

Part Number	Picture	Name	QTY	Description	Notes
275-1030		3/32" Hex Key (8-pack)	1	High Strength Hex Key 3/32" for the serious VEX builder. Fits the 8-32 screws.	
275-1031		5/64" Hex Key (8- pack)	1	High Strength Hex Key 5/64" for the serious VEX builder. Fits the 6-32 screws and shaft collars.	
276-1395		3-Wire PWM Cables (small bundle)	1	Extension cables are used to extend the length of a 3-wire cable such that a motor/servo or sensor can be farther from the VEX Microcontroller.	
276-1403		USB A-A Tether Cable, 6' (1.8m)	1	Cable for connecting VEXnet components to sync and run in tether mode.	
276-1424		3-Wire PWM Cables	1	Are used to extend the length of a 3- wire cable such that a motor/servo or sensor can be farther from the VEX Microcontroller.	
276-1456	NE X	7.2V Robot Battery NiMH 2000mAh	1	Battery provides a rechargeable power source for use with your VEX robots.	





Part Number	Picture	Name	QTY	Description	Notes
276-1622		8-Bay AA/AAA Smart Battery Charger	1	This Smart Battery Charger is capable of charging up to eight Ni-MH or Ni-Cd rechargeable AA or AAA batteries.	
276-1696		AAA NiMH Rechargeable Battery (6-pack	1	A 6-pack of AAA NiMH Rechargeable Batteries designed for use in the VEXnet Joystick.	
276-2154		Line Tracker	1	Program your robot to follow a line. This sensor can also be used as a beam trigger. Includes (3) IR emitter/receivers.	
276-2155		Ultrasonic Range Finder	1	Use this sensor to measure distance using high frequency sound waves.	
276-2156		Optical Shaft Encoder (2-pack)	1	With the Quadrature Encoder's two output channels you can measure both the position and direction of rotation of a VEX shaft.	
276-2158		Light Sensor	1	Uses a photocell that allows your robot to detect and react to light.	



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Part Number	Picture	Name	QTY	Description	Notes
276-2159		Bumper Switch (2-pack)	1	Includes a pair of simple bumper switches custom built for the VEX Robotics Design System.	
276-2162		3-Wire Servo	1	Servo motors are a type of motor that can be directed to turn to face a specific direction, rather than just spin forward or backward.	
276-2166		Sprocket & Chain Kit	1	The six different sprocket sizes allow for a variety of ratios.	
276-2168		Tank Tread Kit	1	Contains over five feet of tank tread designed specifically for the VEX Robotics Design System.	
276-2174		Limit Switch (2-pack)	1	Includes a pair of simple limit switch sensors custom built for the VEX Robotics Design System. Switches send a signal to the Microcontroller when they are triggered.	
276-2176		LED Indicator Pack	1	Compatible with VEX Microcontroller Digital Outputs. Use these for feedback indicators, to debug code, verify Microcontroller mode, or for cool light patterns.	





## **PLTW**

# **VEX Aerospace Engineering Kit Contents**

Part Number	Picture	Name	QTY	Description	Notes
276-2177		2-Wire Motor 393	1	The 2-Wire Motor 393 is the primary actuator used in the VEX Robotics Design System. Build rotational mechanisms, drive bases, rotational joints, or conveyor belts	
276-2184		Advanced Gear Kit	1	This kit provides several options for advanced motion. These parts allow advanced mechanical VEX designers to create new ingenious mechanisms.	
276-1496		2.75" Wheel (4-pack)	1	A pack of (4) of the VEX 2.75" diameter Wheels. These wheels include a smooth grippy tire which has high traction on smooth surfaces.	
276-2186		Programming Hardware Kit	1	Allows for wireless programming of the VEX Microcontroller.	
276-2192		VEXnet Joystick	1	The VEXnet Joystick is the next generation of robot control for VEX Robots with the Microcontroller.	
276-2193		Motor Controller 29	3	The VEX Motor Controller 29 uses a standard PWM signal (like that originating from the 3-wire ports on VEX Microcontrollers) to drive a VEX 2-Wire Motor.	



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Part Number	Picture	Name	QTY	Description	Notes
276-2194	SEA THE SEA TH	VEX ARM® Cortex®- based Microcontroller	1	The brain of every VEX robot. Coordinates the flow of information and power on the robot.	
276-2210	***	Flashlight	1	Turn night into day with this powerful 4-LED flashlight. It draws power directly from the VEX Controller.	
276-1149		Drive Shaft 12" (4-pack)	1	The square shaft has rounded corners which allow it to spin easily in a round hole, while locking to a square hole.	
276-2216		Potentiometer	1	With the Potentiometer you can determine both position and direction of rotation.	
276-2219	Constant Con	Battery Strap (2-pack)	1	Are used to mount the 7.2v battery to your robot. The strap is reusable. Two Battery Straps and Mounting Hardware included.	
276-2519		Smart Charger	1	The VEX Smart Charger is capable of charging ALL VEX rechargeable power packs.	



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Part Number	Picture	Name	QTY	Description	Notes
276-2520		Power Cord- North America (Type A)	1	Brings power to the Smart Charger.	
276-2600		Clawbot Kit	1	Included is the basic robot in all kits, the step-by-step instructions guide users in assembling the robot as they learn to work with the VEX Robotics Design system.	
276-2232		Booster Kit	1	Includes pieces specifically recommended by VEX builders to maximize versatility. Contains over 600 pieces of VEX Structural and Motion Components.	





## **PLTW**

Part Number	Picture	Name	QTY	Description	Notes
276-3245	VEXnet 2.0 2.46Hz	VEXnet USB Adapter Key 2.0	2	The VEXnet USB Adapter Key provides 802.11b/g wireless communication between VEX Microcontrollers and VEXnet Joysticks.	
276-2243	RM	VEXnet Backup Battery Holder	1	The VEXnet Backup Battery allows you to mount and connect (1) 9V battery. This battery keep VEXnet alive when the main battery fails.	
276-2332		Analog Accelerometer V1.0	1	Measures accelerations on three axes simultaneously.	





