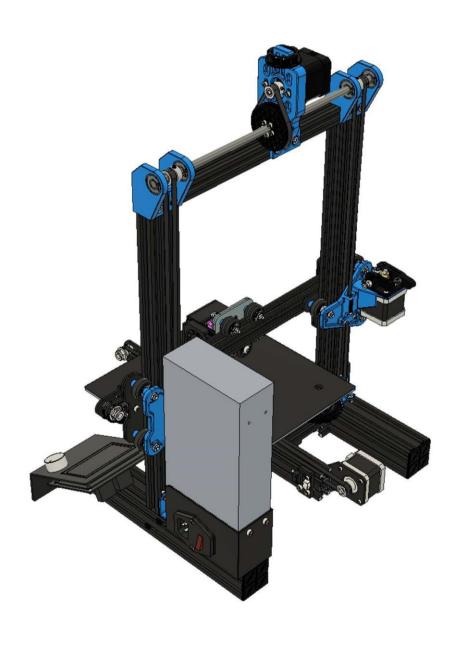
Setup 1

Unrotated

+

V-Rollers



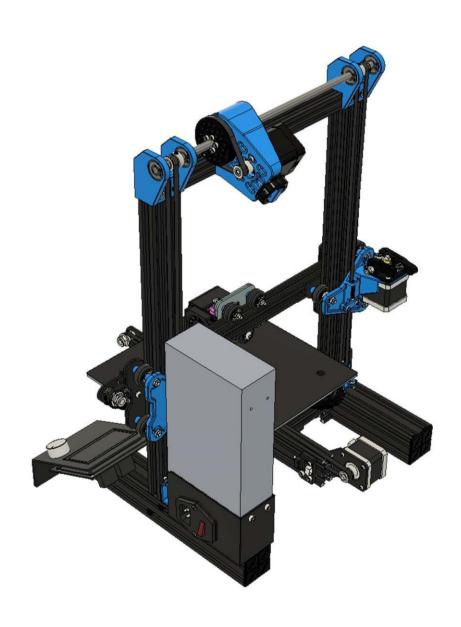
	Version: Unrotated + V-Rollers						
Category	Component	Quantity	Neuse IIOIII	Notes	My Source	Alternative Source	
Motion	20T Pulley - 8mm Bore	3	no	One for each side on the Rod, one for the printed 80T Gear.	<u>Aliexpress</u>	<u>Aliexpress</u>	
	16T Pulley - 5mm Bore	1	no	Motorshaft	<u>Aliexpress</u>	Aliexpress	
	Gt2 Belt	2 Meter	no	Don't buy the cheapest. You should go for belts with glassfiber. Width: 6mm	Amazon Germany	Aliexpress	
	188mm Looped Belt	1	no	Width: 6mm	<u>Aliexpress</u>	Aliexpress Affiliate Link Voron Guys	
	F623ZZ 3*10*4 bearing	4	no	2 Pieces per side	Aliexpress		
	608ZZ Bearing 4 (5)	4 (5)		Do you have an old skateboard? You can steal the bearings from the wheels;) (5 for extra bearing in			
		4 (5)	no	transmission body)	Aliexpress	<u>Aliexpress</u>	
				Theres no link, just go to your local hardware store and take a cheap 8mm (aluminium) rod. You don't			
	8mm Rod	330 mm	yes/no	have to buy a hardened steel one. (to expensive and hard to cut). You also could use your leadscrew.			
Fasteners	M5x8mm	21	no	Any type of M5x8mm screw can be used. I really like the openbuilds one	<u>Aliexpress</u>		
				Screwhead must fit under the extrusion from the X-Axis. (Take a look at 5:20 of my video) You also could			
	M5x40mm	6	yes (3 x)	use a stock 40mm screw from the left side of the printer and place this on the inside of the right side. This			
		ŭ	, co (o n,	way you can use any type of screwhead for the remaining holes.	Aliexpress	Aliexpress (cheaper)	
	M5x30mm	4	no	way you can use any type or screwned for the remaining notes.	Aliexpress	, mexpress (eneaper)	
	M5 T-nuts	21	no		Aliexpress		
	M3x30mm	2	no		<u>инскриезэ</u>		
	M3x25mm	2	no				
	M3x16mm	10	no				
	M3x12mm	8	no	If you have no screws, you should buy a kit. Especially for the tensioner a longer screw can be good.	Aliexpress		
	M3x10mm	2		il you have no screws, you should buy a kit. Especially for the tensioner a longer screw can be good.	Allexpress		
	M3x10mm	5	no				
		10	no				
e	M3 nuts		no		A II		
Electronics	Motor extension cable	1	no	The original Cable is obviously too short^^ Check if the middle cables are crossed!!!	<u>Aliexpress</u>		
Printed Parts	•	1	/	Thingiverse (Bowden-Version available)			
	LeftV3	1	/	Thingiverse (Bowden-Version available)			
	RightTop	1	/	Thingiverse			
	LeftTop	1	/	Thingiverse			
	RightBottom	1	/	Thingiverse			
	LeftBottom	1	/	Thingiverse			
	Spacer	3	/	Thingiverse			
	Tensioner Block	2	/	Thingiverse			
	TensionerClamp	2	/	Thingiverse			
	Transmission	1	/	<u>Github</u>			
	MotorMountTensionerArm	1	/	<u>Github</u>			
	ZDriveTensioningRing	1	/	<u>Github</u>			
	80TRingGear	1	/	<u>Github</u>			
Filament	Petg or ABS (+)	??kg	no	Yes you can use PLA, but you shouldn't ;)			

Setup 2

Rotated

+

V-Rollers



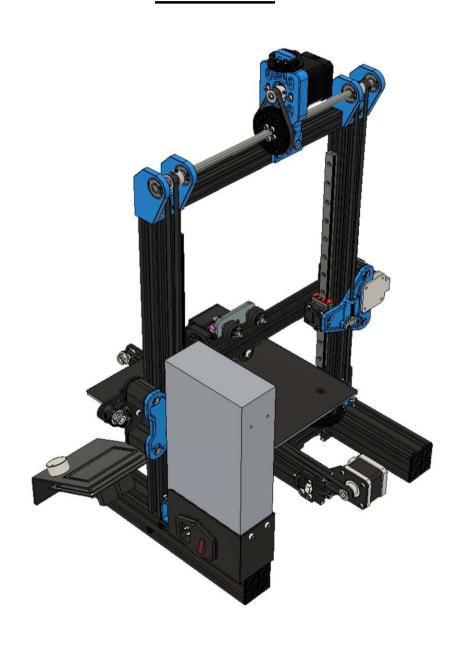
	Version: Rotated + V-Rollers						
Category	Component	Quantity	Neuse IIOIII	Notes	My Source	Alternative Source	
Motion	20T Pulley - 8mm Bore	3	no	One for each side on the Rod, one for the printed 80T Gear.	<u>Aliexpress</u>	Aliexpress	
	16T Pulley - 5mm Bore	1	no	Motorshaft	<u>Aliexpress</u>	Aliexpress	
	Gt2 Belt	2 Meter	no	Don't buy the cheapest. You should go for belts with glassfiber. Width: 6mm	Amazon Germany	Aliexpress	
	188mm Looped Belt	1	no	Width: 6mm	<u>Aliexpress</u>	Aliexpress Affiliate Link Voron Guys	
	F623ZZ 3*10*4 bearing	4	no	2 Pieces per side	<u>Aliexpress</u>		
	608ZZ Bearing	4 (5)	no	Do you have an old skateboard? You can steal the bearings from the wheels;) (5 for extra bearing in transmission body)	Aliexpress	Aliexpress	
	8mm Rod	330 mm	yes/no	Theres no link, just go to your local hardware store and take a cheap 8mm (aluminium) rod. You don't have to buy a hardened steel one. (to expensive and hard to cut). You also could use your leadscrew.			
Fasteners	M5x8mm	23	no	Any type of M5x8mm screw can be used. I really like the openbuilds one	<u>Aliexpress</u>		
	M5x40mm	6	yes (3 x)	Screwhead must fit under the extrusion from the X-Axis. (Take a look at 5:20 of my video) You also could use a stock 40mm screw from the left side of the printer and place this on the inside of the right side. This way you can use any type of screwhead for the remaining holes.	Aliexpress	Aliexpress (cheaper)	
	M5x30mm	4	no	way you can use any type of serewhead for the remaining notes.	Aliexpress	, mexpress (eneaper)	
	M5 T-nuts	23	no		Aliexpress		
	M3x30mm	2	no		<u> тисхрі соо</u>		
	M3x25mm	2	no				
	M3x16mm	10	no				
	M3x12mm	8	no	If you have no screws, you should buy a kit. Especially for the tensioner a longer screw can be good.	Aliexpress		
	M3x10mm	2	no	1. You have no one may you should buy a war Especially for the tensioner a longer solem can be good.	<u>инсиргезэ</u>		
	M3x6mm	5	no				
	M3 nuts	10	no				
Electronics	Motor extension cable	1	no	The original Cable is obviously too short^^ Check if the middle cables are crossed!!!	Aliexpress		
Printed Parts		1	/	Thingiverse (Bowden-Version available)			
	LeftV3	1	,	Thingiverse (Bowden-Version available)			
	RightTop	1	,	Thingiverse			
	LeftTop	1	/	Thingiverse			
	RightBottom	1	,	Thingiverse			
	LeftBottom	1	,	Thingiverse			
	Spacer	3	/	Thingiverse			
	Tensioner Block	2	/	Thingiverse			
	TensionerClamp	2	/	Thingiverse			
	Transmission	1	/	Github			
	MotorMountTensionerArm	1	/	Github			
	ZDriveTensioningRing	1	/	Github			
	80TRingGear	1	/	Github			
Filament	Petg or ABS (+)	??kg	no	Yes you can use PLA, but you shouldn't ;)			

Setup 3

Unrotated

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MGN-12H



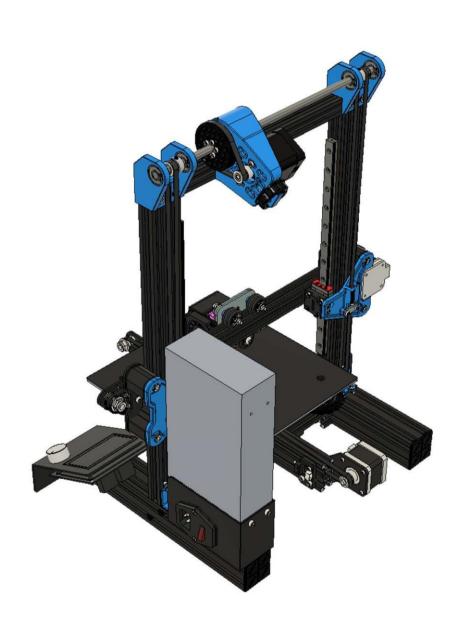
	Version: Unrotated + MGN					
Category	Component	Quantity	Reuse Iroini	Notes	My Source	Alternative Source
Motion	20T Pulley - 8mm Bore	3	no	One for each side on the Rod, one for the printed 80T Gear.	<u>Aliexpress</u>	Aliexpress
	16T Pulley - 5mm Bore	1	no	Motorshaft	<u>Aliexpress</u>	Aliexpress
	Gt2 Belt	2 Meter	no	Don't buy the cheapest. You should go for belts with glassfiber. Width: 6mm	Amazon Germany	Aliexpress
	188mm Looped Belt	1	no	Width: 6mm	Aliexpress	Aliexpress Affiliate Link Voron Guys
	F623ZZ 3*10*4 bearing	4	no	2 Pieces per side	Aliexpress	
	608ZZ Bearing	4 (5)	no	Do you have an old skateboard? You can steal the bearings from the wheels;) (5 for extra bearing in transmission body)	Aliexpress	<u>Aliexpress</u>
	8mm Rod	330 mm	yes/no	Theres no link, just go to your local hardware store and take a cheap 8mm (aluminium) rod. You don't have to buy a hardened steel one. (to expensive and hard to cut). You also could use your leadscrew.		
	300mm MGN Rail	2	no	Don't buy the cheapest.		
Fasteners	M5x8mm	21	no	Any type of M5x8mm screw can be used. I really like the openbuilds one	Aliexpress	
	M5x40mm	4	yes (3x)	7-11	Aliexpress	Aliexpress (cheaper)
	M5x30mm	4	no		Aliexpress	
	M5 T-nuts	21	no		Aliexpress	
	M3x30mm	2	no			
	M3x25mm	2	no			
	M3x20mm	4	no			
	M3x16mm	10	no			
	M3x12mm	8	no	If you have no screws, you should buy a kit. Especially for the tensioner a longer screw can be good.	Aliexpress	
	M3x10mm	10		If you have no sciews, you should buy a kit. Especially for the tensioner a longer sciew can be good.	Allexpress	
		24	no	Vermill and the set to see the set of All below 42 are set by		
	M3x8mm		no	You will need these to mount the rails. All holes: 12 per rail. You can use less, minimum 4 per rail.		
	M3x6mm	5	no			
	M3 nuts	14	no			
	M3 T-nuts	24	no	You will need these to mount the rails. All holes: 12 per rail. You can use less, minimum 4 per rail.		
Electronics	Motor extension cable	1	no	The original Cable is obviously too short^^ Check if the middle cables are crossed!!!	<u>Aliexpress</u>	
Printed Parts	•	1	/	Thingiverse (Bowden-Version available)		
	LeftV3	1	/	Thingiverse (Bowden-Version available)		
	RightTop	1	/	Thingiverse		
	LeftTop	1	/	Thingiverse		
	RightBottom	1	/	Thingiverse		
	LeftBottom	1	/	Thingiverse		
	Spacer_Right (MGN folder)	1	/	Thingiverse		
	Spacer_Left (MGN folder)	1	/	Thingiverse		
	Right (MGN folder)	1	/	Thingiverse		
	Left (MGN folder)	1	/	Thingiverse		
	DistanceBracket	2	/	Thingiverse - you will need this to align the rails. Just take a look at my video.		
	Tensioner Block	2	/	Thingiverse		
	TensionerClamp	2	/	Thingiverse		
	Transmission	1	/	Github		
	MotorMountTensionerArm	1	/	Github		
	ZDriveTensioningRing	1	/	Github		
	80TRingGear	1	/	Github		
Filament	Petg or ABS (+)	??kg	no	Yes you can use PLA, but you shouldn't ;)		
- nament	reag of Abb (1)	:: 1.15	110	165 you can abo t biy but you shouldn't ;		

Setup 4

Rotated

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<u>MGN-12H</u>

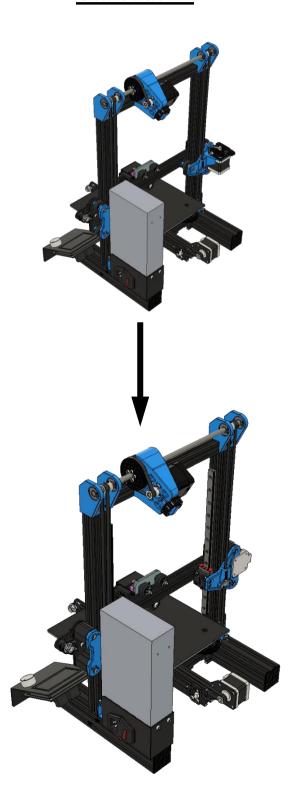


	Version: Rotated + MGN					
Category	Component	Quantity	Reuse Iroini	Notes	My Source	Alternative Source
Motion	20T Pulley - 8mm Bore	3	no	One for each side on the Rod, one for the printed 80T Gear.	<u>Aliexpress</u>	<u>Aliexpress</u>
	16T Pulley - 5mm Bore	1	no	Motorshaft	<u>Aliexpress</u>	Aliexpress
	Gt2 Belt	2 Meter	no	Don't buy the cheapest. You should go for belts with glassfiber. Width: 6mm	Amazon Germany	<u>Aliexpress</u>
	188mm Looped Belt	1	no	Width: 6mm	Aliexpress	Aliexpress Affiliate Link Voron Guys
	F623ZZ 3*10*4 bearing	4	no	2 Pieces per side	Aliexpress	
	608ZZ Bearing	4 (5)	no	Do you have an old skateboard? You can steal the bearings from the wheels;) (5 for extra bearing in transmission body)	Aliexpress	Aliexpress
	8mm Rod	330 mm	yes/no	Theres no link, just go to your local hardware store and take a cheap 8mm (aluminium) rod. You don't have to buy a hardened steel one. (to expensive and hard to cut). You also could use your leadscrew.		
	300mm MGN Rail	2	no	Don't buy the cheapest.		
Fasteners	M5x8mm	23	no	Any type of M5x8mm screw can be used. I really like the openbuilds one	Aliexpress	
	M5x40mm	4	yes(3x)		Aliexpress	Aliexpress (cheaper)
	M5x30mm	4	no		Aliexpress	
	M5 T-nuts	23	no		Aliexpress	
	M3x30mm	2	no			
	M3x25mm	2	no			
	M3x20mm	4	no			
	M3x16mm	10	no			
	M3x12mm	8	no	If you have no screws, you should buy a kit. Especially for the tensioner a longer screw can be good.	Aliexpress	
	M3x10mm	10	no	If you have no sciews, you should buy a kit. Especially for the tensioner a longer sciew can be good.	Allexpress	
	M3x8mm	24	no	You will need these to mount the rails. All holes: 12 per rail. You can use less, minimum 4 per rail.		
	M3x6mm	5		Tou will need these to mount the rails. All noies, 12 per rail, rou can use less, millimum 4 per rail.		
			no			
	M3 nuts	14	no			
	M3 T-nuts	24	no	You will need these to mount the rails. All holes: 12 per rail. You can use less, minimum 4 per rail.		
Electronics	Motor extension cable	1	no	The original Cable is obviously too short^^ Check if the middle cables are crossed!!!	<u>Aliexpress</u>	
Printed Parts	•	1	/	Thingiverse (Bowden-Version available)		
	LeftV3	1	/	Thingiverse (Bowden-Version available)		
	RightTop	1	/	Thingiverse		
	LeftTop	1	/	Thingiverse		
	RightBottom	1	/	Thingiverse		
	LeftBottom	1	/	Thingiverse		
	Spacer_Right (MGN folder)	1	/	Thingiverse		
	Spacer_Left (MGN folder)	1	/	Thingiverse		
	Right (MGN folder)	1	/	Thingiverse		
	Left (MGN folder)	1	/	Thingiverse		
	DistanceBracket	2	/	Thingiverse - you will need this to align the rails. Just take a look at my video.		
	Tensioner Block	2	/	Thingiverse		
	TensionerClamp	2	/	Thingiverse		
	Transmission	1	/	<u>Github</u>		
	MotorMountTensionerArm	1	/	<u>Github</u>		
	ZDriveTensioningRing	1	/	Github		
	80TRingGear	1	/	Github		
Filament	Petg or ABS (+)	??kg	no	Yes you can use PLA, but you shouldn't ;)		
		8		,,		

Upgrade from V-Rollers to MGN

Rotated

<u>Unrotated</u>



Version: Upgrade from V-Rollers to MGN							
Category	Component	Quantity	Neuse Irom	Notes	My Source	Alternative Source	
	300mm MGN Rail	2	no	Don't buy the cheapest.			
Fasteners	M3x20mm	4	no				
	M3x10mm	8	no				
	M3x8mm	24	no	You will need these to mount the rails. All holes: 12 per rail. You can use less, minimum 4 per rail.			
	M3 nuts	4	no				
	M3 T-nuts	24	no	You will need these to mount the rails. All holes: 12 per rail. You can use less, minimum 4 per rail.			
Printed Parts	Spacer_Right (MGN folder)	1	/	Thingiverse			
	Spacer_Left (MGN folder)	1	/	Thingiverse			
	Right (MGN folder)	1	/	Thingiverse			
	Left (MGN folder)	1	/	Thingiverse			
	DistanceBracket	2	/	Thingiverse - you will need this to align the rails. Just take a look at my video.			
Filament	Petg or ABS (+)	??kg	no	Yes you can use PLA, but you shouldn't ;)			