Bear Lab

07. Heated bed

Written By: Grégoire Saunier

Step 1 — Heated bed type
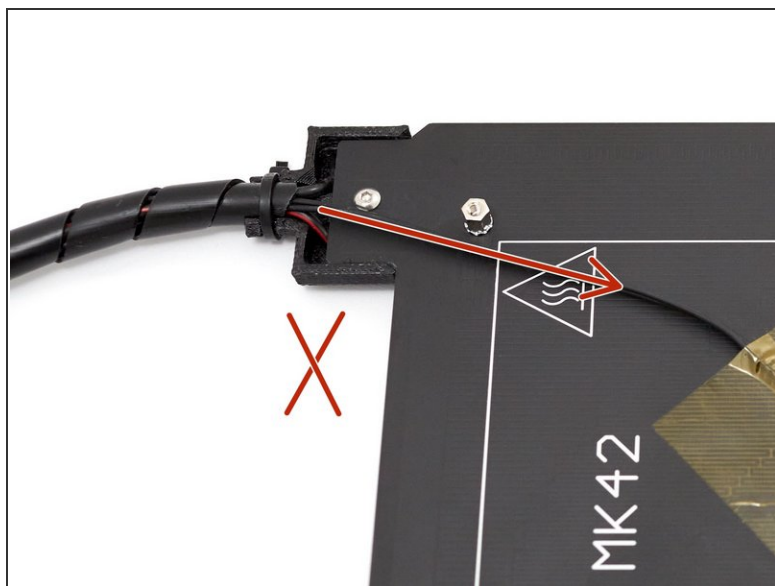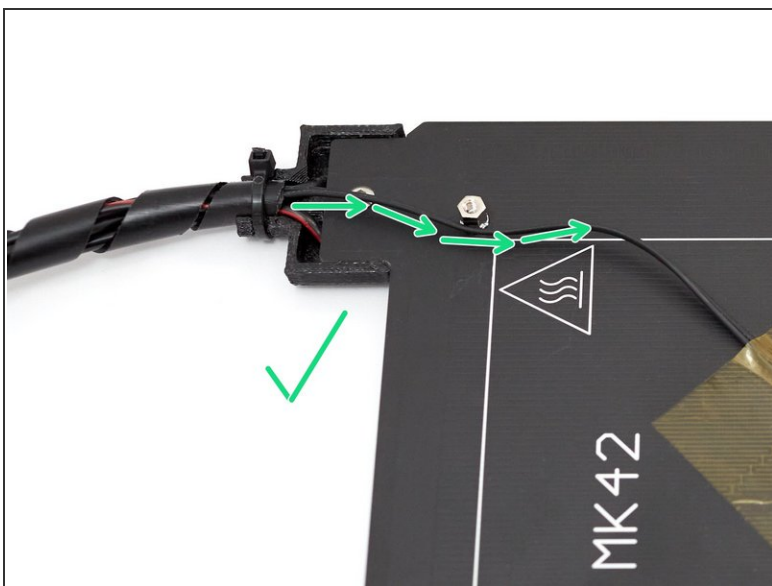

ⓘ This chapter contains the assembly guide for the 3 heated bed of Prusa MK2(S), MK2.5(S) and MK3(S).

● Go to the step corresponding to your Prusa heated bed type:

   ● **Prusa MK2(S):** continue to the next step.

   ● **Prusa MK2.5(S):** go to step 8.

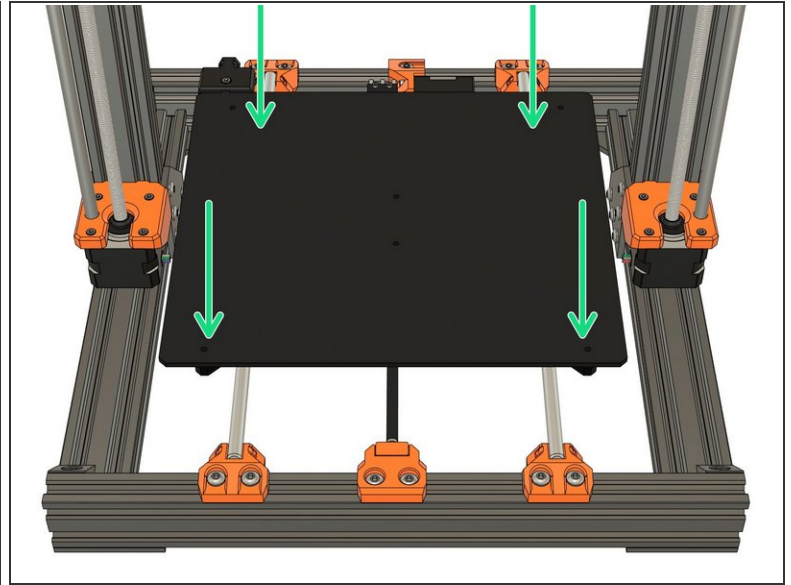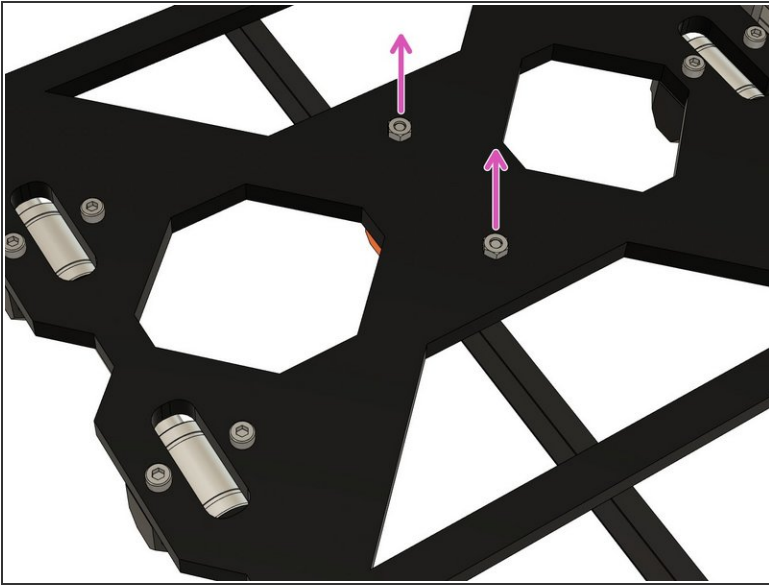   ● **Prusa MK3(S):** go to step 14.

Step 2 — Heat bed cable check - MK2(S)

● On your heated bed, verify that the thermistor cable is **not** stretched, it should make a small curve.
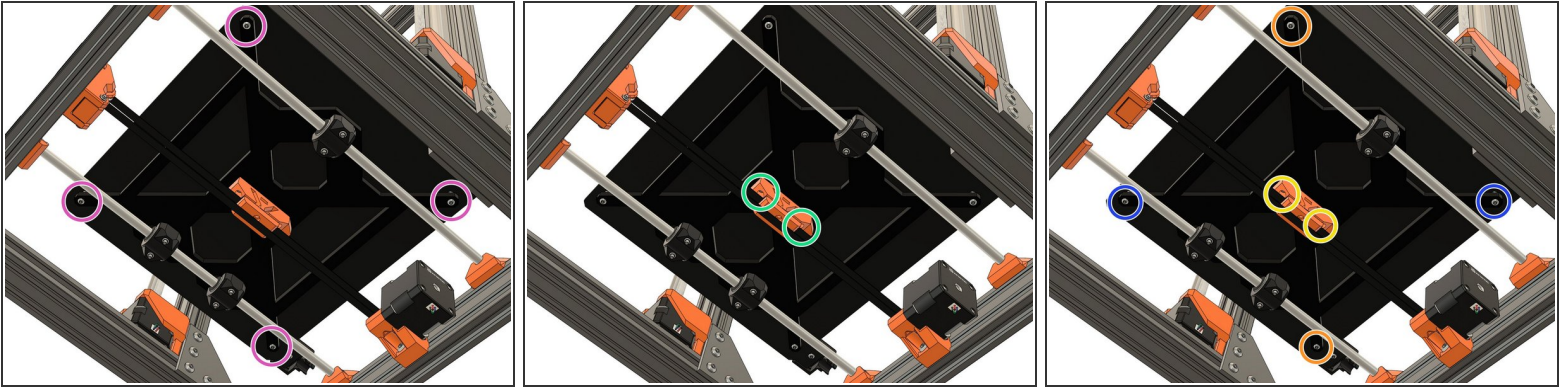
⚠ If the cable is stretched it might move the thermistor from its position or damage the wires during printing.

Step 3 — Heated bed assembly - MK2(S)

- Remove the two temporary hex nuts from the Y carriage and **save them for later use**. Keep the M3x12 screws of the *y_belt_holder* in place.

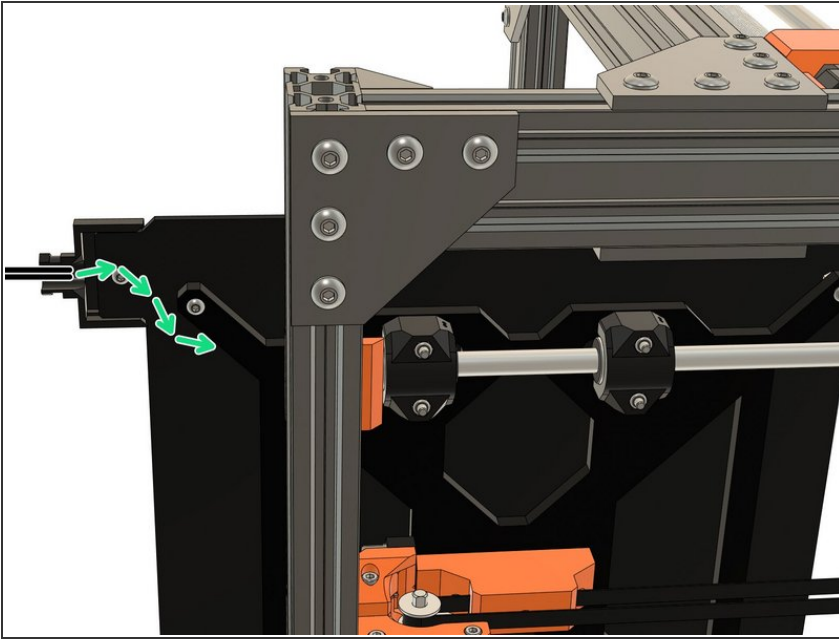- Place the heated bed on the Y carriage.

Step 4 — Heated bed assembly - MK2(S)

⚠️ Be careful with the extruder during this step, it will slide when you rotate the printer to access screws under the heated bed.
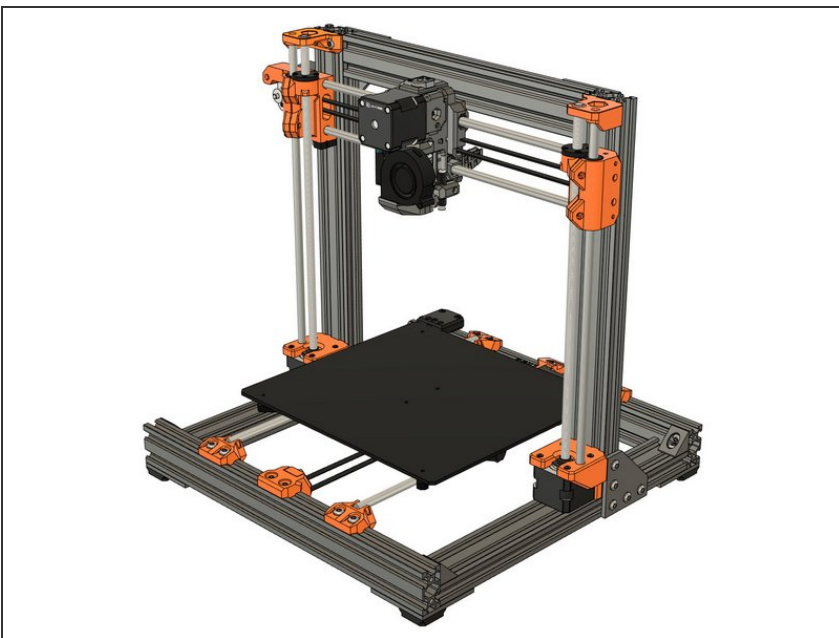
- Take 4x M3x8 button head screws (reused from your Original Prusa) and secure the heated bed in the corners. Do not fully tighten the screws yet.

- Using the 2x M3x12 screws, secure the *y_belt_holder* to the bed. Do not fully tighten the screws yet.

- Fully tighten all the screws **evenly, incrementally and in turn**, in this precise orders (do not use excessive force or you might break the spacers):

  - 1st the screws of *y_belt_holder*.

  - 2nd one of the corner in diagonal.

  - 3rd the other corner in diagonal.

  - Repeat until all screws are fully tightened.

Step 5 — Heat bed cable check - MK2(S)

- Verify again, that the thermistor cable is **not** stretched (it should make a small curve) and does not sag down too much as it could be damaged with bed movements.

Step 6 — Next chapter

- Congratulations you have finished this chapter :)

- Go to the next chapter: 08. LCD screen and PSU.

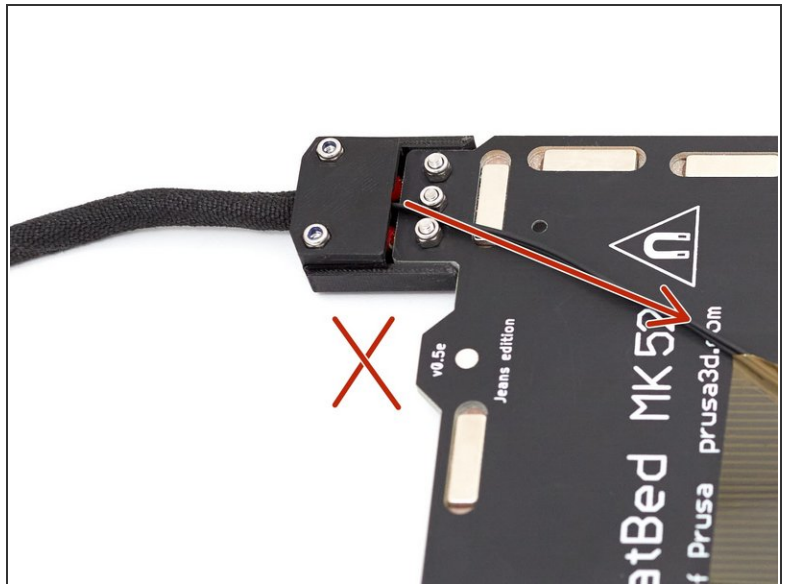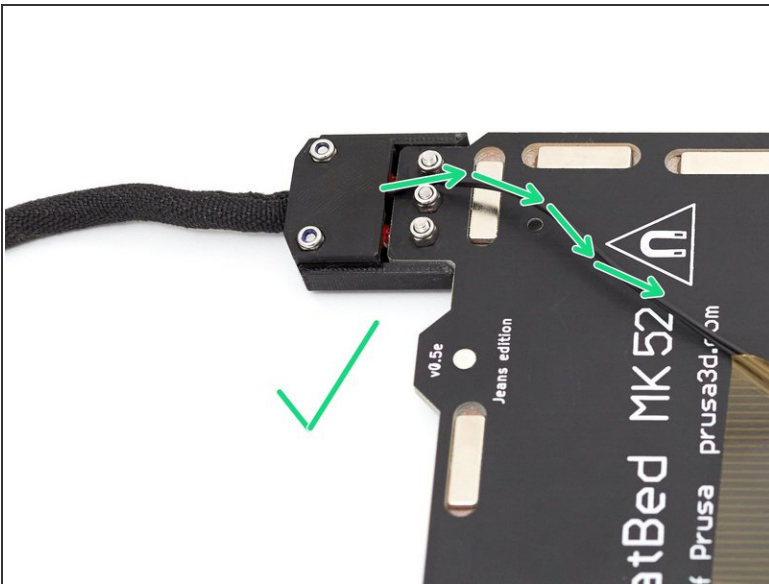This document was generated on 2021-12-21 03:40:32 AM (MST).

Step 7

ⓘ The next steps are for **MK2.5(S) heated bed only**.

● Go to the step corresponding to your Prusa heated bed type:

  ● **Prusa MK2(S):** go to step 2.

  ● **Prusa MK2.5(S):** continue to the next step.
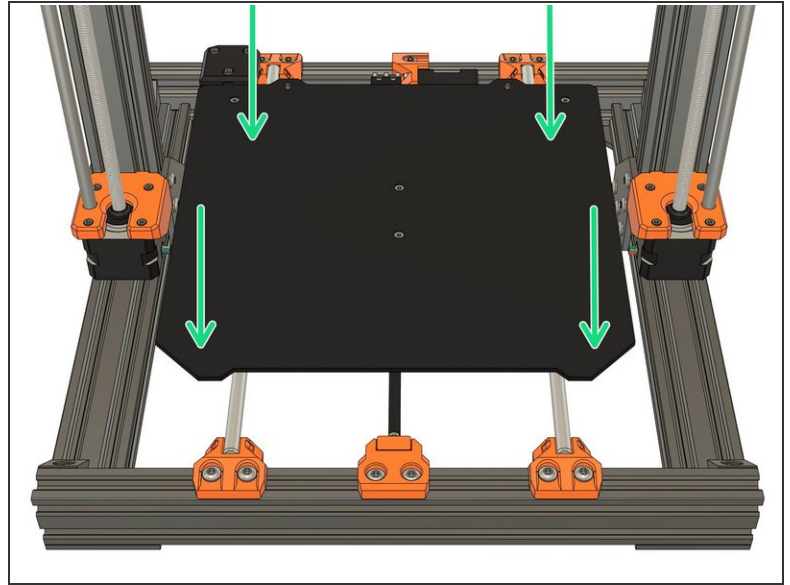
  ● **Prusa MK3(S):** go to step 14.

Step 8 — Heat bed cable check - MK2.5(S)

● On your heated bed, verify that the thermistor cable is **not** stretched, it should make a small curve.

⚠ If the cable is stretched it might move the thermistor from its position or damage the wires during printing.

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Step 9 — Heated bed assembly - MK2.5(S)

- Remove the two temporary hex nuts from the Y carriage. Keep the M3x12 screws of the *y_belt_holder* in place.

- Place the heated bed on the Y carriage.

Step 10 — Heated bed assembly - MK2.5(S)

⚠ Be careful with the extruder during this step, it will slide when you rotate the printer to access screws under the heated bed.

- Take 4x M3x8 button head screws (reused from your Original Prusa) and secure the heated bed in the corners. Do not fully tighten the screws yet.

- Using the 2x M3x12 screws, secure the *y_belt_holder* to the bed. Do not fully tighten the screws yet.

- Fully tighten all the screws **evenly, incrementally and in turn**, in this precise orders (do not use excessive force or you might break the spacers):

  - 1st the screws of *y_belt_holder*.

  - 2nd one of the corner in diagonal.

  - 3rd the other corner in diagonal.

  - Repeat until all screws are fully tightened.

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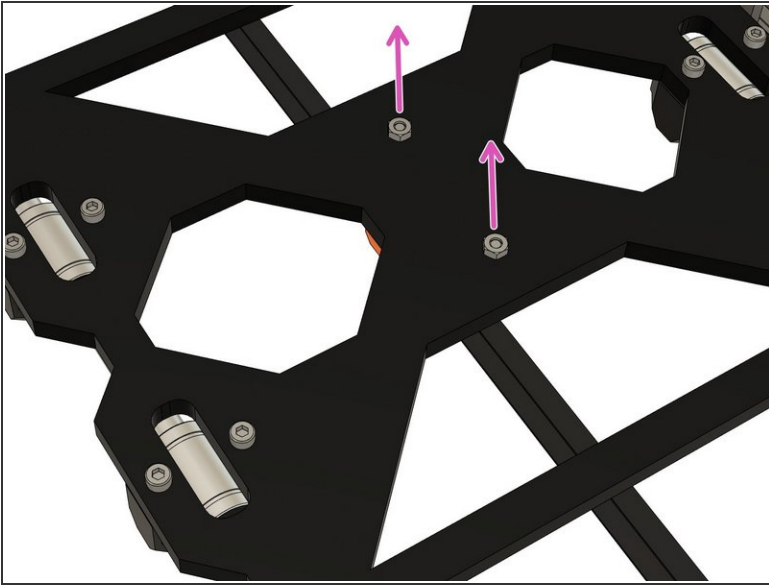© 2021   guides.bear-lab.com/   Page 8 of 14

Step 11 — Heat bed cable check - MK2.5(S)

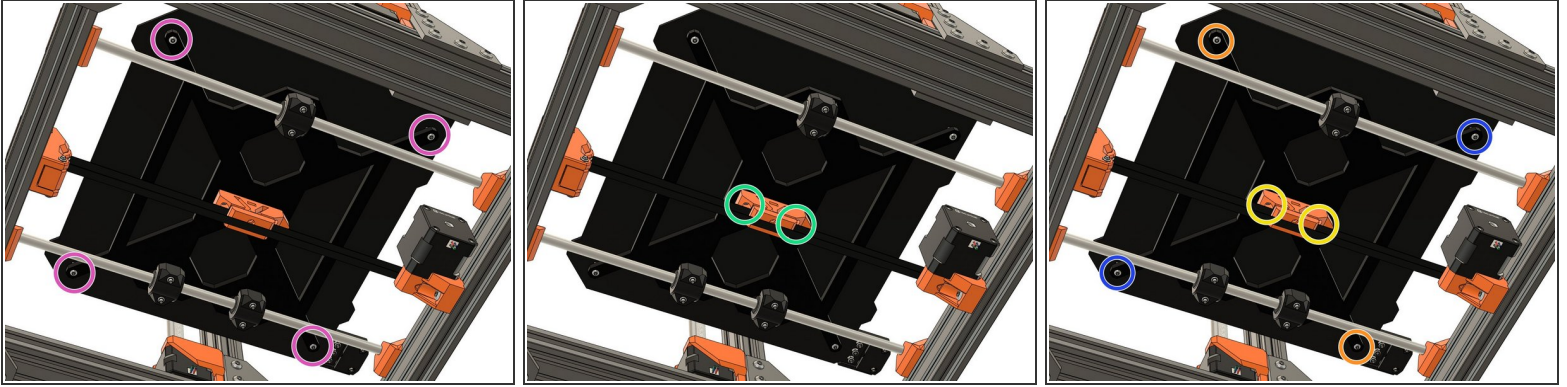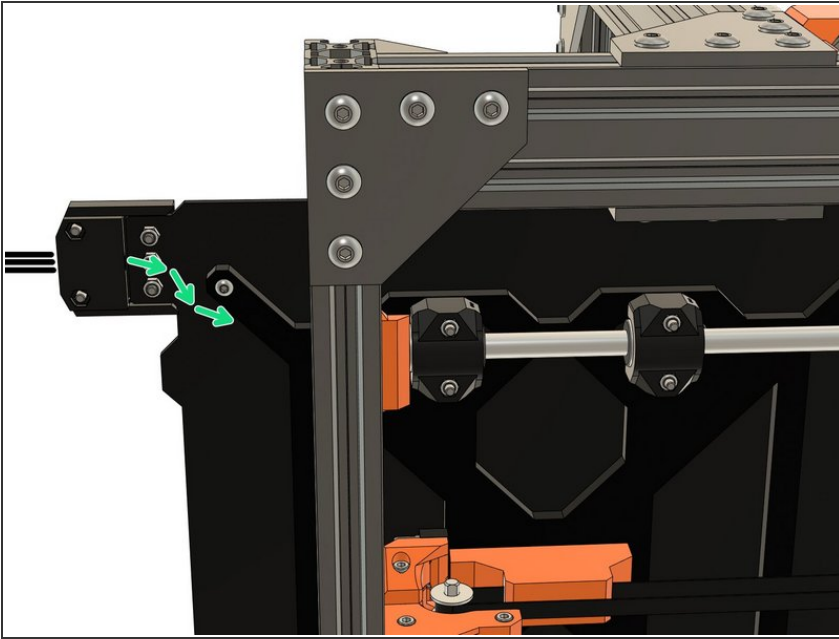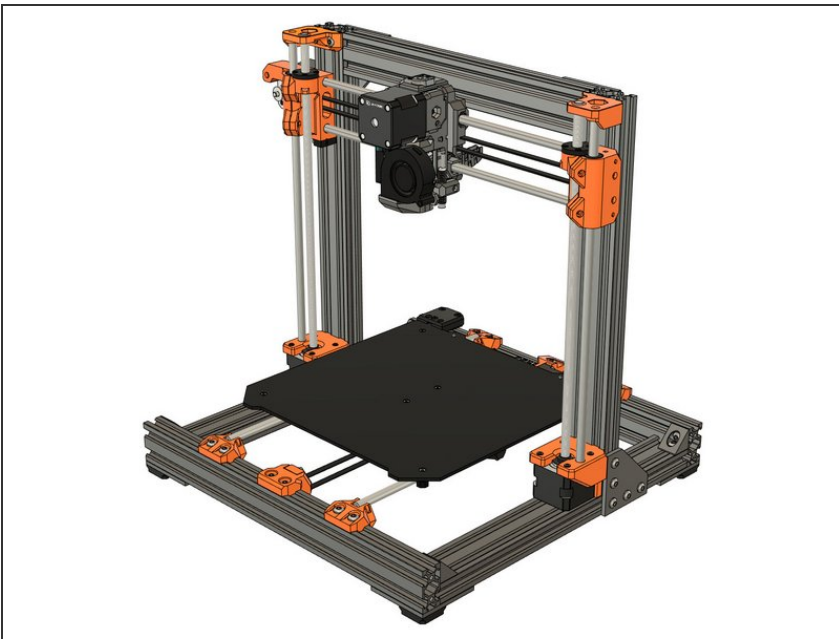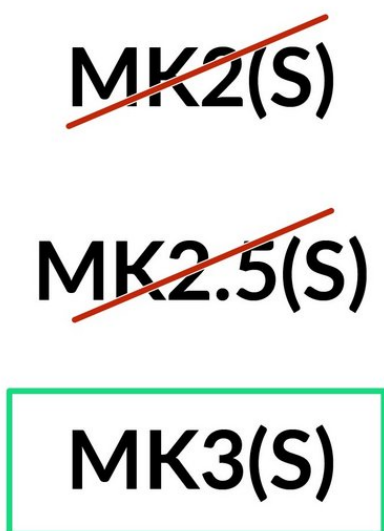- Verify again, that the thermistor cable is **not** stretched (it should make a small curve) and does not sag down too much as it could be damaged with bed movements.

Step 12 — Next chapter

- Congratulations you have finished this chapter :)

- Go to the next chapter: 08. LCD screen and PSU.

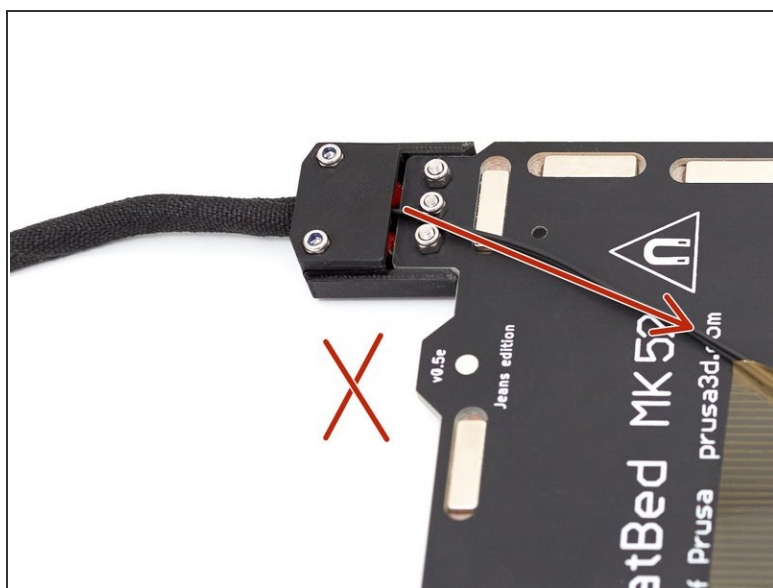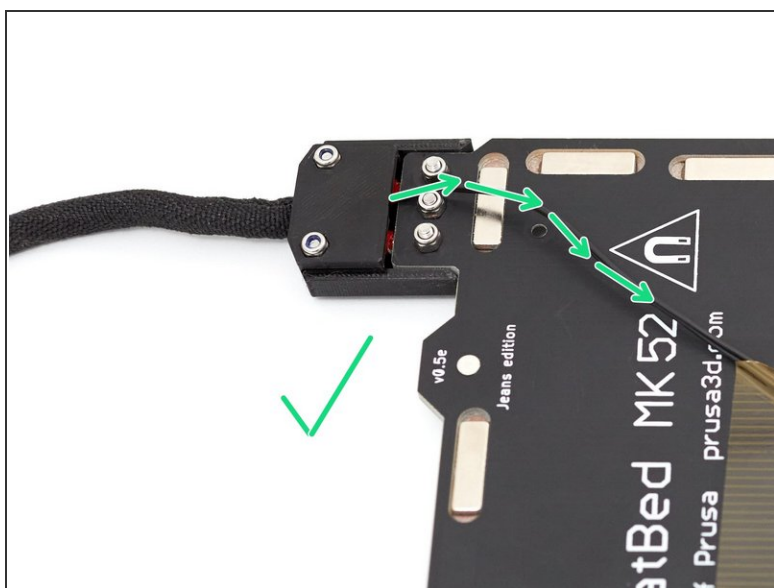This document was generated on 2021-12-21 03:40:32 AM (MST).

Step 13 — Heated bed type

ⓘ The next steps are for **MK3(S) heated bed only**.

● Go to the step corresponding to your Prusa heated bed type:

  ● **Prusa MK2(S):** go to step 2.

  ● **Prusa MK2.5(S):** go to step 8.

  ● **Prusa MK3(S):** continue to the next step.
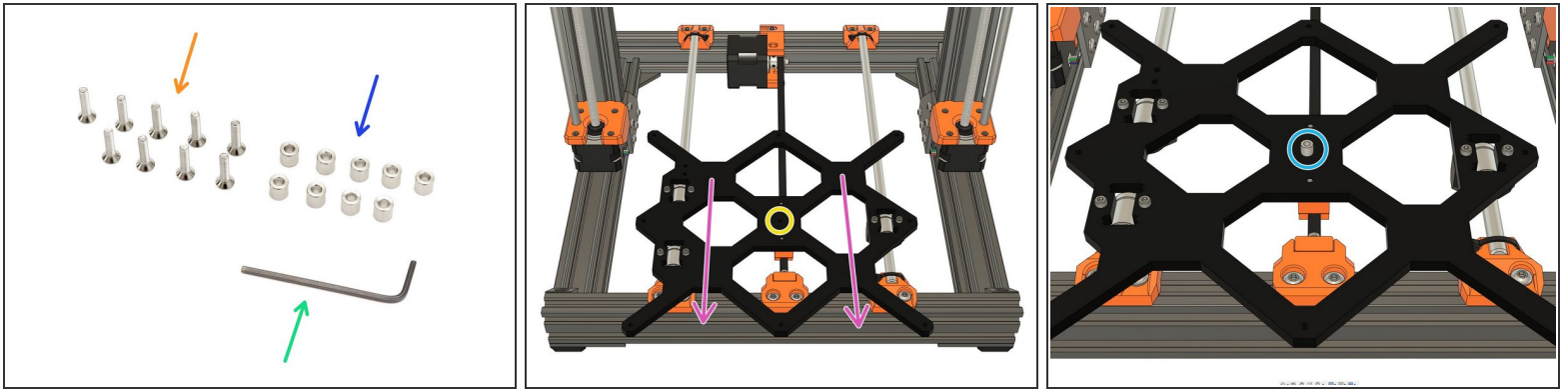
Step 14 — Heat bed cable check - MK3(S)

● On your heated bed, verify that the thermistor cable is **not** stretched, it should make a small curve.

⚠ If the cable is stretched it might move the thermistor from its position or damage the wires during printing.

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Step 15 — Prepare heated bed assembly - MK3(S)

- Prepare the following hardware:
  - 9x M3x12 or M3x14 flat head screws (reused from your Original Prusa).
  - 9x spacers 5.5x6x3 (reused from your Original Prusa).
  - 1x 2mm Allen key.
- Move the Y carriage to the front.
- Locate the center hole of the Y carriage.
- Place 1x spacer on the hole of the Y carriage.

Step 16 — Heated bed assembly - MK3(S)
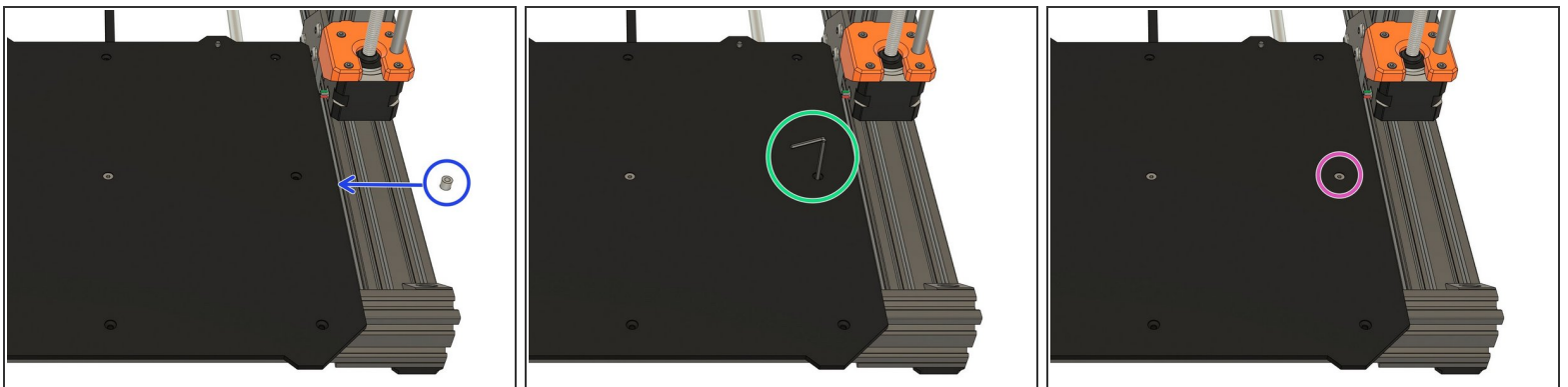

- Take your heated bed and insert the hex key in the central hole.

- Place the heated bed with the hex key on the Y carriage. Align the bed with the spacer and the central hole of the Y carriage using the hex key.

- Add one of the M3 flat head screws and secure the bed in the centre. Do not fully tighten the screw yet.

Step 17 — Heated bed assembly - MK3(S)

- From the right of the bed (or left if you are left-handed), insert a second spacer between the Y carriage and the heated bed. Use needle nosed pliers to make the insertion easier.

- Use the 2mm hex key to align the spacer.

- Secure the bed and spacer using one of the M3 flat head screws. Do not tighten fully yet.

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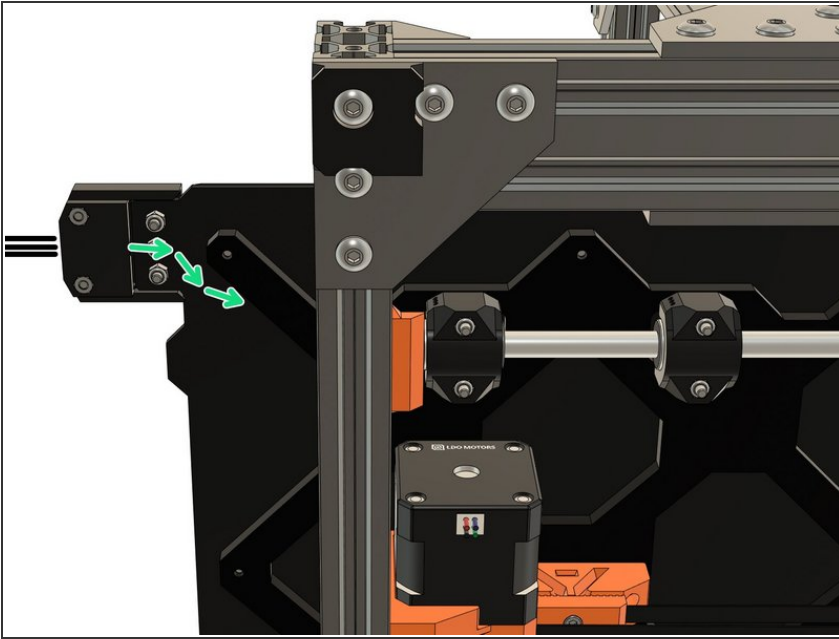
Step 18 — Heated bed assembly - MK3(S)

- Continue with the 7 other points of the heated bed.

  ⚠ Make sure no screw is fully tightened or you may warp the heated bed.
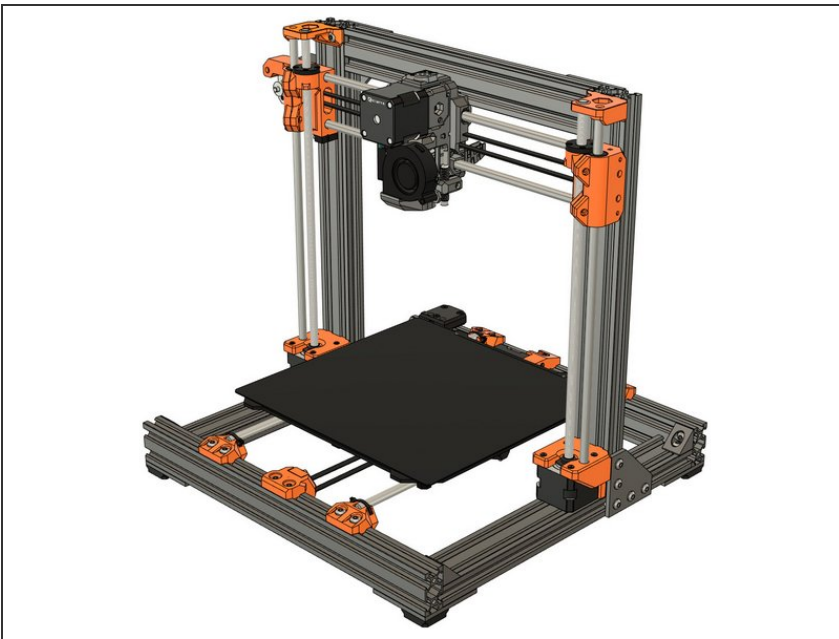
- Fully tighten the M3 flat head screws **evenly and incrementally** in this precise order:

  - 1st center screw.

  - 2nd corner screws.

  - 3rd side screws.

  - Repeat until all screws are fully tightened.

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Step 19 — Heat bed cable check - MK3(S)

- Verify again that the thermistor cable is **not** stretched (it should make a small curve) and does not sag down too much as it could be damaged with bed movements.

Step 20 — Next chapter

- Congratulations you have finished this chapter :)

- **Go to the next chapter: 08. LCD screen and PSU.**

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