specific Source	

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	<b>UNIWRAP Cable Ties</b> 4 in., 18 lb, white, bag of 100	BURNDY LLC	CT18075C	1	No Specific Source	
	<b>UNIWRAP Cable Ties</b> 7.5 in., 50 lb, white, bag of 100	BURNDY LLC	CT50175C	1	No Specific Source	
<b>Bag #3</b>						
	<b>Hex Hub Half</b> ½ in.	Armabot	A0066	2	<a href="https://www.armabot.com/">https://www.armabot.com/</a>	
	<b>Sticker: F1 Intake Instructions</b>	Armabot	2020-F1STICK	1	<a href="https://www.armabot.com/">https://www.armabot.com/</a>	
	<b>Sticker: RS7 Encoder Instructions</b>	Armabot	2020-RS7STICK	1	<a href="https://www.armabot.com/">https://www.armabot.com/</a>	
	<b>Cable Retaining Clips</b> Pack of 10	Innovation First International	276-4128	1	<a href="http://www.vexpro.com">www.vexpro.com</a>	 <small>Photo: VEXpro</small>

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<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
	<b>Shaft Collar</b> 3/8 in.	Ruland Manufacturing Co., Inc.	CL-6-A	1	<a href="http://www.ruland.com/first">www.ruland.com/first</a>	
	<b>Circuit Breaker</b> 20A	Snap Action, Inc.	VB3-A20-F57	2	<a href="http://www.snapaction.net">www.snapaction.net</a> or <a href="http://www.andymark.com">www.andymark.com</a>	
	<b>Circuit Breaker</b> 30A	Snap Action, Inc.	VB3-A30-F57	2	<a href="http://www.snapaction.net">www.snapaction.net</a> or <a href="http://www.andymark.com">www.andymark.com</a>	
	<b>Circuit Breaker</b> 40A	Snap Action, Inc.	MX5-A-40	6	<a href="http://www.snapaction.net">www.snapaction.net</a> or <a href="http://www.andymark.com">www.andymark.com</a>	
	<b>Vulcan Springs Packet</b> 1 Series H (PN SH6G25), 1 Series L (PN SL6G25), voucher info page	Vulcan Spring & Mfg. Co.	SH6G25 SL6G25	1	<a href="http://info.vulcanspring.com/first-robotics-competition">http://info.vulcanspring.com/first-robotics-competition</a>	

### Bag #4

<b>Grip Material</b> 18 in. length	3M	70006701497 or 300LSE	1	No Specific Source	
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<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
	<b>Electrical Tape</b> "Super 33+," Vinyl, Black, 3/4 in x 66 ft.	3M	34-8720-3265-0	1	No Specific Source	
	<b>Electrical Tape</b> "35 Red," Vinyl, Red, 3/4 in x 66 ft.	3M	38-9019-3978-5	1	No Specific Source	
	<b>CULUG Copper Compression Terminal</b> 6 AWG, bag of 8	BURNDY LLC	YAZV6CTC14FX	1	<a href="http://www.andymark.com">www.andymark.com</a>	
	<b>Bumper Material Sample</b>	Robopromo.com	N/A	1	Not Available	
	<b>INFINITE RECHARGE</b> <b>Participation Pins</b> Bag of 40	Sports Awards	2020_PINPACKET	1	<a href="http://www.firstinspiresawards.com">www.firstinspiresawards.com</a>	
<b>Bag #6</b>						
	<b>Bumpon</b> SJ5003, Sheet of 56	3M	70070079671	1	No Specific Source	







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<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
	<b>Bumpon</b> SJ5009, Sheet of 24	3M	70070079754	1	No Specific Source	
	<b>Heat Shrink</b> Thin-Wall Tubing, 1/8 in., 4 ft. length, FP301	3M	80611600893	2	No Specific Source	
	<b>Heat Shrink</b> Thin-Wall Tubing, 1/4 in., 4 ft. length, FP301	3M	80611600968	2	No Specific Source	
	<b>Heat Shrink</b> Thin-Wall Tubing, 1/2 in., 4 ft. length, FP301	3M	80611601206	2	No Specific Source	
	<b>Instant Adhesive</b> Scotch-Weld	3M	CA8	1	No Specific Source	
	<b>Plastic &amp; Rubber Instant Adhesive</b> Scotch-Weld	3M	PR100	1	No Specific Source	




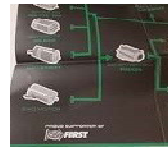


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<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
Bag #8						
	Info packet SB50 connector	Anderson Power Products	N/A	1	Not Available	
	Autodesk sticker sheet	Autodesk	2020-AutodeskStickers	1	Not Available	
	Voucher Info Sheet	Digi-Key Electronics	N/A	1	Not Available	
	Ruler	Digi-Key Electronics	DIGIKEYRULER	1	Not Available	
	Sticker Card	Digi-Key Electronics	N/A	1	Not Available	
	FIRST RISE presented by Star Wars: Force for Change, Decal for Robot	FIRST	2020-THEME-DECAL	1	Not Available	







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<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
	FMS/Events Flyer	FIRST	eventFlyer2020	1	Not Available	
	Event Housing Info Sheet	FIRST	N/A	1	Not Available	
	FLUKE Sticker	Fluke Industrial	FLUKE-STICKER	1	Not Available	
	VEXPro Poster	Innovation First International	217-6120	1	<a href="http://www.vexpro.com">www.vexpro.com</a>	
	VexPro Sticker Packet	Innovation First International	2020-VEXPACKET	1	<a href="http://www.vexpro.com">www.vexpro.com</a>	
	High Performance Ultrasonic Rangefinder (sensor stapled to flyer)	MaxBotix Inc.	MB1013-000	1	<a href="http://www.Maxbotix.com/firstrobotics">www.Maxbotix.com/firstrobotics</a>	

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<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
	Molex Info Card	Molex	2020-MOLEX	1	Not Available	
	National Instruments Kickoff Kit Packet	National Instruments	N/A	1	<a href="#">Available Online</a>	
	Postcard: Siemens software/certification	Siemens	2020-SIEMENSCARD	1	Not Available	
	2020 Kit of Parts (Voucher) Catalog	D3	N/A	1	<a href="#">Available Online</a>	
	Aluminum Info Sheet	Hydro Extrusion North America	N/A	1	Not Available	
	Virtual Kit Checklist	D3	N/A	1	<a href="#">Available Online</a>	









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<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
	Info Magnet	WPI	N/A	1	Not Available	
	Info Sheet	WPI	N/A	1	Not Available	
<b>Igus Bag</b>						
	<b>e-chain® cable carrier</b> 1 meter	igus Inc.	05-4-038-0	1	<a href="http://www.igus.com">www.igus.com</a>	  Photo: igus
	<b>e-chain® cable carrier mounting bracket set</b>	igus Inc.	050-20-12	1	<a href="http://www.igus.com">www.igus.com</a>	
	<b>chainflex cable</b> 20 AWG, 2 wire	igus Inc.	CF9-05-02	1	<a href="http://www.igus.com">www.igus.com</a>	
	<b>iglide® tribo-tape</b> 12 in. strip	igus Inc.	A160T5100S305	1	<a href="http://www.igus.com">www.igus.com</a>	

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<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
	<b>drylin® N linear guide system</b> With 24 in. rail & 2 carriages	igus Inc.	NK02-40-2-610	1	<a href="http://www.igus.com">www.igus.com</a>	 Photo: igus
	<b>iglide® J plain bearing</b>	igus Inc.	JSI-1012-08	2	<a href="http://www.igus.com">www.igus.com</a>	 Photo: igus
	<b>iglide® J plain bearing w/ flange</b>	igus Inc.	JFI-1012-08	2	<a href="http://www.igus.com">www.igus.com</a>	
	<b>iglide® M250 plain bearing</b>	igus Inc.	MTI-10	2	<a href="http://www.igus.com">www.igus.com</a>	 Photo: igus
	<b>igubal® rod end</b>	igus Inc.	EBRI-10R	2	<a href="http://www.igus.com">www.igus.com</a>	
	<b>igubal® flange</b>	igus Inc.	EFOI-10R	2	<a href="http://www.igus.com">www.igus.com</a>	

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<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
	<b>drylin® S aluminum shafting</b> 24 in.	igus Inc.	AWI-10	2	<a href="http://www.igus.com">www.igus.com</a>	 Photo: igus
	<b>iglide® MCI bearing</b>	igus Inc.	MCI-06-01	4	<a href="http://www.igus.com">www.igus.com</a>	 Photo: igus
<b>REV Robotics Kit</b>						
	<b>2-Wire Jumper Cable</b> 36 in., F/F	REV Robotics	REV-11-1134	1	<a href="http://www.revrobotics.com">www.revrobotics.com</a>	
	<b>CAN Wire</b> 22 AWG, Green/Yellow Twist, 36 in.	REV Robotics	REV-11-1149	1	<a href="http://www.revrobotics.com">www.revrobotics.com</a>	
	<b>PWM Y Cable</b> 22 AWG, 12 in., F/MM	REV Robotics	REV-11-1131	2	<a href="http://www.revrobotics.com">www.revrobotics.com</a>	
	<b>PWM Cable</b> 22 AWG, 36 in., F/M	REV Robotics	REV-11-1130	4	<a href="http://www.revrobotics.com">www.revrobotics.com</a>	

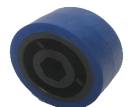

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<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
	<b>POE Injector Cable</b>	REV Robotics	REV-11-1210	1	<a href="http://www.revrobotics.com">www.revrobotics.com</a>	
	<b>Color Sensor</b>	REV Robotics	REV-31-1557	1	<a href="http://www.revrobotics.com">www.revrobotics.com</a>	
	<b>Color Sensor Cable</b> 4-pin JST to FRC I2C, 100cm	REV Robotics	REV-11-1729	1	<a href="http://www.revrobotics.com">www.revrobotics.com</a>	
<b>Loose</b>						
	<b>Dual Lock Reclosable Fastener</b> 12 ft.	3M	SJ3540 or 70070521052	1	No Specific Source	
	<b>VHB Tape</b>	3M	70006149820	1	No Specific Source	
	<b>Scholarship Calendar</b>	FIRST	N/A	1	Not Available	

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<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
	<b>Compliant Wheel, 4in.</b> 1/2in Hex, 50 Durometer	AndyMark	am-3480_blue	1	<a href="http://www.andymark.com">http://www.andymark.com</a>	
	<b>Stealth Wheel, 2in.</b> 1/2in. Hex, 50 Durometer	AndyMark	am-3155_blue	1	<a href="http://www.andymark.com">www.andymark.com</a>	
	<b>Pneumatic Tubing Kit</b> Two 25 ft. tubing & voucher flyer	AutomationDirect. com	2020-AD-Bag	1	No Specific Source	
	<b>Main Circuit Breaker</b> 120A	Eaton - Bussmann Division	CB185-120	1	<a href="http://www.eaton.com/bussmannseries">www.eaton.com/bussmannseries</a>	
	<b>Robot Radio</b> Dual Band 1.17 Gbps Access Point	Open Mesh Networks	OM5P-AC	1	<a href="http://www.andymark.com">www.andymark.com</a>	
	<b>Throttle Motor</b>	DENSO/ ASMO	AE235100-0160	1	Not Available	

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	Power cable, for radio	Epec	PwrCblRdo	1	No Specific Source	
	Game Piece: POWER CELL	Flaghouse	1892-YEL or AM-4200	1	<a href="http://www.andymark.com">www.andymark.com</a>	
	775 Pro Motor	Innovation First International	217-4347	1	<a href="http://www.vexpro.com">www.vexpro.com</a>	
	MiniCIM Motor	Innovation First International	217-3371	1	<a href="http://www.vexpro.com">www.vexpro.com</a>	
	Motor Controller Victor SPX	Innovation First International	217-9191	2	<a href="http://www.vexpro.com">www.vexpro.com</a>	 <small>Photo: VEXpro</small>
	CIM Motor	Innovation First International	217-2000	2	<a href="http://www.vexpro.com">www.vexpro.com</a>	




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	<b>Foam Gripper</b>	John Deere	M156751	2	Not Available	
	<b>Travel Waist Pack</b>	Kettering University	TravelPack	1	Bob Nichols bnichols@kettering.edu	
	<b>BB8 Banner</b>	The Walt Disney Company	BB8BANNER	1	Not Available	
	<b>Battery</b> Sealed Lead Acid, 12V, 18Ah, Bolt Fastened, Rechargeable	MK Battery	ES17-12	1	<a href="http://www.mkbattery.com">www.mkbattery.com</a>	
	<b>Robot Signal Light</b> (i.e. Panel Signal Device)	Rockwell Automation	855PB-B12ME522	1	No Specific Source	
	<b>Cardboard VR Viewer</b> (colors vary)	Siemens	cardboardvr	1	Not Available	

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<input checked="" type="checkbox"/>	Item Description	Supplier	Part Number	Qty	Where to get more?	Photo
	<b>Ethernet cable</b> colors & lengths vary	Various	ethernetcable	1	No Specific Source	
	<b>Lazy Susan</b>	Triangle Manufactureing	12D10346	1	<a href="http://www.triangleoshkosh.com">www.triangleoshkosh.com</a>	
	<b>Color Swatch for Control Panel</b>	TurnOne Graphics	ColorSample	1	Not Available	
	<b>Battery Connector</b> SB50-FR (housing) and 5900-BK (contacts)	Anderson Power Products	2020_CONNECTORS	3	<a href="http://www.andersonpower.com">http://www.andersonpower.com</a> (housing & contacts) <a href="http://www.andymark.com">http://www.andymark.com</a> (connector assembly)	