

Part #	Part Name	Vendor	Description/Dimensions
1.1	Carbon Fiber Bottom Pylon	Rock West Composites	TUBE - ROUND - INFINITUBETW - STANDARD MODULUS - TWILL - SIZE 3 - 27.965 X 30.099 X 609.6 mm
1.2	Carbon Fiber Top Pylon	Rock West Composites	TUBE - ROUND - INFINITUBETW - STANDARD MODULUS - TWILL - SIZE 4 - 31.75 X 33.884 X 609.6 mm
2.1	L-Shaped/ U-Shaped Carbon Fiber Support	Rock West Composites	Prepreg carbon fiber Toray T300 3K twill weave 250F resin 1003.3 mm wide x 0.279 mm thick
3.1	Cuffs	Plastics 2000	Kydex V Sheet 304.8 mm x 304.8 mm 2.997 mm thick
3.2	Velcro Straps	Amazon	609.6 mm x 50.8 mm Cinch Straps - 5 Pack
3.3	Cuffs	Plastics 2000	Kydex V Sheet 304.8 mm x 304.8 mm 2.362 mm thick
3.4	Cuffs	Plastics 2000	Kydex V Sheet 304.8 mm x 304.8 mm 2.032 mm thick
3.5	Cuff Springs	McMaster-Carr	smaller compression spring: Length of 14.986 mm, OD of 17.043 mm and ID of 12.286 mm
3.6	Foam	Amazon	Neoprene Sponge Foam Rubber Roll with Adhesive 381 mm x 1524 mm x 3.175 mm
3.6.1	Foam	Amazon	Neoprene Sponge Foam Rubber Roll with Adhesive 381 mm x 1524 mm x 6.35 mm
4	Mounting Plate Attachment	Rock West Composites	CARBONNECT - MOUNTING PLATE KIT - ALUMINUM - FOR 25.4 mm ID ROUND TUBING
4.1.1	Coil Shock	Single Track Bicycle Shop	Mountain Bike Rear Coil Shock
4.1.2	Shoulder Bolt - Coil Shock	Copper State Bolts & Nuts	5/16 X 1 1/2" (1/4-20) Socket Head Shoulder Bolt Plain

4.1.3	Lock Nut - Coil Shock	Copper State Bolts & Nuts	1/4-20 Grade C All Metal Hex Lock Nut Zinc
4.1.4	Coil Shock Mount	Rock West Composites	ANGLE - TWILL - 90 DEGREE SHARP - 1.50" LEGS X 0.08" THICK
4.2	Coil Shock Compression Spring	Amazon	Forney 72667 Wire Spring Compression (10-874), 1-3/8-Inch-by-6-Inch-by-.120-Inch
5.1.1	Bearing Shoulder Bolt	McMaster-Carr	shoulder bolts : Alloy Steel Shoulder Screws 12.7 mm OD and 25.4 mm long. Thread size of 9.525 mm -16
5.1.2	Bearing Lock Nut	McMaster-Carr	Locknuts : 6061 aluminum threadsize of 9.525 mm -16
5.2	Mounting Plate Attachment Screws	McMaster-Carr	Alloy Steel Low-Profile Socket Head Screw Black-Oxide, 6-32 Thread Size, 12.7 mm Long
5.3.1	U-Shaped to Attachment Bolt	Copper State Bolts & Nuts	Black-Oxide Alloy Steel Socket Head Screw 12-24 Thread Size, 5/8" Long
5.3.2	U-Shaped to Attachment Nut	Copper State Bolts & Nuts	Low-Strength Steel Serrated Flange Locknut Zinc-Plated, 12-24 Thread Size
5.4.1	Chicago Bolts	McMaster-Carr	Steel Low-Profile Binding Barrels and Screws 8-32 Thread Size, for 4.763 mm - 6.35 mm Material Thickness
5.4.2	Chicago Bolts	McMaster-Carr	Steel Low-Profile Binding Barrels and Screws 8-32 Thread Size, for 19.05 mm - 25.4 mm Material Thickness
6	Bearings	McMaster-Carr	bearings: High-Load Sealed Ball Bearing with shaft diameter of 12.7 mm and OD of 44.45 mm
6.1	Chicago Bolts	McMaster-Carr	Steel Low-Profile Binding Barrels and Screws 8-32 Thread Size, for 3.175 mm - 4.763 mm Material Thickness
7	Bike Clamp	Amazon	Gub Bike Seat Post Clamp Tube Clip Quick Release Aluminium Alloy , 34.9mm
8	BiOM Attachment	Hanger Clinic	Stainless Steel Attachment with 4 screws that clamps on the BiOM
	Aluminum Top Pylon	McMaster-Carr	General Purpose Aluminum Tubing 31.75 mm OD, 1.651 mm Wall Thickness
	Aluminum Bottom Pylon	McMaster-Carr	General Purpose Aluminum Tubing 34.925 mm OD, 1.473 mm Wall Thickness

	Cuffs	Plastics 2000	Kydex V Sheet 304.8 mm x 304.8 mm 1.524 mm thick
	Telescoping Clamp	Rock West Composites	TELESCOPING CLAMP - INFINITUBETW - SIZE 4
	Bike Clamp	Amazon	ODIER Bike Bicycle Quick Release SeatPost Clamp 34.9mm 31.8mm MTB Bike Road Bike Clamp Bike Seatpost Clamp
	Chicago Bolts	McMaster-Carr	Steel Low-Profile Binding Barrels and Screws 8-32 Thread Size, for 6.35 mm - 9.525 mm Material Thickness
	Compression Spring	McMaster-Carr	Spring-Tempered Steel Compression Spring 254 mm Long, 73.812 mm OD, 59.538 mm ID
	Vacuum Bag Sealent Tape	Rock West Composites	Vacuum bag sealant tape 12.7mm x 9.144 m roll
	Oven Bags	Amazon	Reynolds Oven Bags, Large, 5 ct
	Disposable Suit	Amazon	Disposable Suit
	Vinyl Gloves	Amazon	Vinyl Gloves
	Zinc-Galvanized Sheet	McMaster-Carr	Zinc-Galvanized Low-Carbon Steel Sheet 609.6 x 1219.2 x 0.483 mm
	Carbon Fiber Sticker Film	Amazon	304.8 x 1524 mm 4D Carbon Fiber Black Vinyl Vehicle Wrapping Sticker Film
	Compression Spring	McMaster-Carr	302 Stainless Steel Corrosion-Resistant Compression Springs 5" Long, 1.219" OD, 0.939" ID
	Compression Spring	McMaster-Carr	302 Stainless Steel Corrosion-Resistant Compression Springs 5" Long, 0.875" OD, 0.635" ID
	Compression Spring	McMaster-Carr	Compression Spring 6" Long, 0.875" OD, 0.635" ID
	Compression Spring	McMaster-Carr	302 Stainless Steel Corrosion-Resistant Compression Springs 5" Long, 0.75" OD, 0.54" ID

	Elastic Band	Amazon	Resistance Loop Exercise Bands
	Torque sensor	Transducer Techniques	TRT-500 / 500 in-lb
	Aluminum Sheet	McMaster-Carr	6061 Aluminum Sheet 2.032 mm Thick, 304.8 x 304.8 mm

Function	qty	cost/qty	Overall Cost	Web Address
Support weight	1	\$49.99	\$49.99	<a href="https://www.rockwestcomposites.com/round-tubing/infiniube-round-telescoping-tubing/infiniube-tw/infiniube-tw-tubing/45003-group">https://www.rockwestcomposites.com/round-tubing/infiniube-round-telescoping-tubing/infiniube-tw/infiniube-tw-tubing/45003-group</a>
Support weight	1	\$54.99	\$54.99	<a href="https://www.rockwestcomposites.com/round-tubing/infiniube-round-telescoping-tubing/infiniube-tw/infiniube-tw-tubing/45004-group">https://www.rockwestcomposites.com/round-tubing/infiniube-round-telescoping-tubing/infiniube-tw/infiniube-tw-tubing/45004-group</a>
Frame support	5 sqft. units	\$33.79	\$168.95	<a href="https://www.rockwestcomposites.com/14033-d-group">https://www.rockwestcomposites.com/14033-d-group</a>
Leg Support	2	\$3.60	\$7.20	<a href="https://plastics2000.net/products/kydex-v-sheet-0-118-thick-12-x-12-black-52114/">https://plastics2000.net/products/kydex-v-sheet-0-118-thick-12-x-12-black-52114/</a>
Leg Support	1	\$14.78	\$14.78	<a href="https://smile.amazon.com/gp/product/B00VETHHY8/ref=ox_sc_act_title_3?smid=A21DQIB18TK000&amp;psc=1">https://smile.amazon.com/gp/product/B00VETHHY8/ref=ox_sc_act_title_3?smid=A21DQIB18TK000&amp;psc=1</a>
Leg Support	2	\$3.30	\$6.60	<a href="https://plastics2000.net/products/kydex-v-sheet-0-093-thick-12-x-12-black-52114/">https://plastics2000.net/products/kydex-v-sheet-0-093-thick-12-x-12-black-52114/</a>
Leg Support	2	\$3.10	\$6.20	<a href="https://plastics2000.net/products/kydex-v-sheet-0-080-thick-12-x-12-black-52114/">https://plastics2000.net/products/kydex-v-sheet-0-080-thick-12-x-12-black-52114/</a>
Secure Calf	1 pkg	\$6.70	\$6.70	<a href="https://www.mcmaster.com/9657k494">https://www.mcmaster.com/9657k494</a>
Comfortibility	1	\$13.80	\$13.80	<a href="https://smile.amazon.com/gp/product/B07H2M69PG/ref=ox_sc_act_title_1?smid=ATCEOOTPRH3R3&amp;psc=1">https://smile.amazon.com/gp/product/B07H2M69PG/ref=ox_sc_act_title_1?smid=ATCEOOTPRH3R3&amp;psc=1</a>
Comfortibility	1	\$14.80	\$14.80	<a href="https://smile.amazon.com/gp/product/B07H2QKC3X/ref=ox_sc_act_title_1?smid=ATCEOOTPRH3R3&amp;psc=1">https://smile.amazon.com/gp/product/B07H2QKC3X/ref=ox_sc_act_title_1?smid=ATCEOOTPRH3R3&amp;psc=1</a>
Hold system together	1	\$14.99	\$14.99	<a href="https://www.rockwestcomposites.com/connector-accessories/carbonnect/carbonnect-system-components/ce-mp-05-group">https://www.rockwestcomposites.com/connector-accessories/carbonnect/carbonnect-system-components/ce-mp-05-group</a>
Allows the pylon to move forward	1	\$0.00	\$0.00	N/A
Hold coil shock together	2	\$0.00	\$0.00	N/A

Hold system together	2	\$0.00	\$0.00	N/A
Holds coil shock to the pylon	2	\$3.99	\$7.98	<a href="https://www.rockwestcomposites.com/808-150-group">https://www.rockwestcomposites.com/808-150-group</a>
Allows the pylon to move forward	1	\$13.48	\$13.48	<a href="https://www.amazon.com/gp/product/B003XEZQM2/ref=ppx_vo_dt_b_asin_title_o00_s00?">https://www.amazon.com/gp/product/B003XEZQM2/ref=ppx_vo_dt_b_asin_title_o00_s00?</a>
Hold system together	4	\$2.52	\$10.08	<a href="https://www.mcmaster.com/91259A712">https://www.mcmaster.com/91259A712</a>
Hold system together	1 pkg	\$4.06	\$4.06	<a href="https://www.mcmaster.com/95856a265">https://www.mcmaster.com/95856a265</a>
Hold system together	1 pkg	\$9.63	\$9.63	<a href="https://www.mcmaster.com/92220a143">https://www.mcmaster.com/92220a143</a>
Hold system together	4	\$0.00	\$0.00	N/A
Hold system together	4	\$0.00	\$0.00	N/A
Hold system together	1 pkg	\$11.48	\$11.48	<a href="https://www.mcmaster.com/95519a608">https://www.mcmaster.com/95519a608</a>
Hold system together	1 pkg	\$11.20	\$11.20	<a href="https://www.mcmaster.com/95519a649">https://www.mcmaster.com/95519a649</a>
Allows Smooth Rotation	2	\$33.42	\$66.84	<a href="https://www.mcmaster.com/2782t81">https://www.mcmaster.com/2782t81</a>
Hold system together	1 pkg	\$10.68	\$10.68	<a href="https://www.mcmaster.com/95519a601">https://www.mcmaster.com/95519a601</a>
Pylon adjustment	1	\$7.99	\$7.99	<a href="https://www.amazon.com/gp/product/B0754LPJML/ref=ppx_">https://www.amazon.com/gp/product/B0754LPJML/ref=ppx_</a>
Attaches the pylon to the BiOM	2	\$0.00	\$0.00	N/A
Support weight	1	\$26.38	\$26.38	<a href="https://www.mcmaster.com/89965k414">https://www.mcmaster.com/89965k414</a>
Support weight	1	\$34.81	\$34.81	<a href="https://www.mcmaster.com/89965k741">https://www.mcmaster.com/89965k741</a>

Leg Support	2	\$2.80	\$5.60	<a href="https://plastics2000.net/products/kydex-v-sheet-0-060-thick-12-x-12-black-52114/">https://plastics2000.net/products/kydex-v-sheet-0-060-thick-12-x-12-black-52114/</a>
Pylon adjustment	1	\$27.99	\$27.99	<a href="https://www.rockwestcomposites.com/infiniubev-fliplock-group">https://www.rockwestcomposites.com/infiniubev-fliplock-group</a>
Pylon adjustment	1	\$8.29	\$8.29	<a href="https://www.amazon.com/SeatPost-Aluminium-Seatpost-Cannondale-">https://www.amazon.com/SeatPost-Aluminium-Seatpost-Cannondale-</a>
Hold system together	1 pkg	\$11.61	\$11.61	<a href="https://www.mcmaster.com/95519a617">https://www.mcmaster.com/95519a617</a>
Allows the pylon to move forward	1	\$19.09	\$19.09	<a href="https://www.mcmaster.com/96485k229">https://www.mcmaster.com/96485k229</a>
Close the oven bags	1	\$9.99	\$9.99	<a href="https://www.rockwestcomposites.com/materials-tools/vacuum-bagging-materials/tapes/3009-d">https://www.rockwestcomposites.com/materials-tools/vacuum-bagging-materials/tapes/3009-d</a>
Carbon Fiber Lay-up	1	\$8.44	\$8.44	<a href="https://smile.amazon.com/gp/product/B000SRI6A6/ref=ox_sc_act_title_5?">https://smile.amazon.com/gp/product/B000SRI6A6/ref=ox_sc_act_title_5?</a>
Protection	1	\$7.45	\$7.45	<a href="https://www.amazon.com/Disposable-Dupont-Elastic-Wrists-">https://www.amazon.com/Disposable-Dupont-Elastic-Wrists-</a>
Protection	1	\$6.45	\$6.45	<a href="https://www.amazon.com/AMMEX-IVPF44100-BX-GlovePlus-Disposable-Non-sterile/dp/B0017HQNFG/ref=sr_1_30_ss_pa?keywords=rubber%2Bgloves&amp;qid=1551477396&amp;s=gateway&amp;sr=8-30-spons&amp;th=1&amp;pldnSite=1">https://www.amazon.com/AMMEX-IVPF44100-BX-GlovePlus-Disposable-Non-sterile/dp/B0017HQNFG/ref=sr_1_30_ss_pa?keywords=rubber%2Bgloves&amp;qid=1551477396&amp;s=gateway&amp;sr=8-30-spons&amp;th=1&amp;pldnSite=1</a>
To Form the Carbon Fiber	1	\$19.17	\$19.17	<a href="https://www.mcmaster.com/8943k14">https://www.mcmaster.com/8943k14</a>
Provides nice appearance	1	\$8.52	\$8.52	<a href="https://www.amazon.com/gp/product/B07HM86QGT/ref=ox_sc_act_title_1?smid=A10DP4NSFDU408&amp;psc=1">https://www.amazon.com/gp/product/B07HM86QGT/ref=ox_sc_act_title_1?smid=A10DP4NSFDU408&amp;psc=1</a>
Allows the pylon to move forward	1	\$3.53	\$3.53	<a href="https://www.mcmaster.com/1986k428">https://www.mcmaster.com/1986k428</a>
Allows the pylon to move forward	1	\$3.25	\$3.25	<a href="https://www.mcmaster.com/1986k821">https://www.mcmaster.com/1986k821</a>
Allows the pylon to move forward	1	\$12.99	\$12.99	<a href="https://www.mcmaster.com/9657k321">https://www.mcmaster.com/9657k321</a>
Allows the pylon to move forward	1	\$11.63	\$11.63	<a href="https://www.mcmaster.com/1986k961">https://www.mcmaster.com/1986k961</a>

	1	\$10.95	\$10.95	<a href="https://www.amazon.com/Fit-Simplify-Resistance-Exercise-Instruction/dp/B01AVDVHTI/ref=sr_1_2_sspa?crid=3KHPR9Y04JH7C&amp;keywords=exercise+bands&amp;qid=1553719979&amp;s=industrial&amp;srefix=Exercise+bands%2Cindustrial%2C211&amp;sr=1-2-spons&amp;psc=1">https://www.amazon.com/Fit-Simplify-Resistance-Exercise-Instruction/dp/B01AVDVHTI/ref=sr_1_2_sspa?crid=3KHPR9Y04JH7C&amp;keywords=exercise+bands&amp;qid=1553719979&amp;s=industrial&amp;srefix=Exercise+bands%2Cindustrial%2C211&amp;sr=1-2-spons&amp;psc=1</a>
Future work	1	\$675.00	\$675.00	<a href="https://www.transducertechniques.com/trt-torque-sensor.aspx">https://www.transducertechniques.com/trt-torque-sensor.aspx</a>
To Form the Carbon Fiber	1	\$18.36	\$18.36	<a href="https://www.mcmaster.com/89015k231">https://www.mcmaster.com/89015k231</a>
<b>Total</b>			<b>\$1,441.92</b>	
<b>Tax &amp; Shipping</b>			<b>\$492.92</b>	
<b>Sub Total</b>			<b>\$1,934.84</b>	