

OPEN 3D ENGINEERING

Build Manual

About.

The Prusa i3 is designed by Josef Prusa from Prague. "i3" stands for iteration 3, because it is the 3rd printer he published. All hardware and software that is needed to make this printer work is published under the General Public License. This means that the information belongs to the public domain, which is everybody. You may use it for free for whatever you want it, as long as the information stays accessible for everybody.

Next to the visible hardware design other people offered big contributions to make this work. To name a few:

Kliment Yanev: pronterface printer driver software and firmware

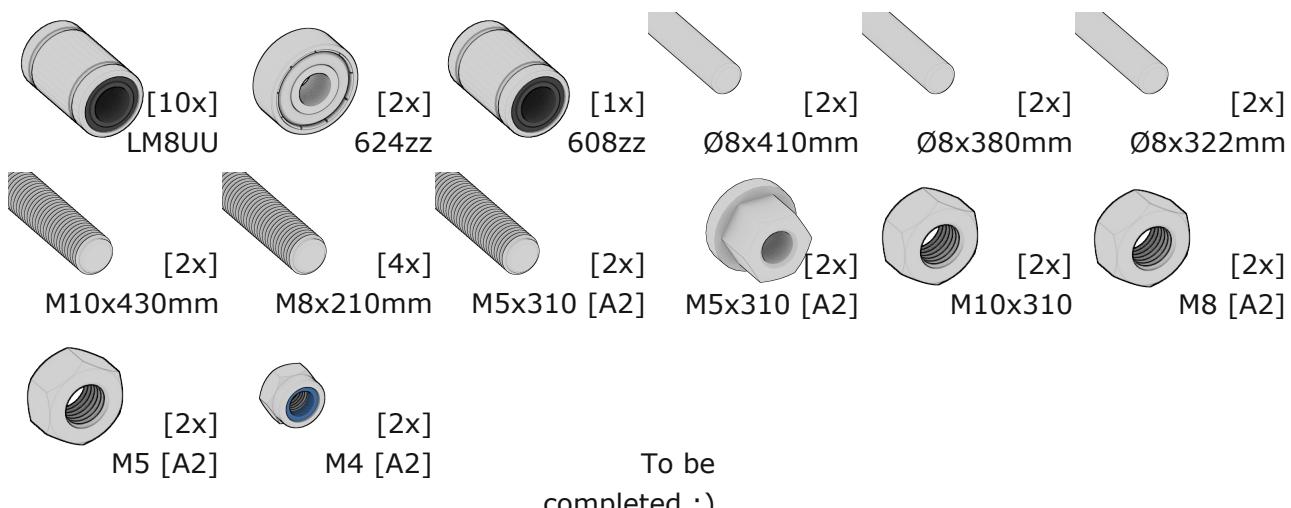
Erik van der Zalm a.o.: Marlin firmware

Alessandro Ranellucci a.o.: Slic3r slicing software.

Brian Reifsnyder: J-Head nozzle design

Arduino.cc: Arduino programmable electronics

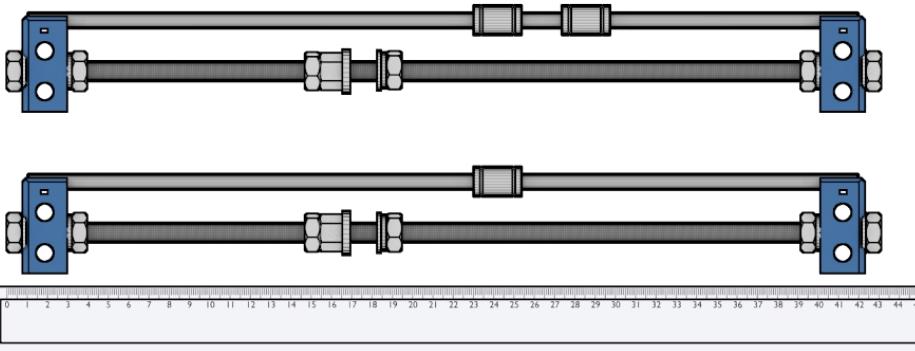
Bill of Materials



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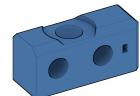


Handtight



Other parts are:
2x threaded rod M10 x 430mm
2x smooth rod Ø8mm x 410mm

Handle linear bearings with care.



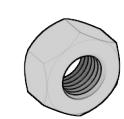
[4x]
Y-Corners



[3x]
LM8UU



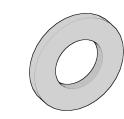
[2x]
Din 6331 M10



[12x]
Din 934 M10



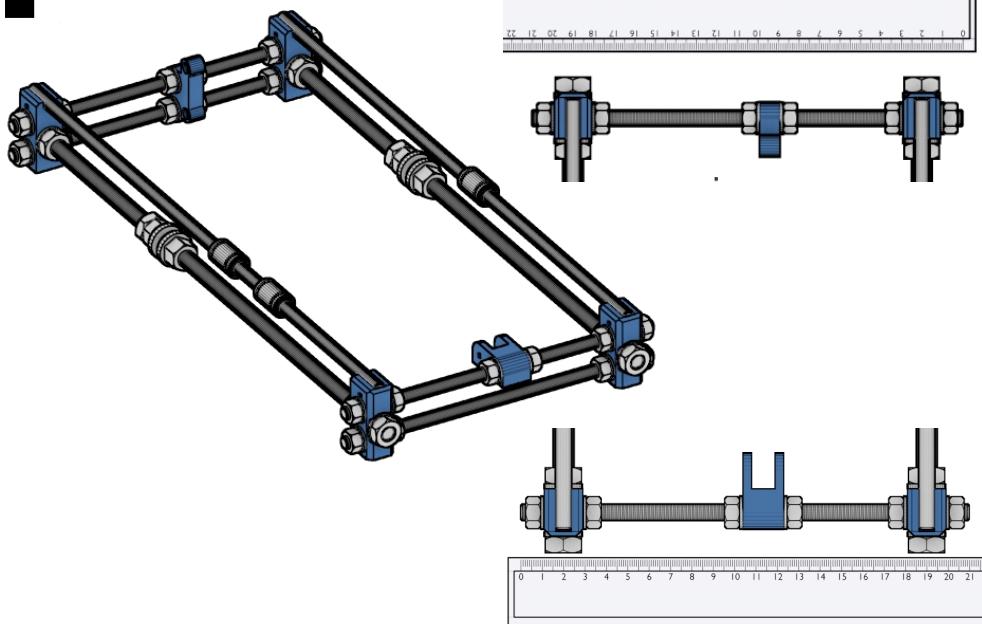
[6x]
Din 127 M10



[6x]
Din 125 M10



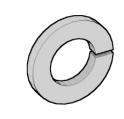
Handtight



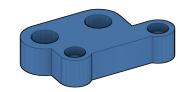
Other parts are:
4x threaded rod M8 x 210mm



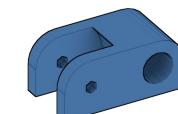
[22x]
din 934 M8



[22x]
din 127 M8

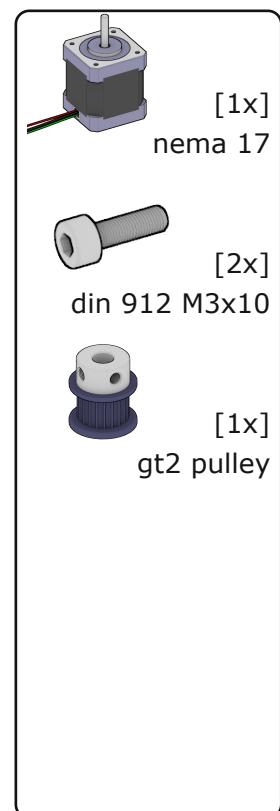
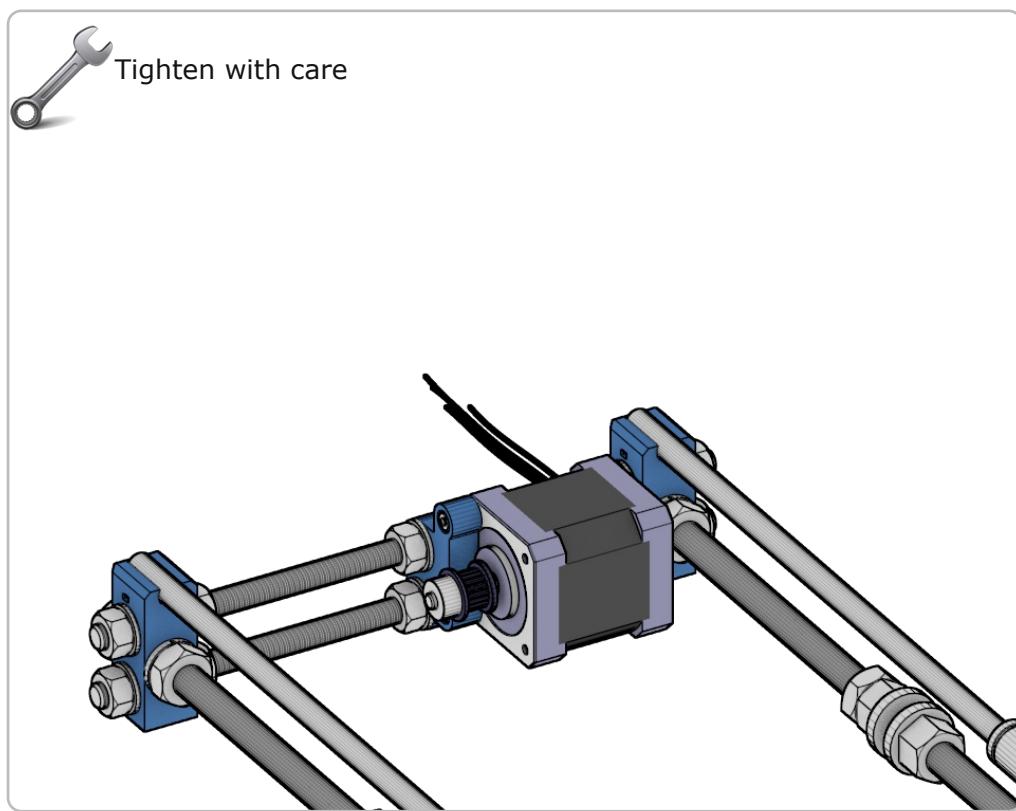
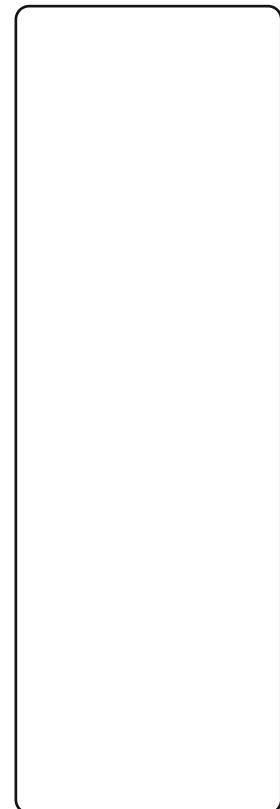
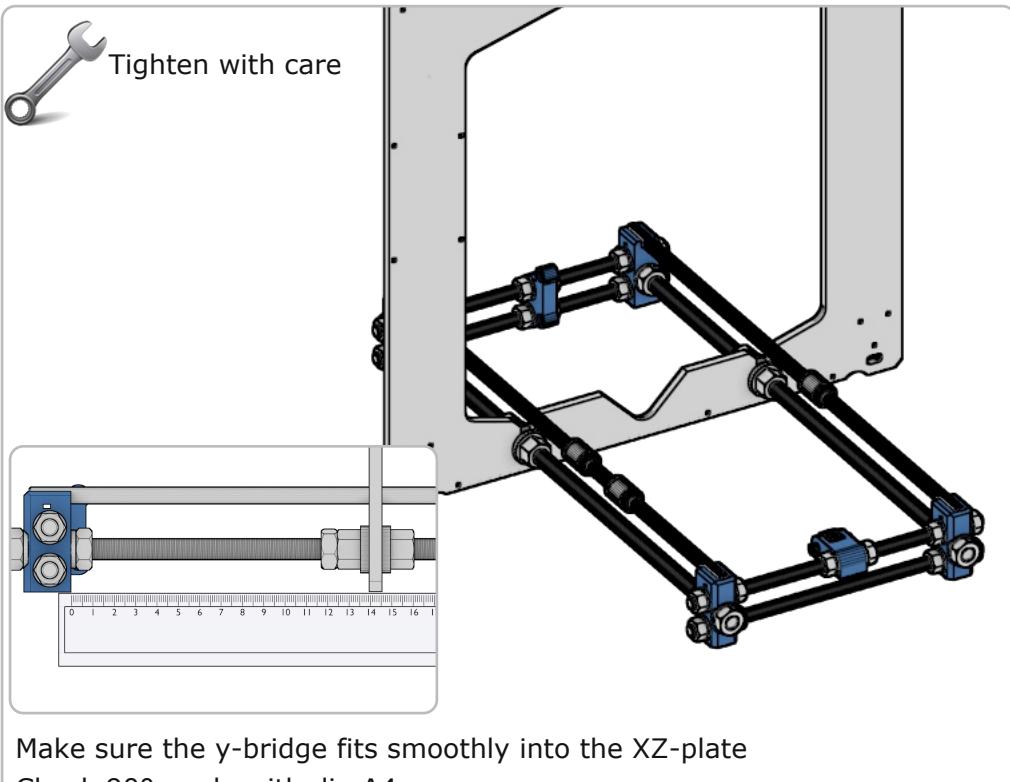


[1x]
y-motor holder

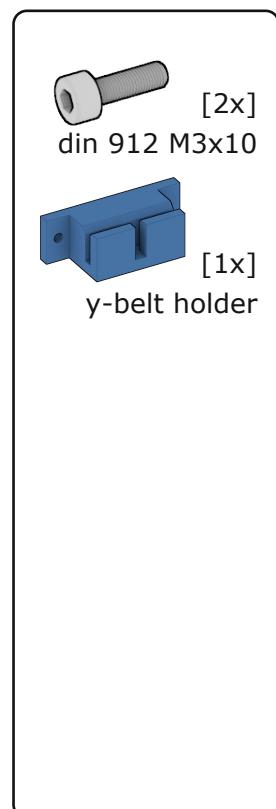
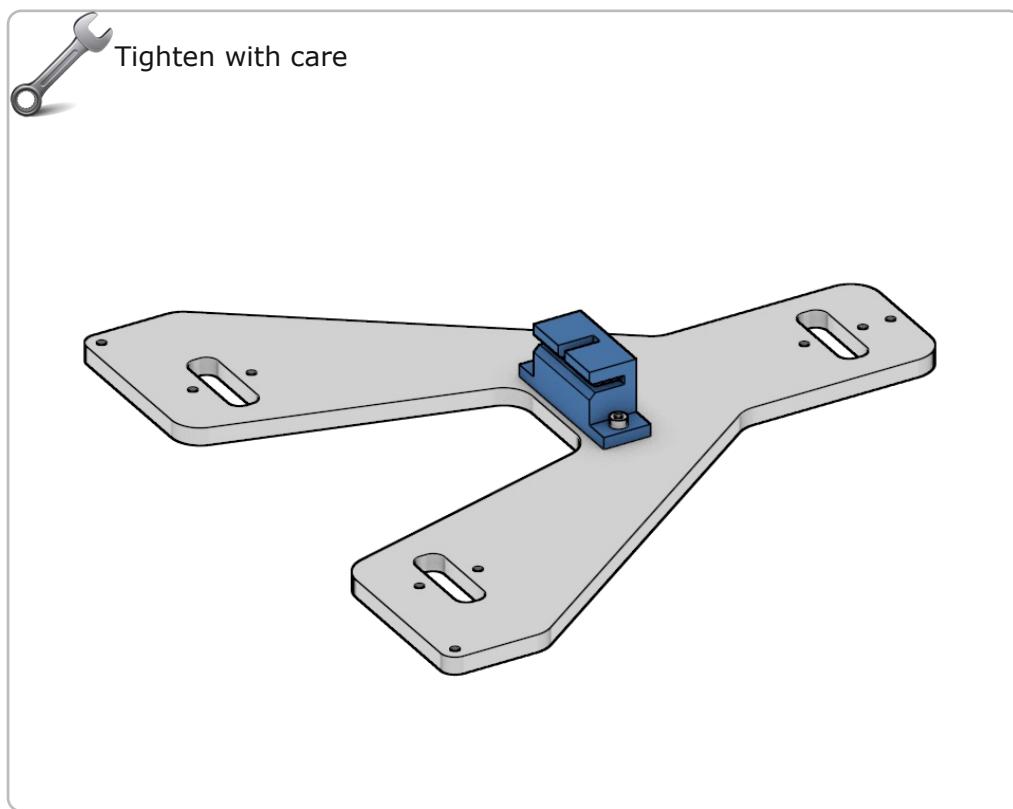
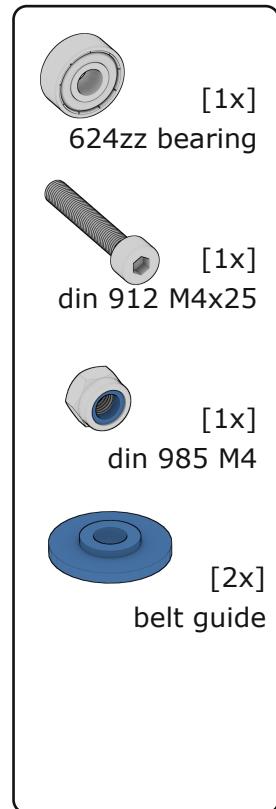
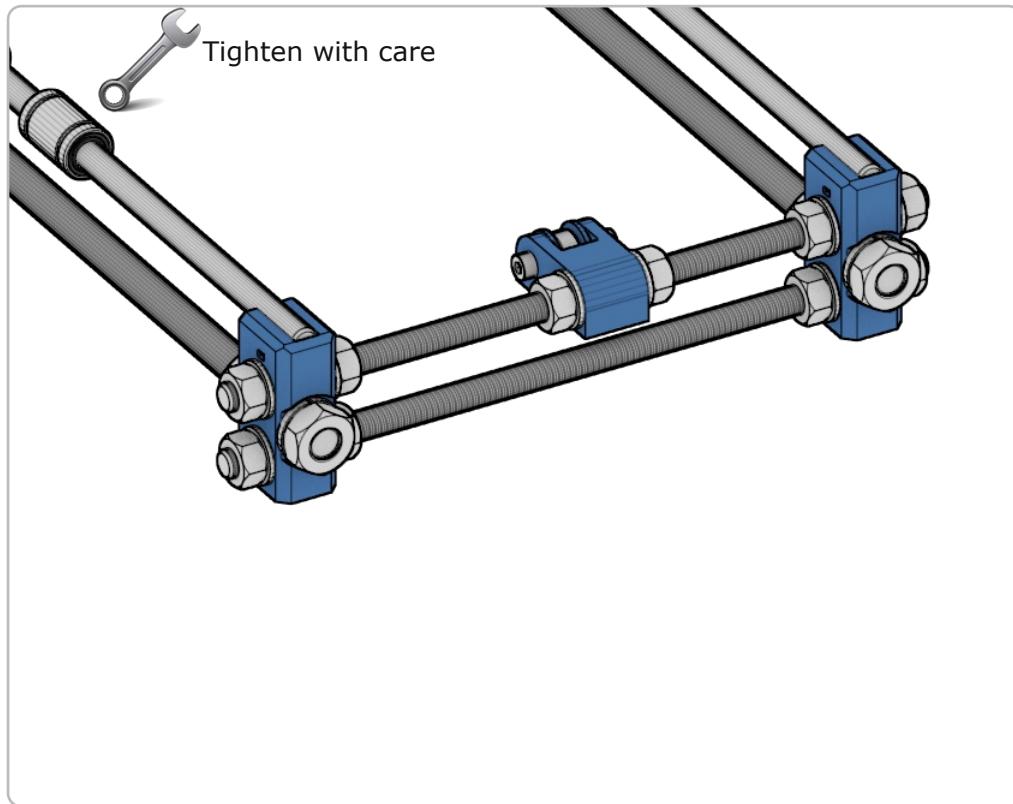


[1x]
y-idler holder

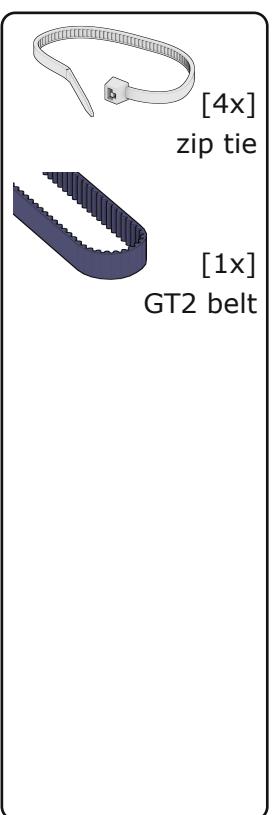
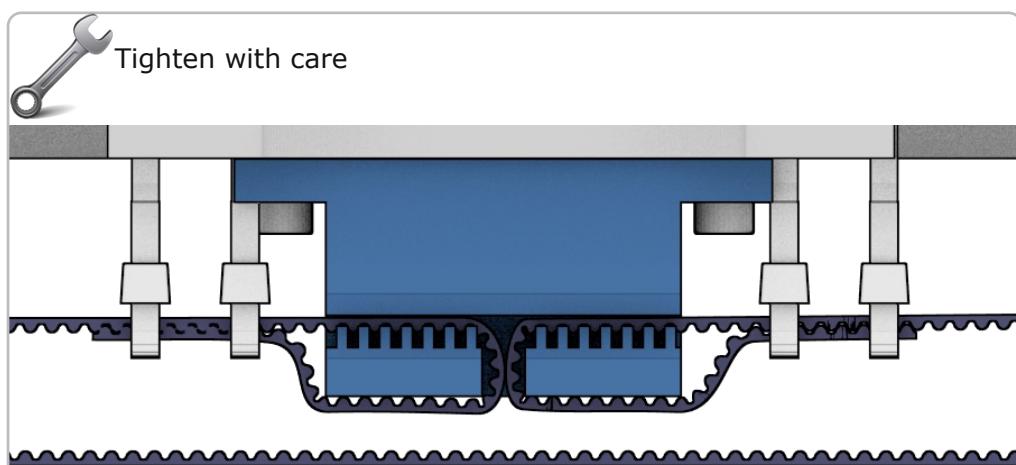
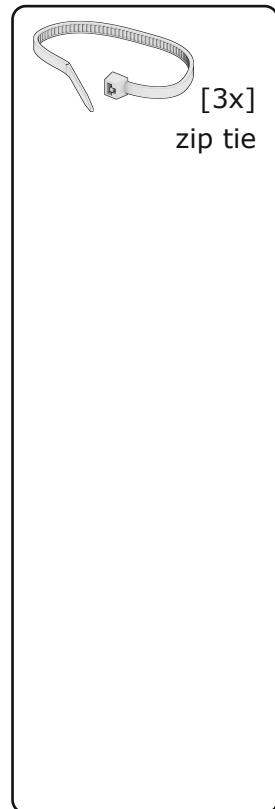
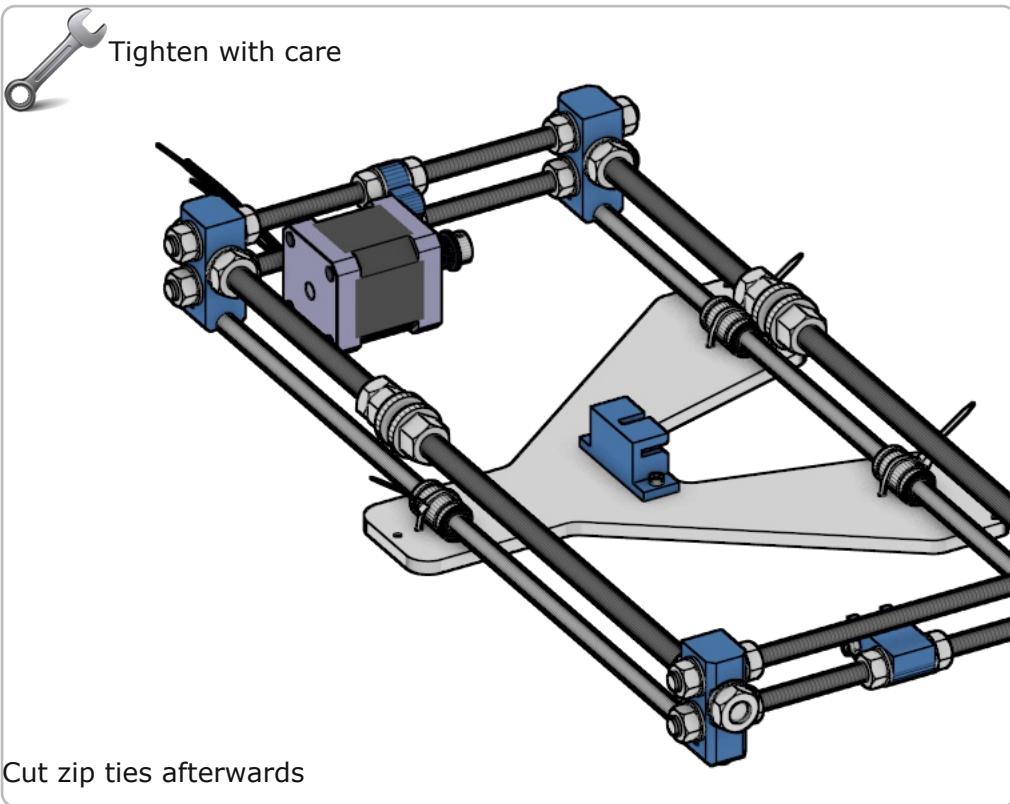
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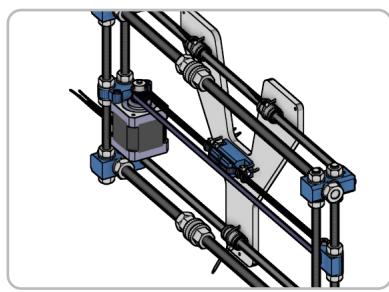
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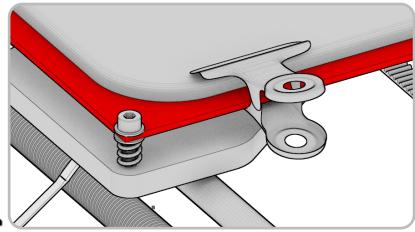
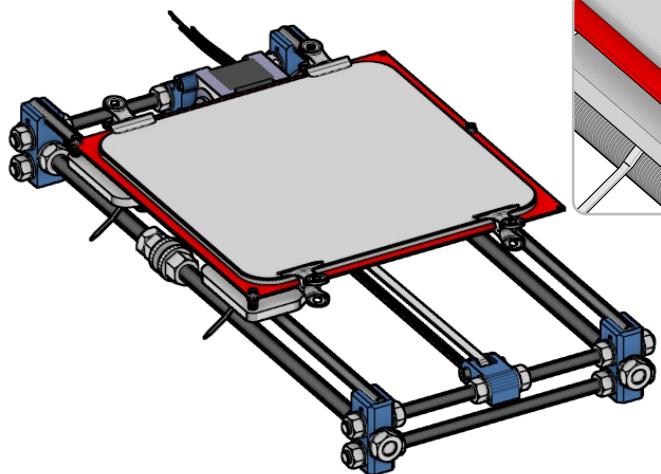
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- Push timing belt into the slots
- Adjust motor and idler so the belt makes a straight line
- Pull the belt pretty tight
- Lock the ends with zip ties and cut the tips

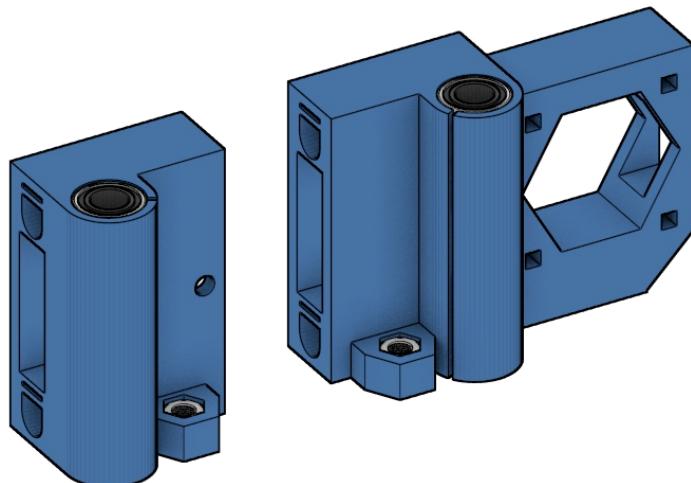


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Check for smooth movement of heatbed wire
Adjustment comes later

	[3x]	din 912 m3 x 16
	[6x]	din 125 M3
	[3x]	spring
	[4x]	mauly



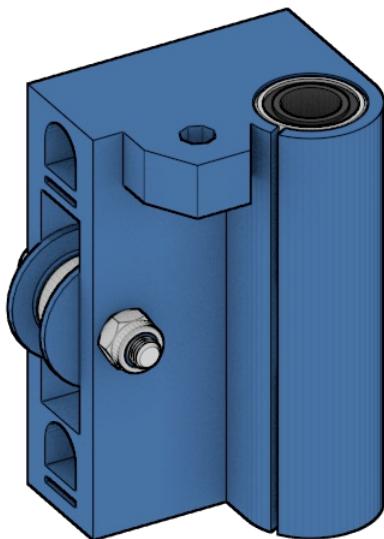
M5 nuts should be pressed in straightly
Handle linear bearings with care (balls might fall out)

	[4x]	LM8UU
	[2x]	din 934 M5 (A2)
	[1x]	x idler
	[1x]	x motor

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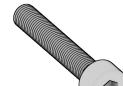
Tighten with care



Mind position of the nut



[1x]
624ZZ



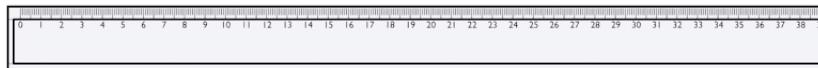
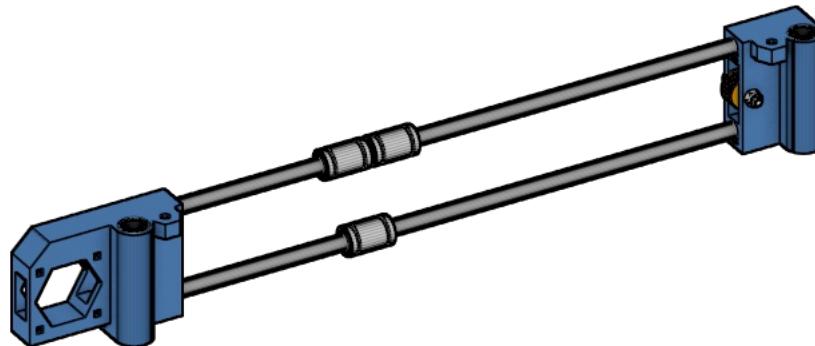
[1x]
Din 912 M4 x 25



[1x]
Din 985 M4



[2x]
Belt Guide



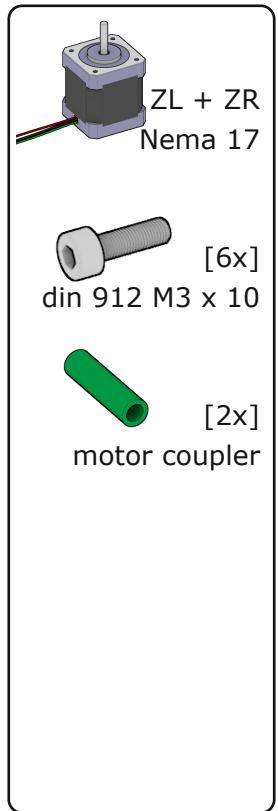
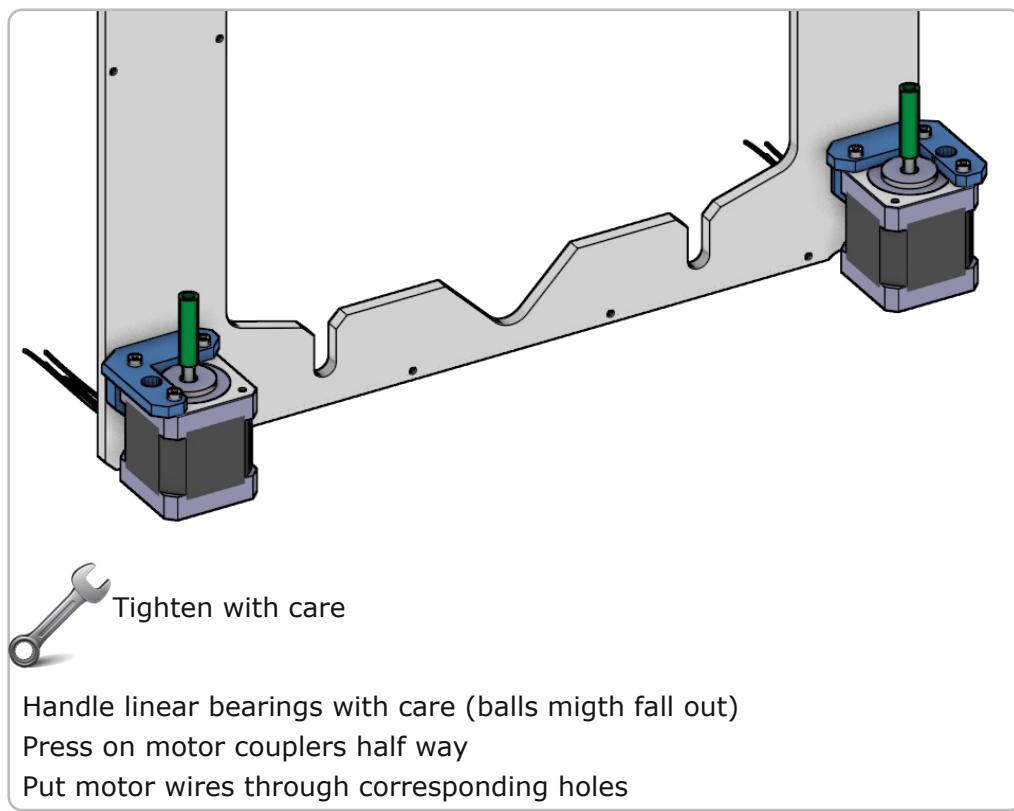
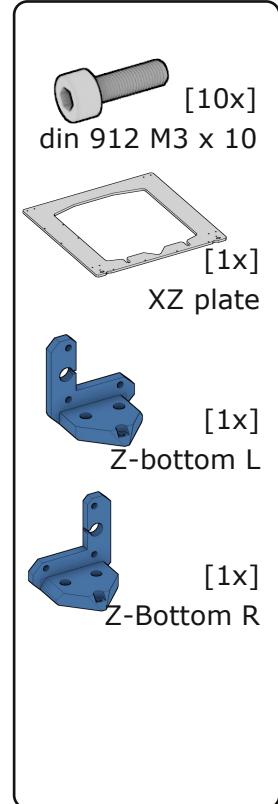
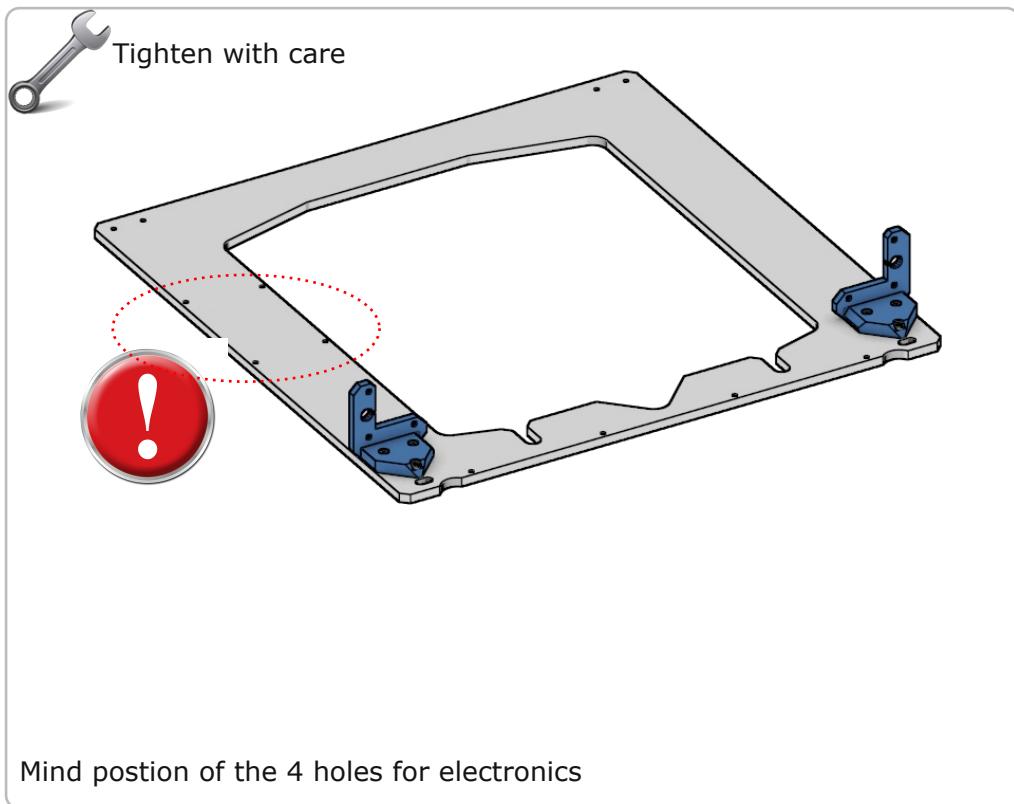
[3x]
LM8UU

Other parts: 2x linear smooth rod Ø8mm x 380mm

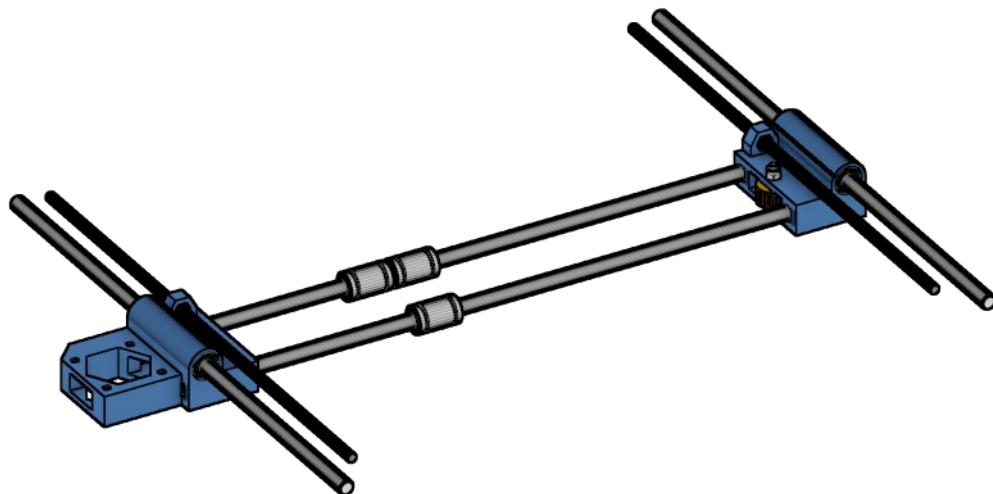
Handle linear bearings with care (balls might fall out)

Drill holes with 8mm if rods don't fit smoothly

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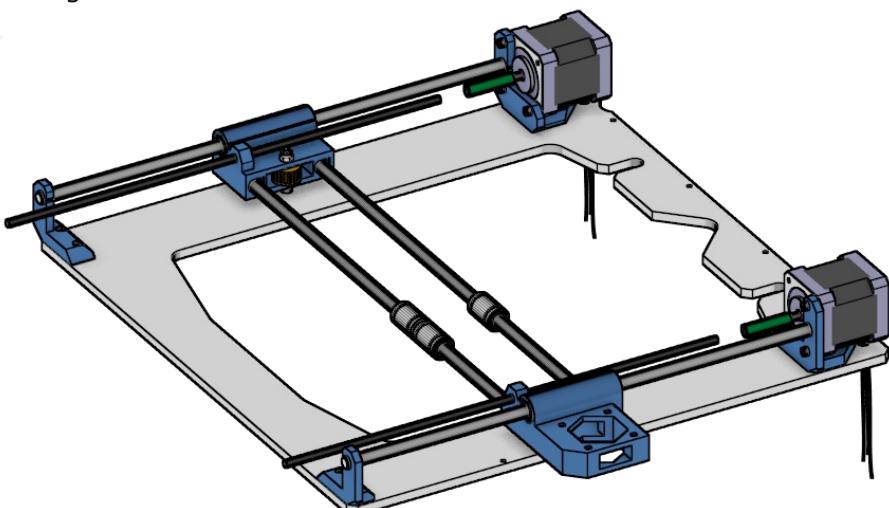
Other parts: 2x linear smooth rod Ø8mm x 322mm
2x treaded rod M5 x 295mm

Handle linear bearings with care (balls might fall out)

Be carefull not to bend the M5 rods



Tighten with care



[4x]
din 912 M3 x 10

[1x]
z-top left

[1x]
z-top right

Check smooth movement of the x-bridge

Stay carefull with the M5 rods

Turn them into the motor couplers after mounting the linear rods.

With this type of coupler you can only do this once, at remounting they loose grip.

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