

1. Introduction

A few tips for making the assembly easier.

Written By: Dozuki System



Step 1 — All the required tools are included



- (*i*) No soldering is required.
- (i) No wire crimping is required.

Step 2 — Use labels for reference



Most of the labels are scaled 1:1
and can be used to identify the part
:-)

Step 3 — Critical parts are spare back-uped



- Critical parts, like zipties, have a spare for back-up.
- No need to worry if you mess up cable management or something, you have a spare ziptie ready.

Step 4 — Labels guide

2	Y-AXIS	ho	wto.prusa3	d.cz
M/2 UPGRADE	1x GT2-16	1x Y-GT2	1x 623h	
-	2x M3x12	2x M3x10	2x M2x12	5×100
	$\langle Q \rangle$	$\langle Q \rangle$	Ø	14(+2)x 2
	14x M10n	22(+2)x M8n	1x M3nN	
	12x M10w	22x M8w	2x M3w	
	1x M3x25	Зх	LM8UU	

- You have almost the same bags as new builders have!
- You don't need to extract M3 nuts or reuse washers.
- Parts shown uncrossed are in the package.
- Parts shown as crossed are going to be used from your old printer.

Step 5 — View high resolution images



- *(i)* When you browse the guide on <u>http://manual.prusa3d.com</u>, you can view the original images in high resolution for clarity.
- Just hover your cursor over the image and click the "View Original" button.
- You can start by disassembling your printer in the next chapter - <u>1. Printer</u> <u>disassembly</u>



2. Printer disassembly

Written By: Josef Prusa



Step 1 — Disassembling Electronics



- Using the supplied tools, open up the RAMBo cover and disconnect all the electronics.
- The only things you'll need for future assembly are the RAMBo electronics, spiral wrap and screws.
- *i* If you damage a 3D printed part, it's ok, you won't need it anymore.
- If you have troubles with disassembling, you can simply follow <u>8. Electronics</u> from Assembly Instructions for Original Prusa i3 MK1 backwards.



Step 2 — Disassembling PSU and Heatbed

- Using the supplied tools, disassemble the Heatbed and PSU.
- The only things you'll need for future assembly are the PSU and screws.
- If you have troubles with disassembling, you can simply follow <u>7. PSU and Heatbed</u> from Assembly Instructions for Original Prusa i3 MK1 backwards.
- Do NOT disassemble the PSU cover !!

Step 3 — Disassembling LCD



- Using the supplied tools, disconnect the LCD cables and disassemble the LCD cover.
- The only things you'll need for future assembly are the LCD panel and LCD cables.
- Be EXTREMELY careful while cutting zipties holding the cables. DO NOT damage the cables.
- If you have troubles with disassembling, you can simply follow <u>6. LCD</u> from Assembly Instructions for Original Prusa i3 MK1 backwards.

Step 4 — Disassembling Extruder



- Using the supplied tools, disassemble the Extruder.
- The only things you'll need for future assembly are the 5015 print fan, spiral wrap, M5w washers, 625 bearing, printed shaft for bearing, springs and screws.
- (i) There is no need for taking out the M3 nuts from traps, you'll get new ones.
- If you have troubles with disassembling, you can simply follow <u>5. Extruder</u> from Assembly Instructions for Original Prusa i3 MK1 backwards.

Step 5 — Disassembling Z axis



- Using the supplied tools, disassemble the Z axis.
- The only things you'll need for future assembly are the smooth rods and screws.
- If you have troubles with disassembling, you can simply follow <u>4. Z axis</u> from Assembly Instructions for Original Prusa i3 MK1 backwards.

Step 6 — Disassembling X axis



- Using the supplied tools, disassemble the X axis.
- The only things you'll need for future assembly are the smooth rods, linear bearings, 623h bearing with housing, spiral wrap and screws.
- There is no need for taking out the M3 nuts from traps, you'll get new ones.
- If you have troubles with disassembling, you can simply follow <u>3. X axis</u> from Assembly Instructions for Original Prusa i3 MK1 backwards.
- While extracting linear bearings, you may damage the X-ends parts, don't worry, you won't need them.
- For extracting linear bearings from parts, you can insert flathead screwdriver between them and slide them out as shown in the second picture.

Step 7 — Disassembling Y axis



- Using the supplied tools, disassemble the Y axis.
- The only things you'll need for future assembly are the smooth rods, linear bearings, threaded rods, Y-idler assembly (shown in the second picture), Y-carriage and screws.
- If you have troubles with disassembling, you can simply follow <u>2. Y axis</u> from Assembly Instructions for Original Prusa i3 MK1 backwards while skipping Step 6.

Step 8 — All good!



- Now you should have several types of screws in a bowl, smooth and threaded rods, spiral wraps and the frame, plus other things like motors.
- Now you are ready to prepare Ycarriage and then you can start assembling the new printer.
- Continue with the next chapter <u>1. Y-</u> <u>carriage drilling</u>.



3. Y-carriage drilling

Written By: Josef Prusa



Step 1 — Assembling P-drill



Step 2



• Insert M3nS square nuts into the nut traps in the P-drill printed part.

Step 3



• Insert the 3.1 mm drill bit all the way into the P-drill printed part.

Step 4



- Insert M3x12 screws into the P-drill printed part.
- Tighten the screws as much as possible.

Step 5



• Highlighted holes are going to be drilled in next steps.

Step 6 — Drilling Y-carriage



- Using the assembled P-drill, drill out the holes highlighted in the picture.
- Rotate with the P-drill assembly clockwise as shown in the picture.
- Apply force in direction through the Y-carriage.
- (i) It's similar to opening a wine bottle, but don't apply that much force or the drill bit will get stuck. If it gets stuck, just rotate the opposite direction and repeat with smaller force.
- F If the drill bit is slipping in the printed part, just tighten the M3x12 screws a little more.

Step 7 — Identifying Y-carriage orientation



- Place the Y-identifier on the Ycarriage as shown in the picture (pin on the top, hanged on y-carriage, pushed as down as possible).
- Make sure that you have the side with two bearing holes on the left hand side.

Step 8 — Y-carriage identifying



- Make sure that holes in the middle of the Y-carriage are perfectly aligned with the Y-identifier as shown in the second picture.
- If they are not, turn the Y-carriage upside down and it should be aligned.
- Keep in mind that you still need to have the side with two bearings on the same side as in the previous step. IT'S MANDATORY!

Step 9 — Y-carriage marking



- DOUBLE CHECK that you have aligned holes in the Y-carriage with the Y-identifier and two bearing holes on the left hand side.
- Make a mark on the top left corner (with a permanent marker or with the drill bit).

Step 10 — [OPTIONAL] PSU reinforcement part 1



- (i) If you want to have as close experience as MK2 builders have, you can glue PSU-reinfocement part to you power supply.
 - PSU-reinforcement
 - Power supply
 - Apply superglue (or alternative) here.

Step 11 — [OPTIONAL] PSU reinforcement part 2



• Press the PSU-reinforcement with glue on your power supply and wait until the glue dries.



Step 12 — Let's assemble!

- Great, you're ready to assemble the new MK2 printer.
- You can continue by <u>Assembly</u> <u>Instructions</u> for Original Prusa i3 MK2S.
- Happy assembling!