

ITEM NUMBER	QUANTITY NEEDED	ITEM DESCRIPTION	ORDERING LINK 1	2	3	4	5	Cost (US\$)
<b>OVERALL BOM (2X, 2Y, 2Z AXES)</b>								
1	12	motor 3D printed piece	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
2	12	carriage 3D printed piece	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
3	12	idler 3D printed piece	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
4	12	belt peg	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
5	4	8 mm chrome plated guide rods, 1280 mm long	<a href="https://www.amazon.com">https://www.amazon.com</a>					
6	4	8 mm chrome plated guide rods, 430 mm long						
7	4	8 mm chrome plated guide rods, 460 mm long						
8	54	m6x18 socket screw (zinc plated, black oxide, or stainless)	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					8
9	16	m6x30 socket screw (zinc plated, black oxide, or stainless)	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					8
10	62	m6 zinc plated nut	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					5
11	24	m3x25 philips pan head screw	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					4
12	6	NEMA 17 stepper motor, 92 oz in	<a href="https://www.amazon.com">https://www.amazon.com</a>					150
13	24	8 mm linear bearing, plastic (low noise; can also use metal bearings)	<a href="https://www.ebay.com">https://www.ebay.com</a>	<a href="http://">http://</a>	<a href="http://">http://</a>	<a href="http://">http://</a>		24
14	10 meters	GT2 belt, 6mm wide	<a href="https://smile.amazon.com">https://smile.amazon.com</a>	<a href="http://">http://</a>				12
15	6	GT2 pulley, 5mm bore, 6mm wide, 20 teeth	<a href="https://www.amazon.com">https://www.amazon.com</a>	<a href="http://">http://</a>	<a href="http://">http://</a>			8
16	12	m6x12x4 flanged bearing	<a href="http://www.ebay.com/">http://www.ebay.com/</a>	<a href="http://">http://</a>				8
17	1 roll	thin wires for stepper motor extension if needed - ga 22	<a href="https://smile.amazon.com">https://smile.amazon.com</a>					7
18	6	stepper motor wires	<a href="https://smile.amazon.com">https://smile.amazon.com</a>					6
19	8	springs. 0.48" outer diameter, 3" long	<a href="https://www.msdirect.com">https://www.msdirect.com</a>					32
<b>TOTAL USD:</b>								<b>272</b>

ITEM NUMBER	QUANTITY NEEDED	ITEM DESCRIPTION	ORDERING LINK 1	2	3	4	5	Cost (US\$)
<b>X AXIS (ONE AXIS ONLY)</b>								
1	2	motor 3D printed piece	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
2	2	carriage 3D printed piece	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
3	2	idler 3D printed piece	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
4	2	belt peg	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
5	2	8 mm chrome plated guide rods, 1280 mm long	<a href="https://www.amazon.com">https://www.amazon.com</a>					
6	7	m6x18 socket screw (zinc plated, black oxide, or stainless)	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					1
7	4	m6x30 socket screw (zinc plated, black oxide, or stainless)	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					1
8	11	m6 zinc plated nut	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					1
9	4	m3x25 philips pan head screw	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					1
10	1	NEMA 17 stepper motor, 92 oz in	<a href="https://www.amazon.com">https://www.amazon.com</a>					25
11	4 pieces	8 mm linear bearing, plastic (low noise; can also use metal bearings)	<a href="https://www.ebay.com">https://www.ebay.com</a>	<a href="http://">http://</a>	<a href="http://">http://</a>	<a href="http://">http://</a>		4
12	2.64 m	GT2 belt, 6mm wide (2x+3 inch = 2.64 m)	<a href="https://smile.amazon.com">https://smile.amazon.com</a>	<a href="http://">http://</a>				3
13	1 piece	GT2 pulley, 5mm bore, 6mm wide, 20 teeth	<a href="https://www.amazon.com">https://www.amazon.com</a>	<a href="http://">http://</a>	<a href="http://">http://</a>			1
14	2 pieces	m6x12x4 flanged bearing	<a href="http://www.ebay.com/">http://www.ebay.com/</a>	<a href="http://">http://</a>				2
15	depends on	thin wires for stepper motor extension if needed - ga 22	<a href="https://smile.amazon.com">https://smile.amazon.com</a>					1
16	1	stepper motor wires	<a href="https://smile.amazon.com">https://smile.amazon.com</a>					1
<b>Y AXIS (ONE AXIS ONLY)</b>								
1	2	motor 3D printed piece	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
2	2	carriage 3D printed piece	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
3	2	idler 3D printed piece	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
4	2	belt peg	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
5	2	8 mm chrome plated guide rods, 430 mm long	<a href="https://www.amazon.com">https://www.amazon.com</a>					
6	11	m6x18 socket screw (zinc plated, black oxide, or stainless)	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					1
7	4	m6x30 socket screw (zinc plated, black oxide, or stainless)	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					1
8	11	m6 zinc plated nut	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					1
9	4	m3x25 philips pan head screw	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					1
10	1	NEMA 17 stepper motor, 92 oz in	<a href="https://www.amazon.com">https://www.amazon.com</a>					25
11	4 pieces	8 mm linear bearing, plastic (low noise; can also use metal bearings)	<a href="https://www.ebay.com">https://www.ebay.com</a>	<a href="http://">http://</a>	<a href="http://">http://</a>	<a href="http://">http://</a>		4
12	94 cm	GT2 belt, 6mm wide (2x+3 inch = 93.5 cm)	<a href="https://smile.amazon.com">https://smile.amazon.com</a>	<a href="http://">http://</a>				1
13	1 piece	GT2 pulley, 5mm bore, 6mm wide, 20 teeth	<a href="https://www.amazon.com">https://www.amazon.com</a>	<a href="http://">http://</a>	<a href="http://">http://</a>			1
14	2 pieces	m6x12x4 flanged bearing	<a href="http://www.ebay.com/">http://www.ebay.com/</a>	<a href="http://">http://</a>				2
15	depends on	thin wires for stepper motor extension if needed - ga 22	<a href="https://smile.amazon.com">https://smile.amazon.com</a>					1
16	1	stepper motor wires	<a href="https://smile.amazon.com">https://smile.amazon.com</a>					1
<b>Z AXIS (ONE AXIS ONLY)</b>								
1	2	motor 3D printed piece	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
2	2	carriage 3D printed piece	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
3	2	idler 3D printed piece	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
4	2	belt peg	<a href="https://wiki.opensource.com">https://wiki.opensource.com</a>					
5	2	8 mm chrome plated guide rods, 460 mm long	<a href="https://www.amazon.com">https://www.amazon.com</a>					
6	9	m6x18 socket screw (zinc plated, black oxide, or stainless)	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					1
7	4	m6x50 socket screw (zinc plated, black oxide, or stainless)	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					1
8	9	m6 zinc plated nut	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					1
9	4	m3x25 philips pan head screw	<a href="https://www.mcmaster.com">https://www.mcmaster.com</a>					1
10	1	NEMA 17 stepper motor, 92 oz in	<a href="https://www.amazon.com">https://www.amazon.com</a>					25
11	4 pieces	8 mm linear bearing, plastic (low noise; can also use metal bearings)	<a href="https://www.ebay.com">https://www.ebay.com</a>	<a href="http://">http://</a>	<a href="http://">http://</a>	<a href="http://">http://</a>		4
12	1 m	GT2 belt, 6mm wide (2x+3 inch = 99.5 cm)	<a href="https://smile.amazon.com">https://smile.amazon.com</a>	<a href="http://">http://</a>				6
13	1 piece	GT2 pulley, 5mm bore, 6mm wide, 20 teeth	<a href="https://www.amazon.com">https://www.amazon.com</a>	<a href="http://">http://</a>	<a href="http://">http://</a>			1
14	2 pieces	m6x12x4 flanged bearing	<a href="http://www.ebay.com/">http://www.ebay.com/</a>	<a href="http://">http://</a>				2
15	depends on	thin wires for stepper motor extension if needed - ga 22	<a href="https://smile.amazon.com">https://smile.amazon.com</a>					1
16	1	stepper motor wires	<a href="https://smile.amazon.com">https://smile.amazon.com</a>					1
17	4	springs. 0.48" outer diameter, 3" long	<a href="https://www.msccdirect.com">https://www.msccdirect.com</a>					16