Step 1 – Determine Design and Size

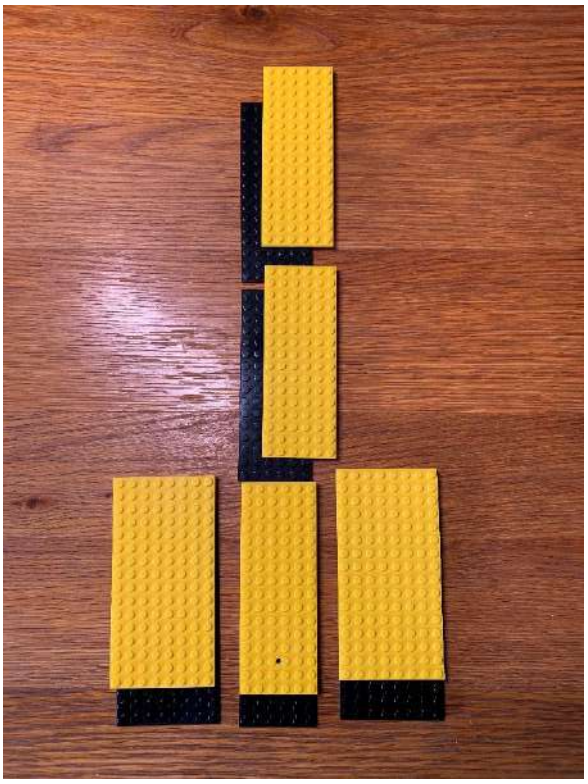
Determine the color/design and size of your violin.

In general, three types of plates in two colors (primary and secondary color) are included, therefore you need to determine the color/design of your violin first.

Put the plates as seen in example below so you get an idea of the end result. Black and yellow combination is used as example, your package may be in other color combination. The options are as follows but not limited to,

Pure black

Pure yellow

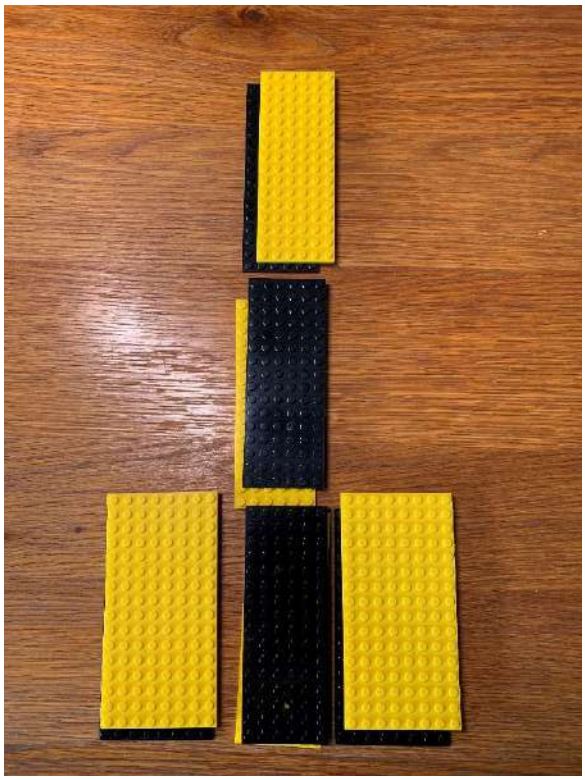


As an addon, you may find Fire or Thunder or other sidebox parts included in you package, please follow this instruction manual for the first half and skip to page 70.

Step 1 – Violin Design

Determin the colour/design and size of your violin

Yellow as primary colour



There may be other colour combinations, you can even use your own lego pieces as long as it is the same spec as the corresponding one in this document.

Step 1 – Violin Size

With the same set of build blocks and parts, you can build different sizes of violin, namely 1/2, 3/4 and 4/4.

You can refer to this chart for your violin size.

Size	4/4 full size	7/8	3/4	1/2	1/4	1/8	1/10	1/16	1/32
Age	11+ and adults	10+ and adults	9-11	7-9	6-7	5-6	4-5	5 years and under	
Arm length CM (neck to mid-palm)	58,5	57,5	56	51	47	42	38	35,5	35 and under
Arm length INCH	23	22	22	20	18	16	15	14	14 and under
Total violin length CM	59	57	55	52	48	43	39	36	33
Total violin length INCH	23	22	22	20	19	17	15	14	13
Violin body length CM	36	34,5	33	30	28	25	23	21	18
Violin body length INCH	14	13,5	13	12	11	10	9	8	7

For demonstration purposes, we will build 4/4 size of the design to the left.

For 4/4 size, please go through page 4 - 16 and 39 - end

For 3/4 size, please go through page 17 - 27 and 39 - end

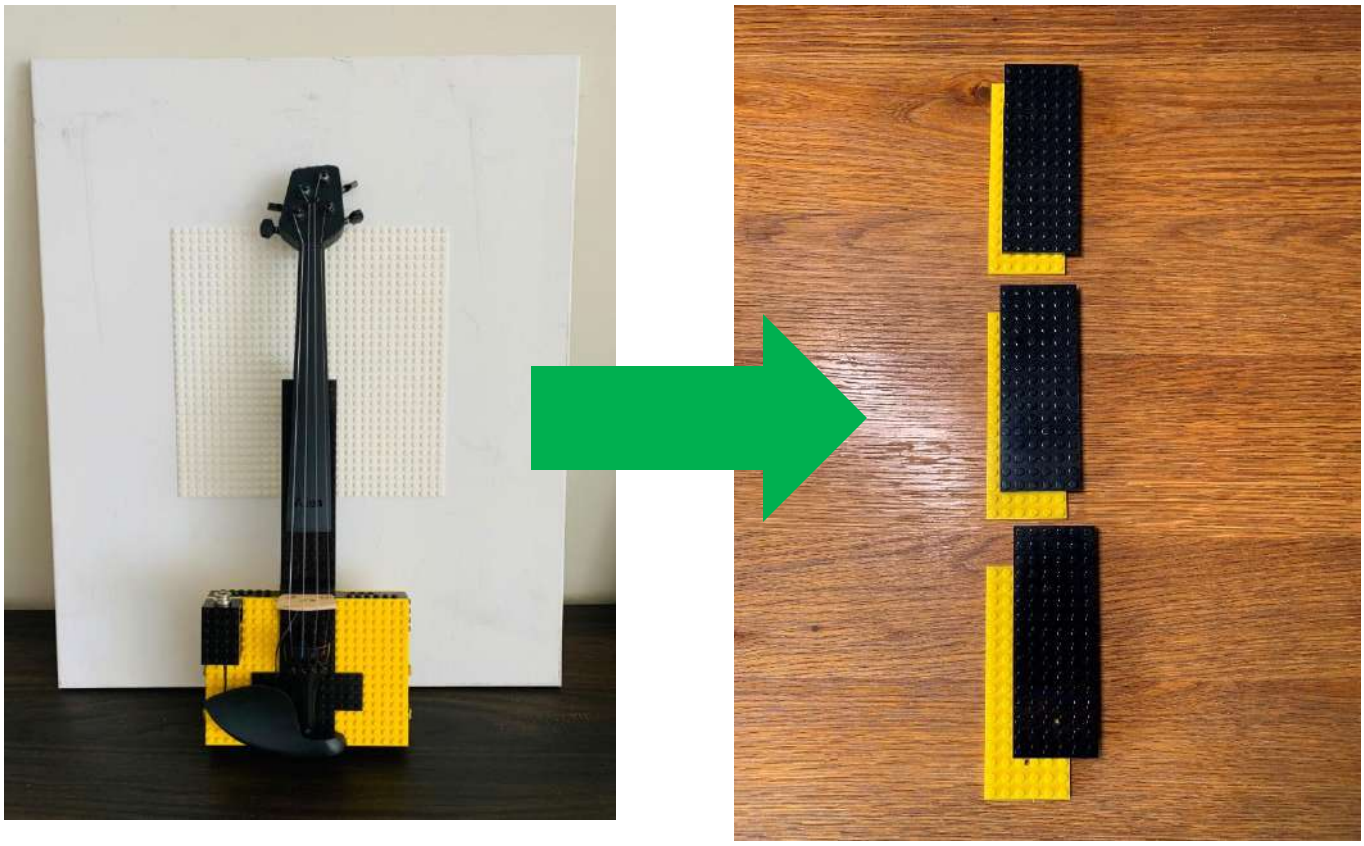
For 1/2 size, please go through page 28 - end

Step 2

Build spine of the violin.

4/4 size spine

In this example, we will build the violin as below, therefore yellow plate is the back plate of the spine.

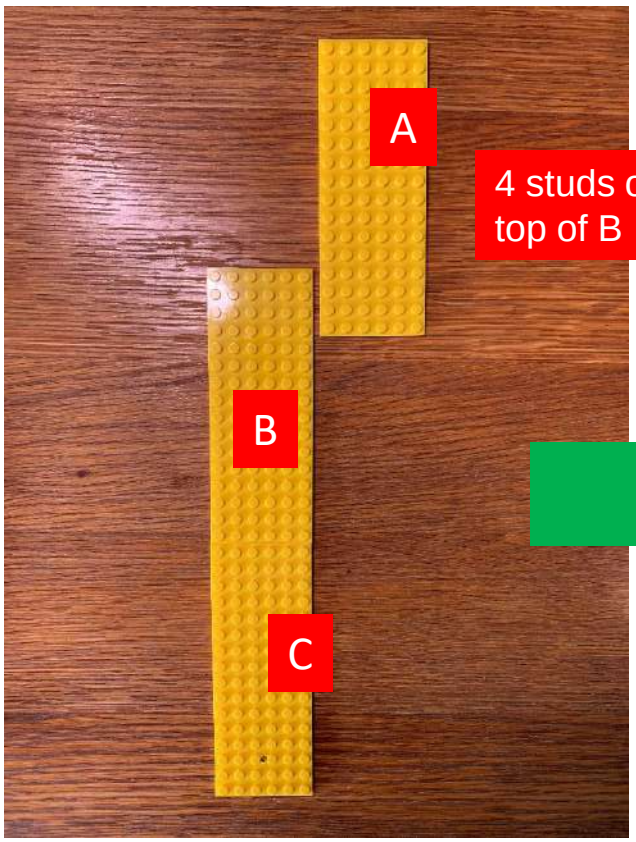


Step 2

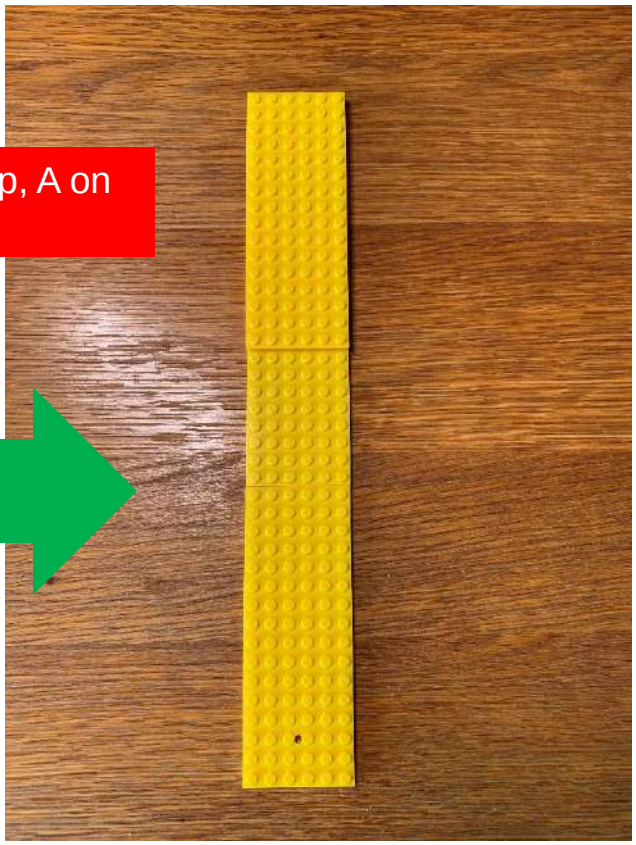
Build spine of the violin.

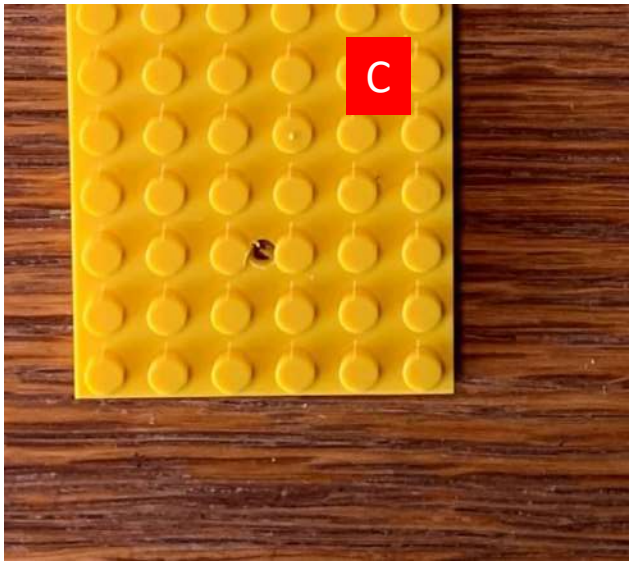
4/4 size spine

Step 2a – lay out base of the back plate



4 studs overlap, A on top of B





Note:

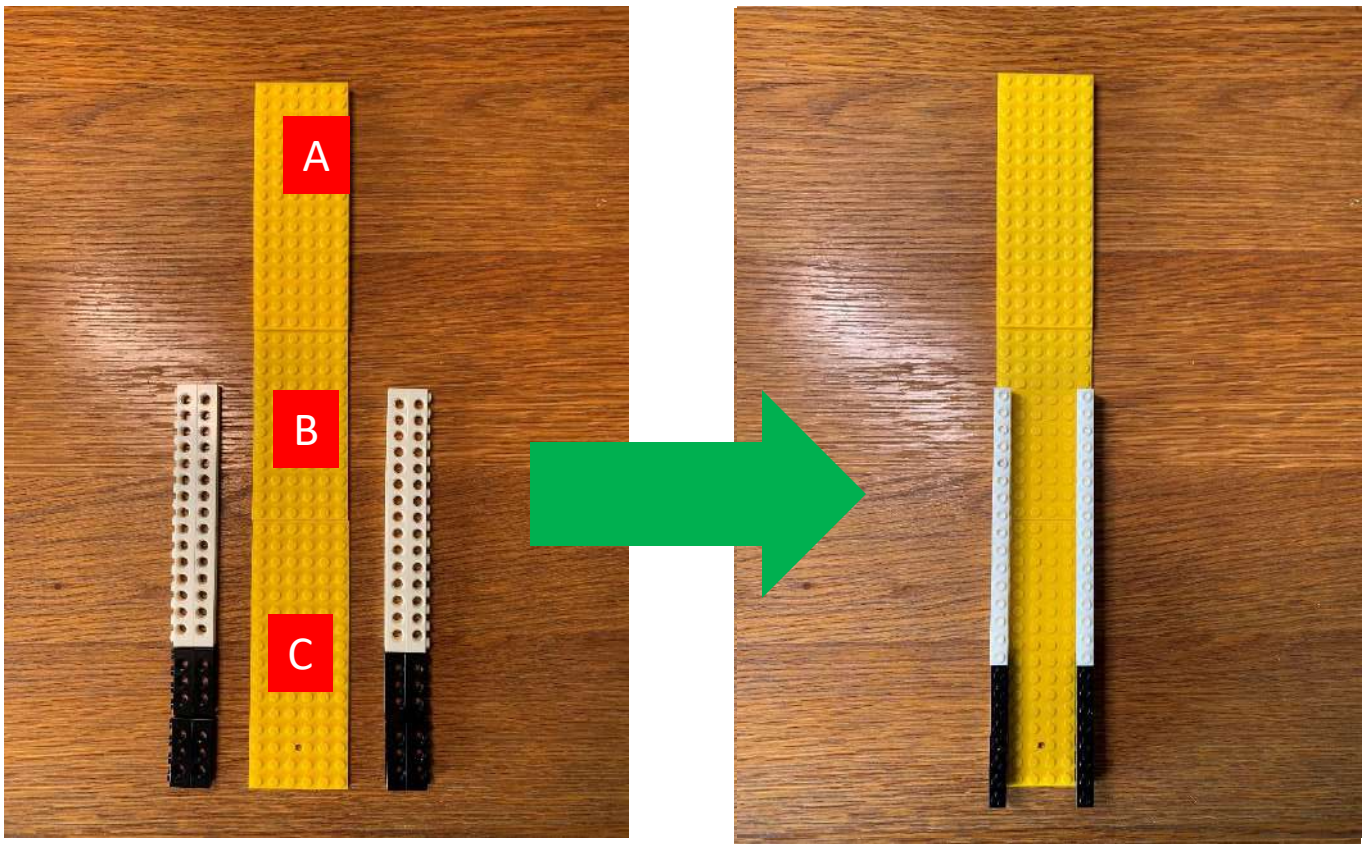
Make sure the bottom plate (C) is the one with hole at the lower half of the plate.

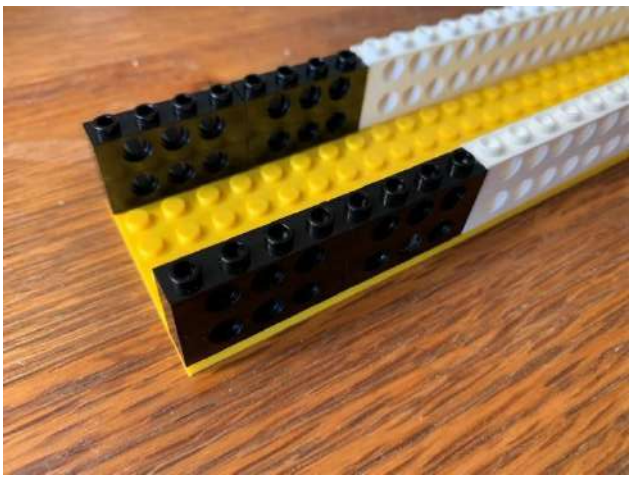
Step 2

Build spine of the violin.

4/4 size spine

Step 2b – connect B and C



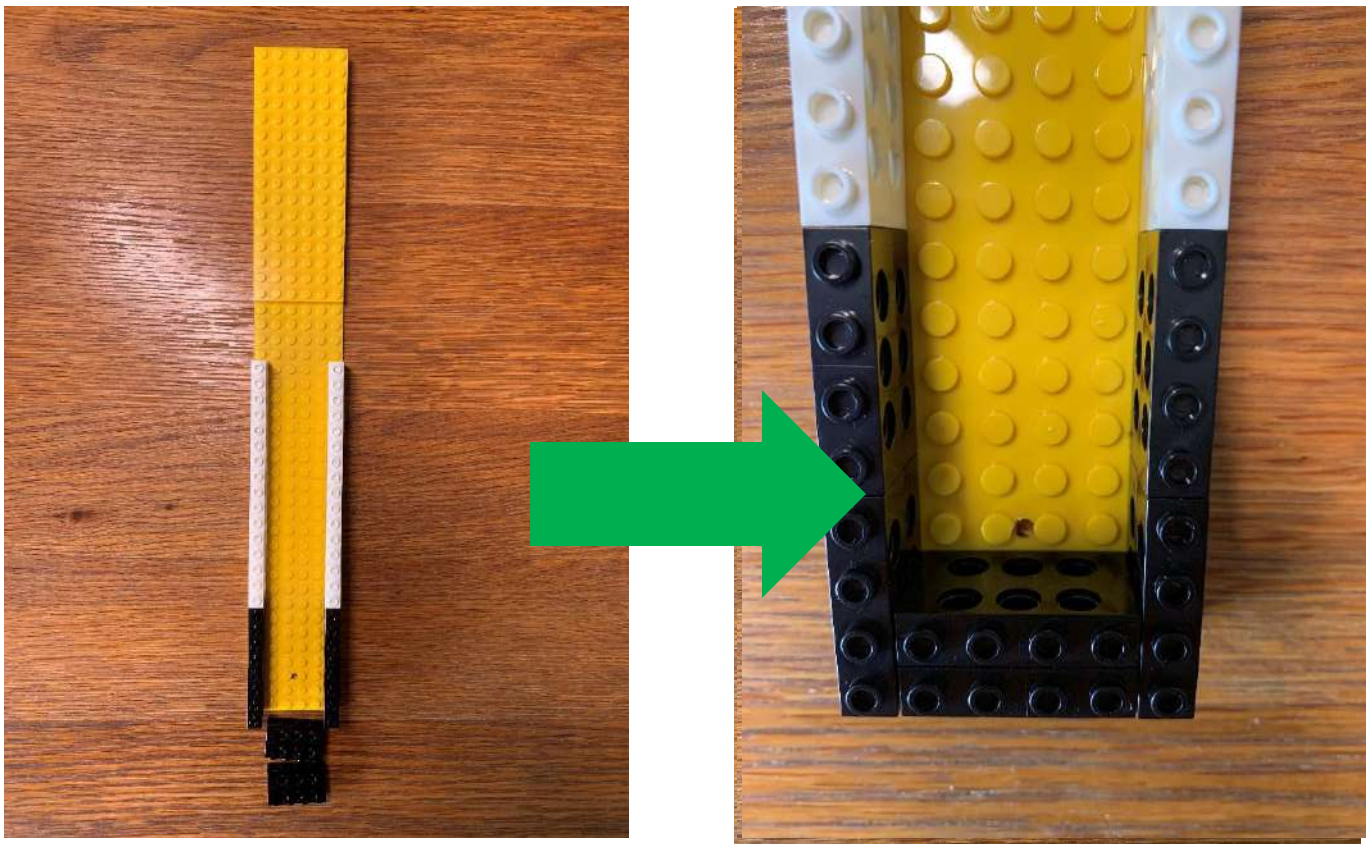


Step 2

Build spine of the violin.

4/4 size spine

Step 2c

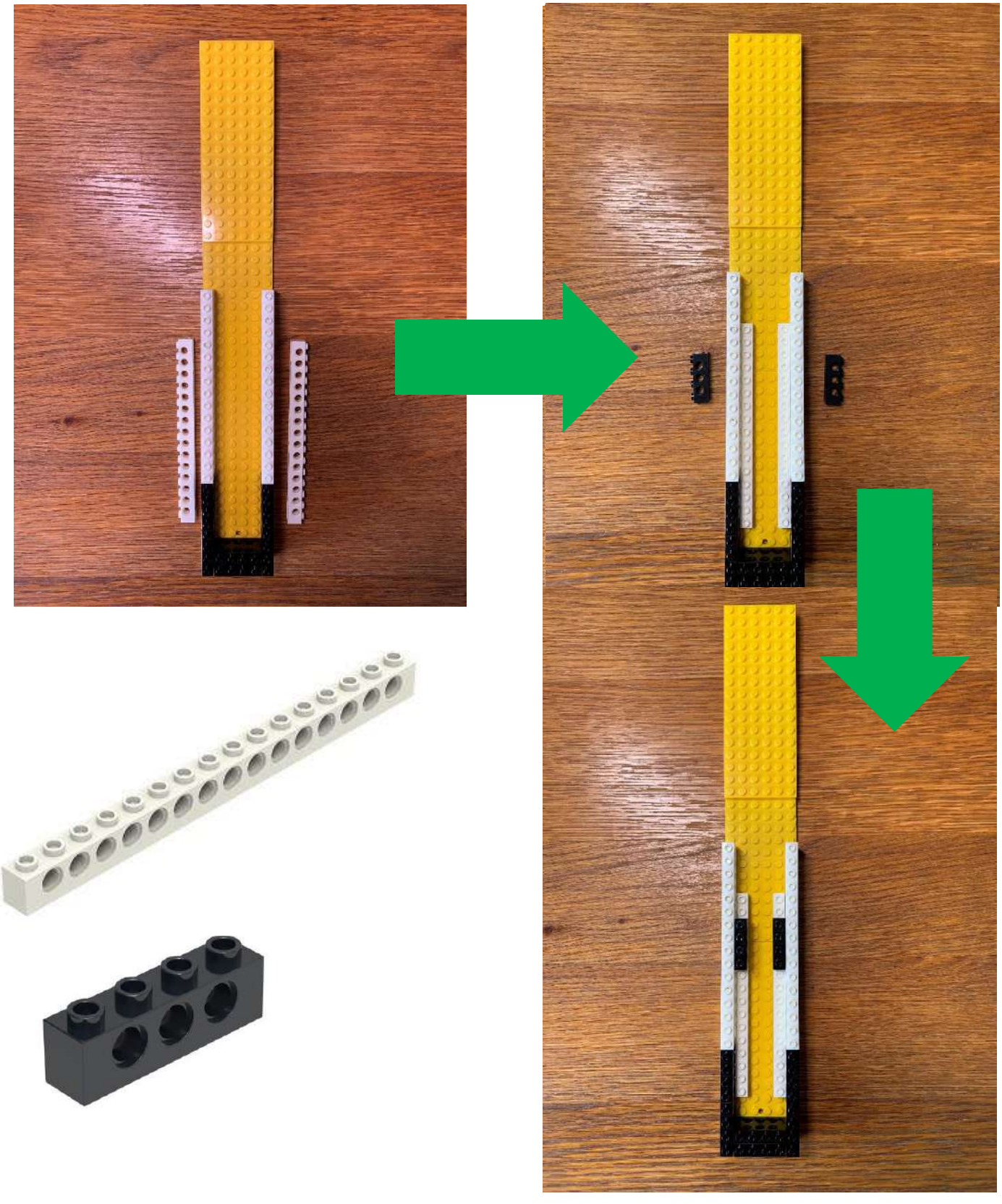


Step 2

Build spine of the violin.

4/4 size spine

Step 2d

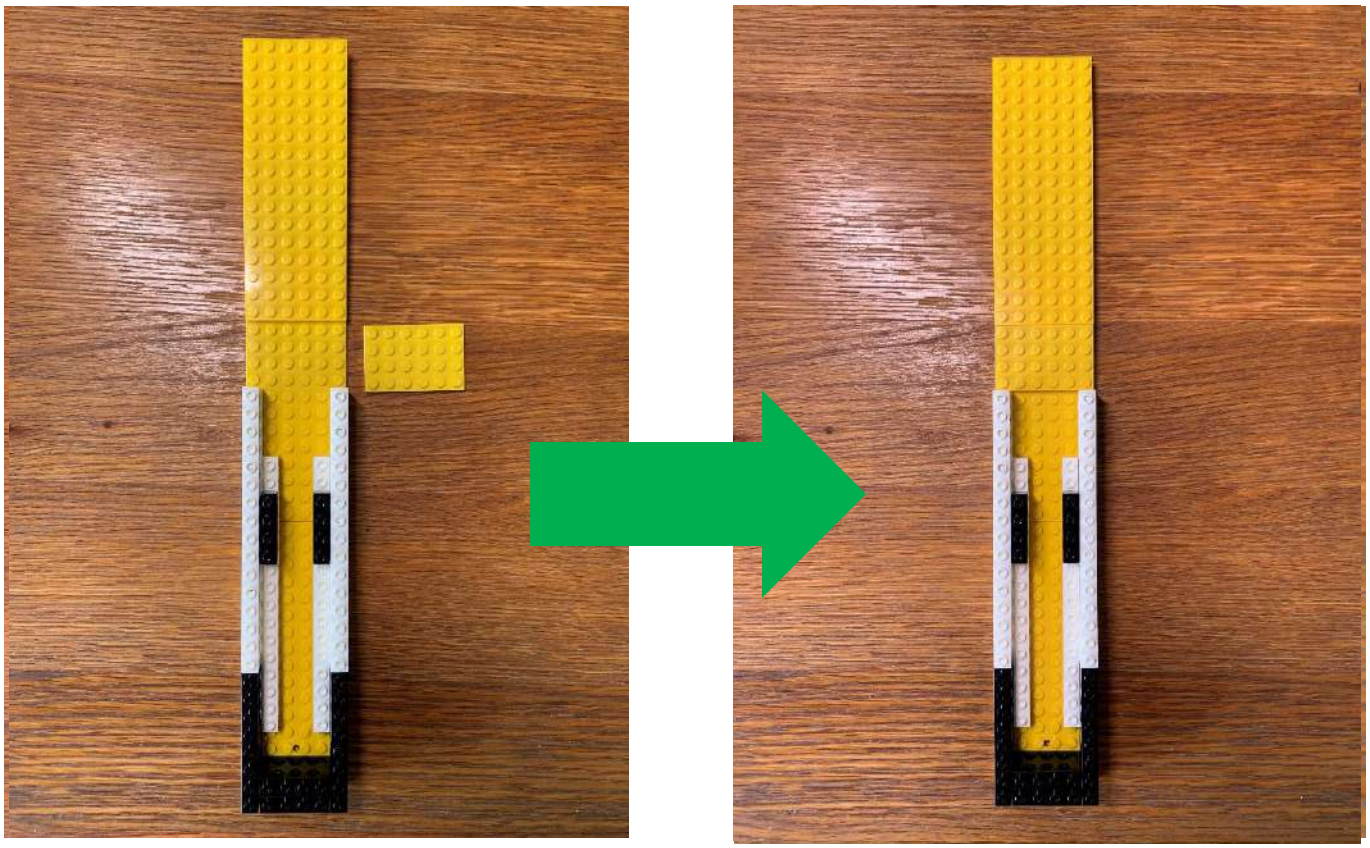


Step 2

Build spine of the violin.

4/4 size spine

Step 2e

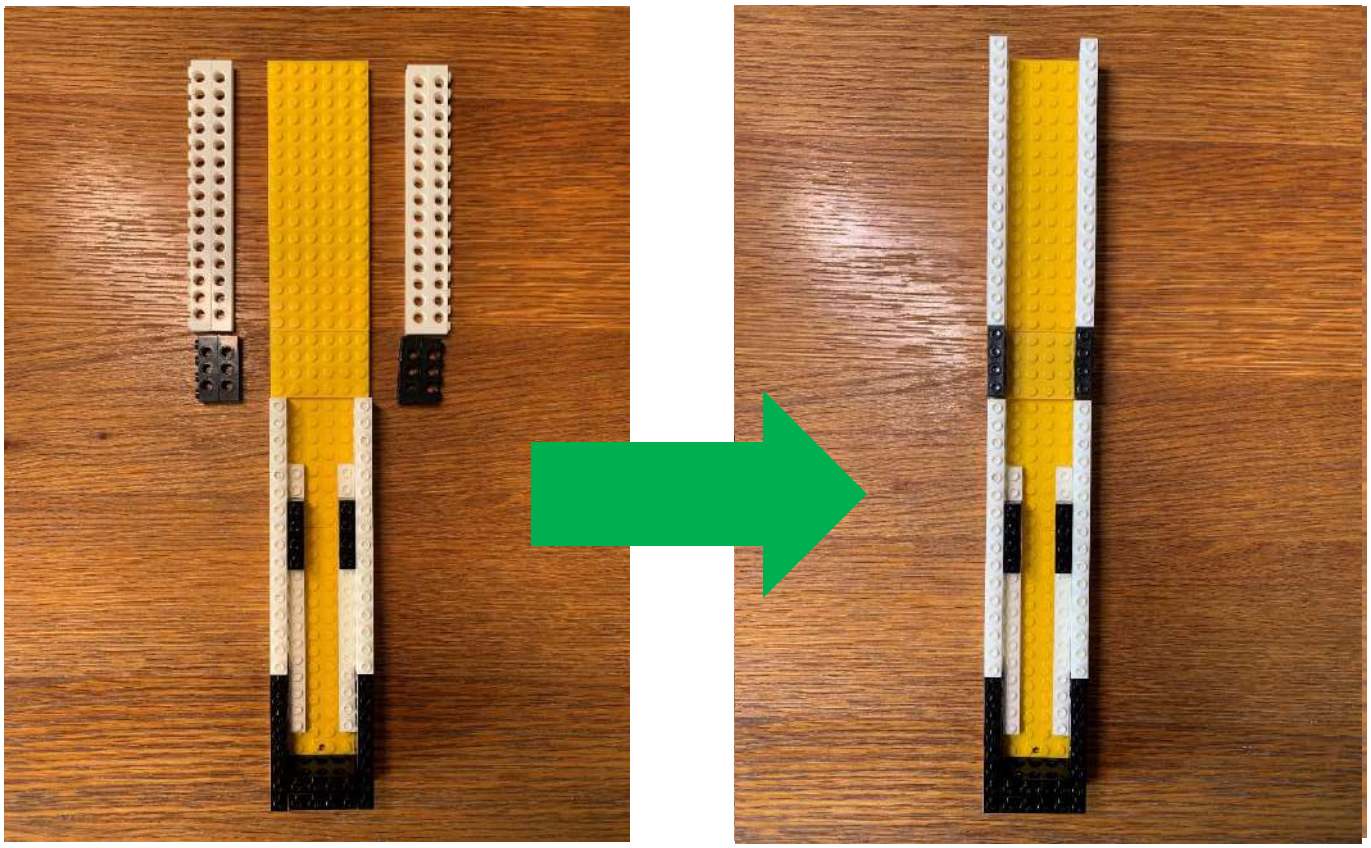


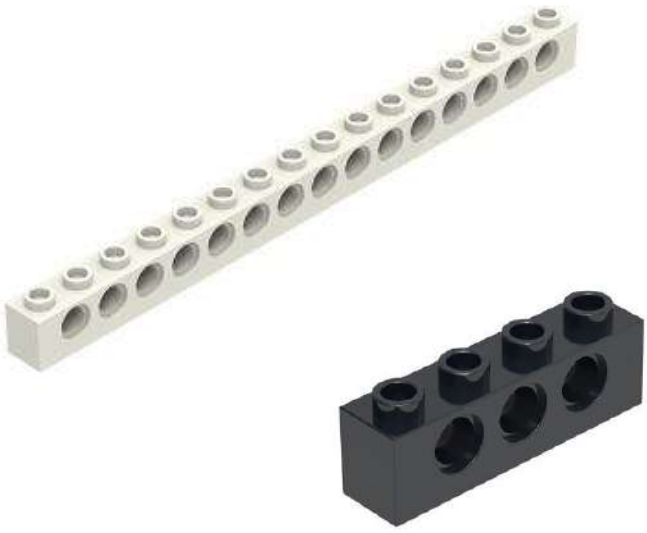
Step 2

Build spine of the violin.

4/4 size spine

Step 2f



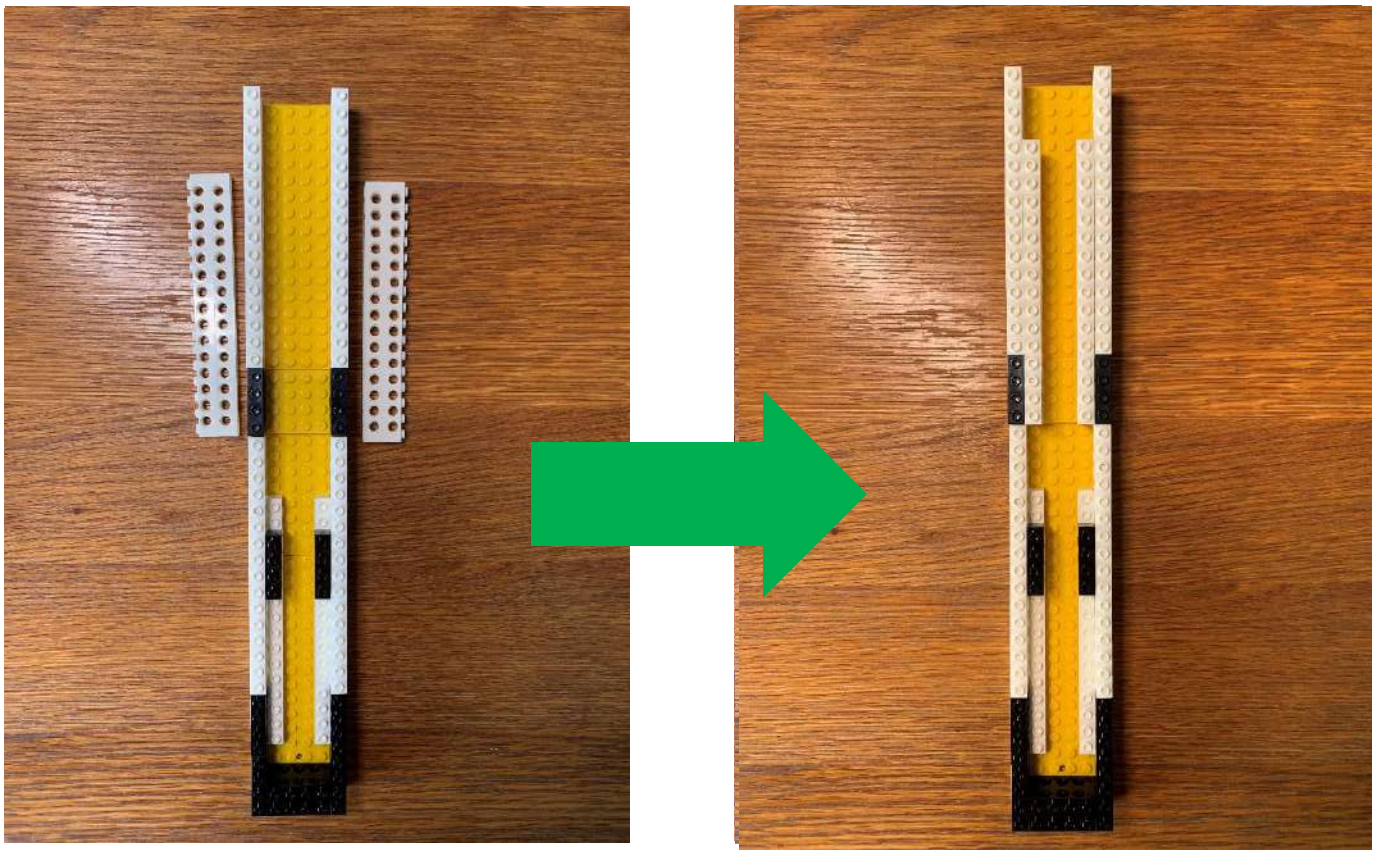


Step 2

Build spine of the violin.

4/4 size spine

Step 2g

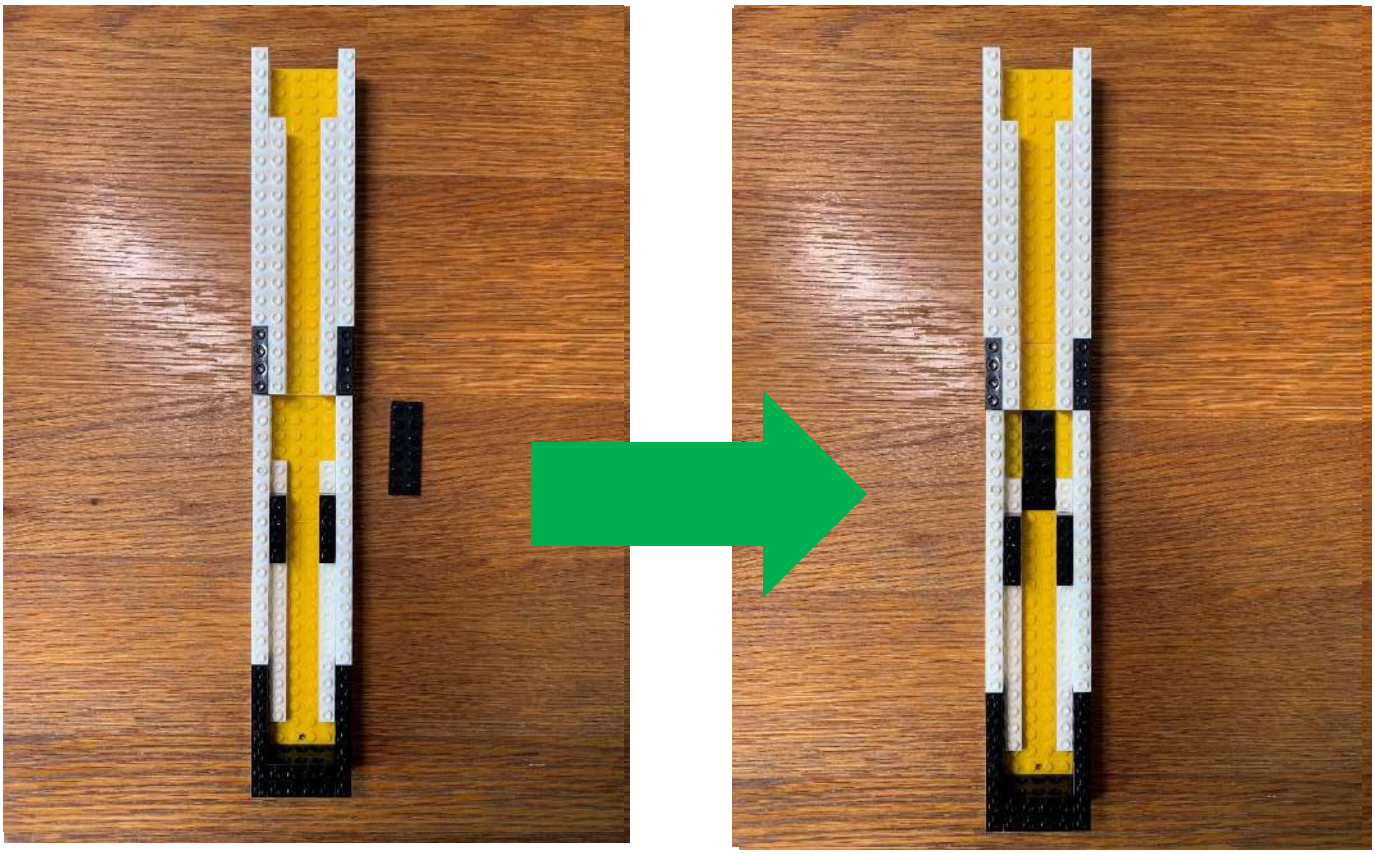


Step 2

Build spine of the violin.

4/4 size spine

Step 2h

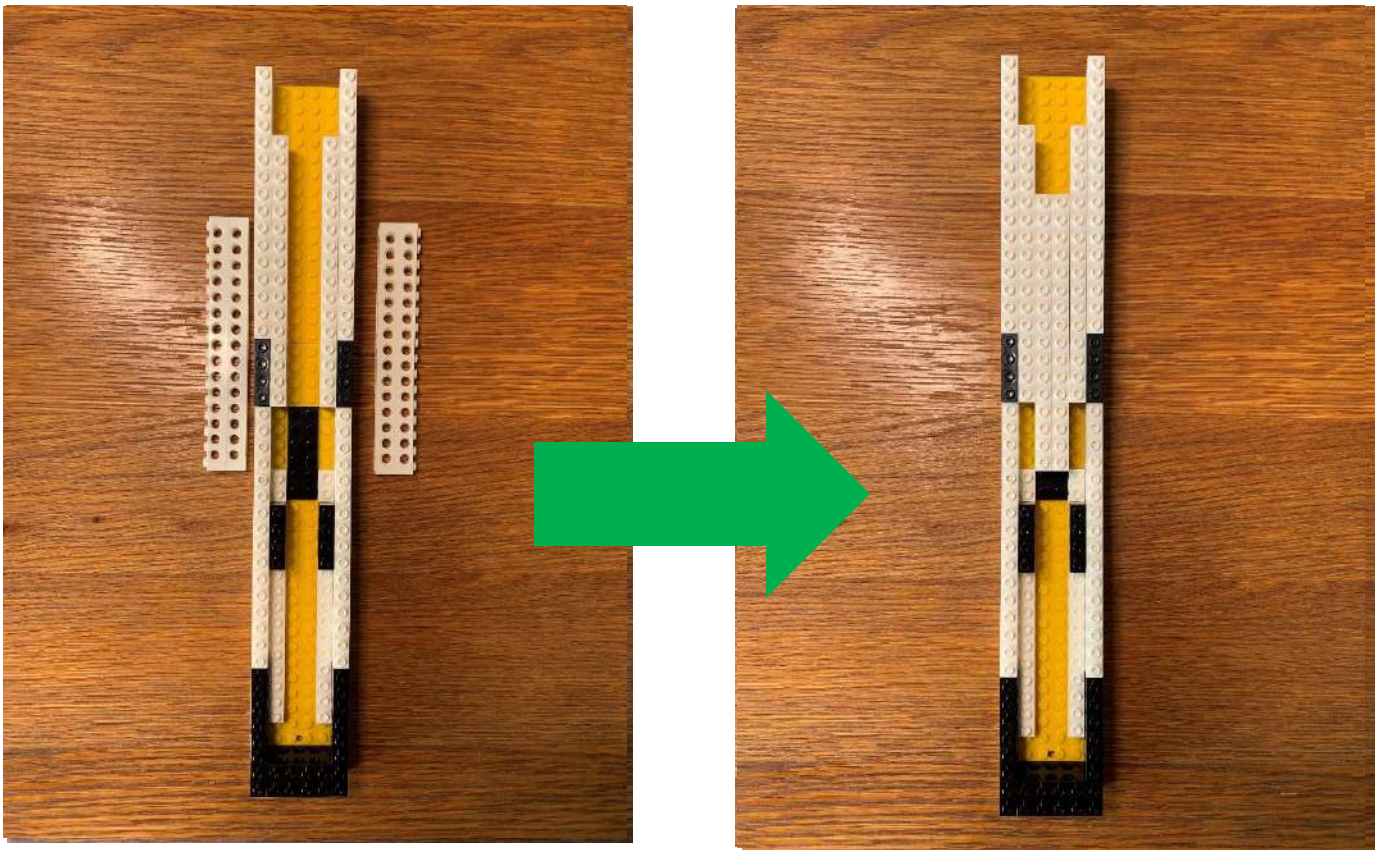


Step 2

Build spine of the violin.

4/4 size spine

Step 2i

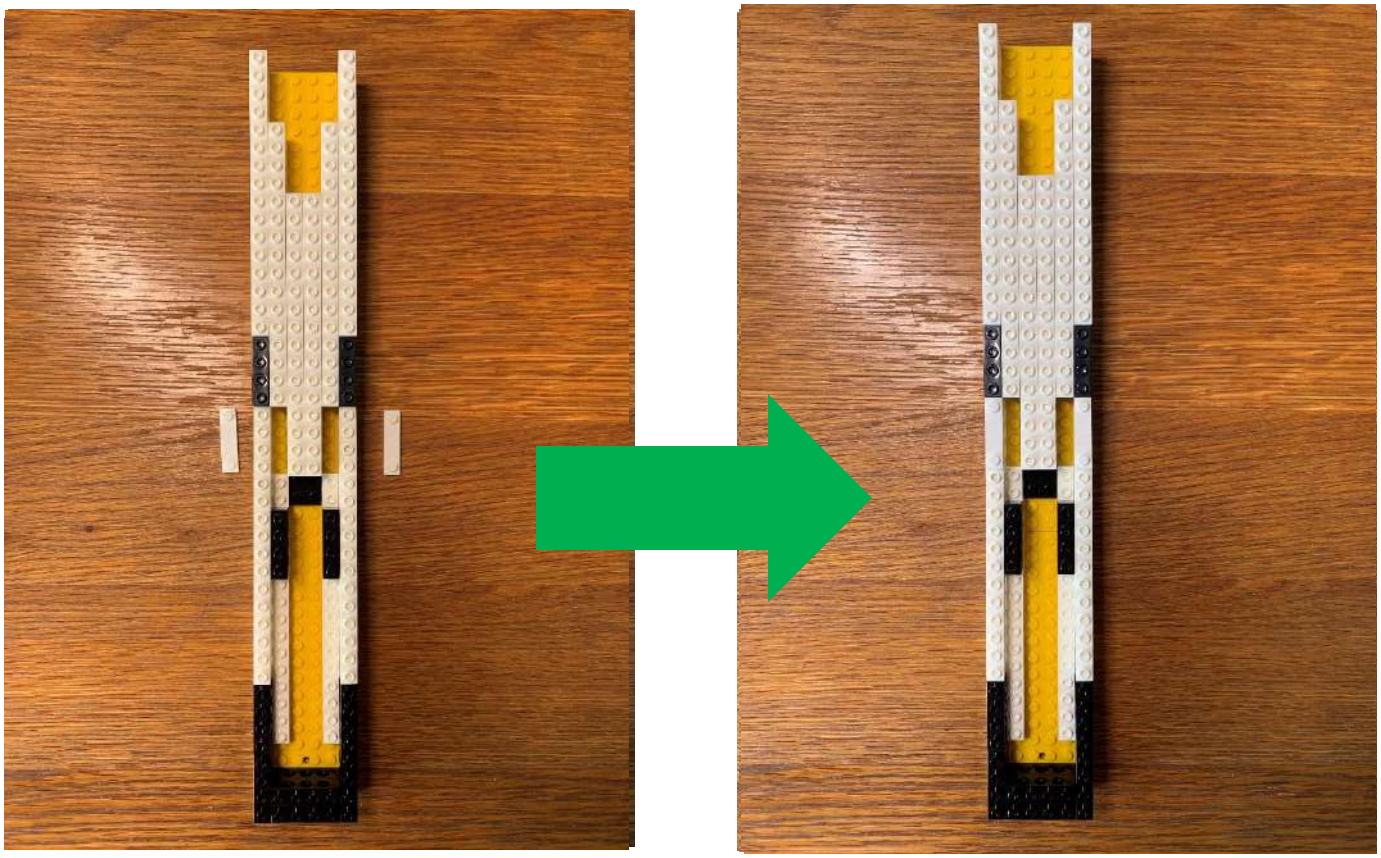


Step 2

Build spine of the violin.

4/4 size spine

Step 2j

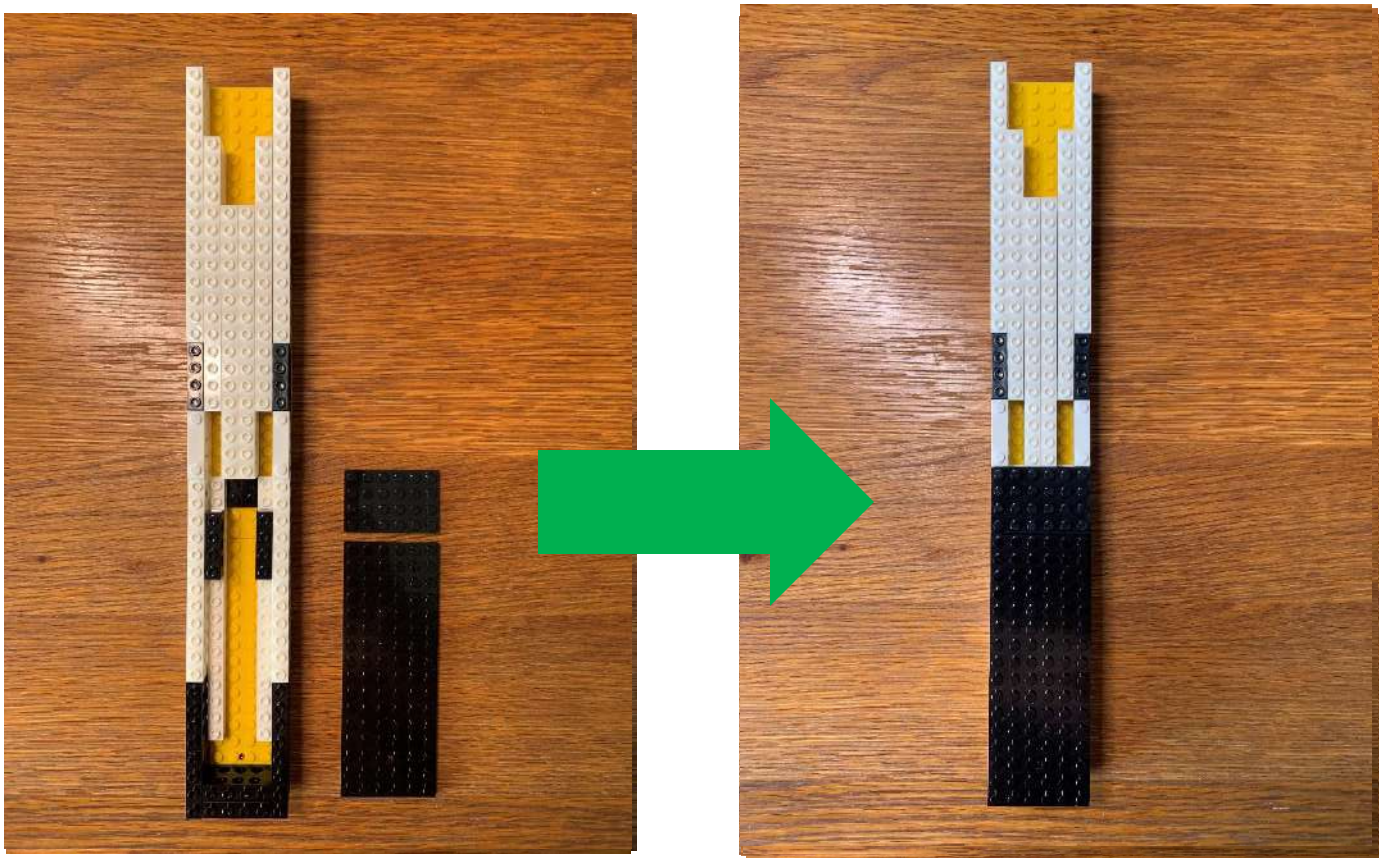


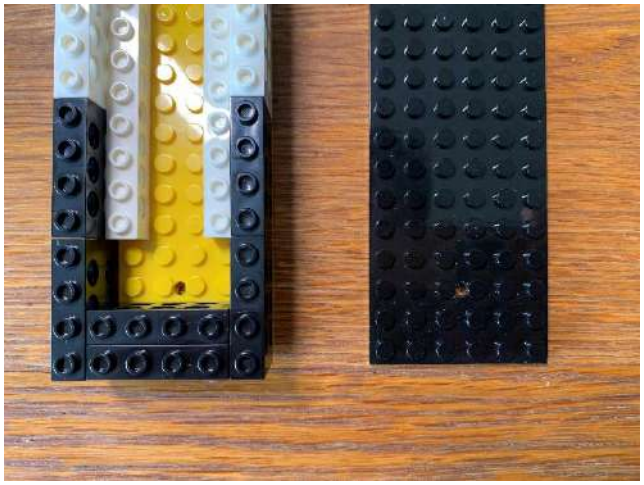
Step 2

Build spine of the violin.

4/4 size spine

Step 2k





Note:

Make sure the bottom plate is the one with hole at the lower half ot the plate.

Step 2

Build spine of the violin.

4/4 size spine

Note:

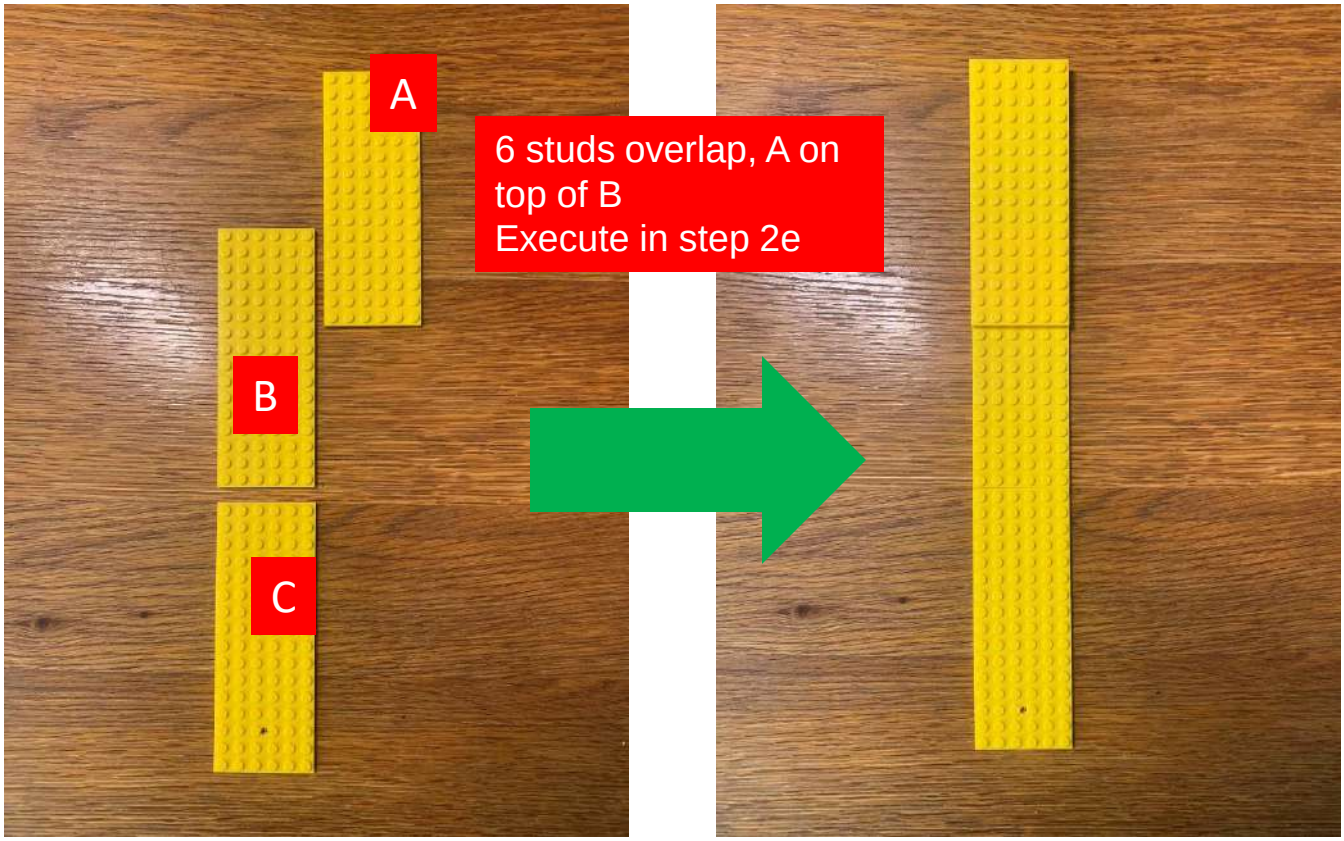
4/4 size spine is done, please skip to page 39 for step 3

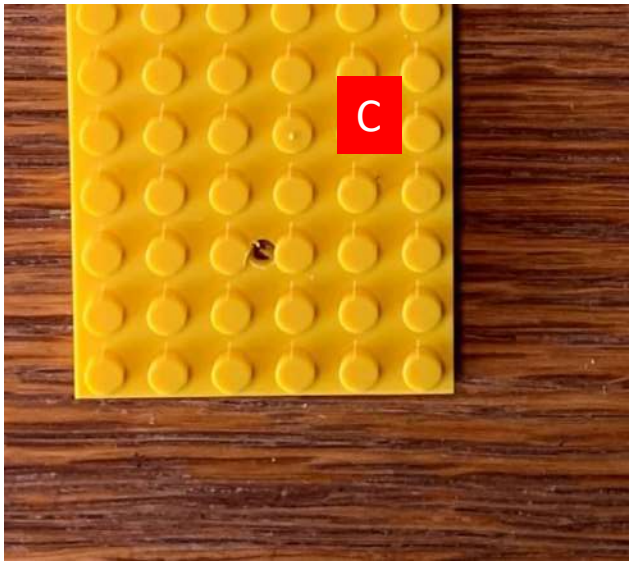
Step 2

Build spine of the violin.

3/4 size spine

Step 2a – lay out base of the back plate





Note:

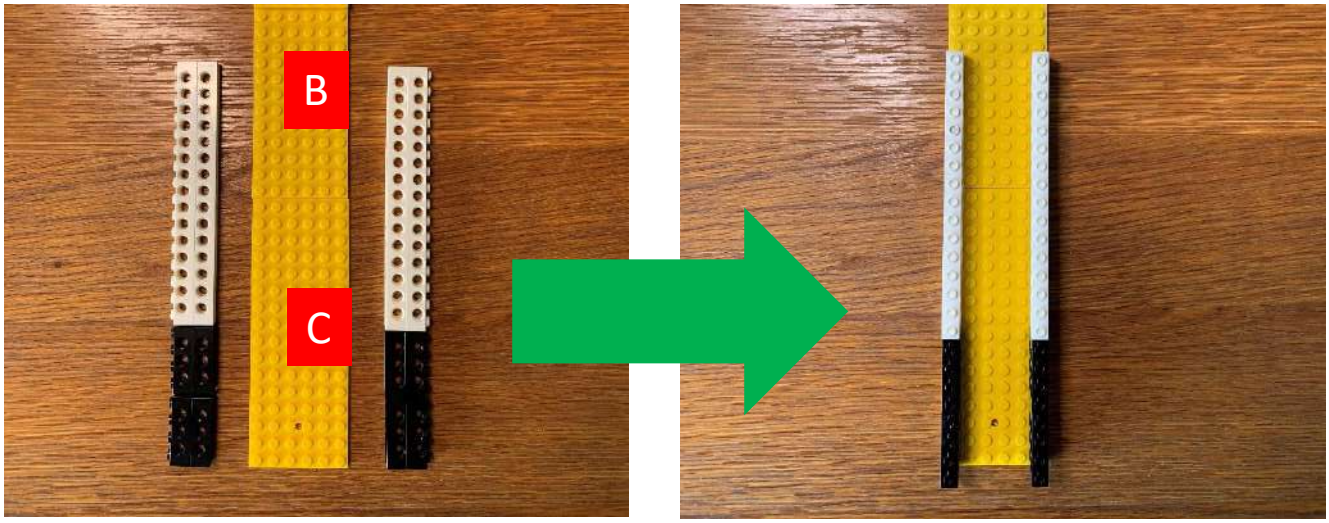
Make sure the bottom plate (C) is the one with hole at the lower half of the plate.

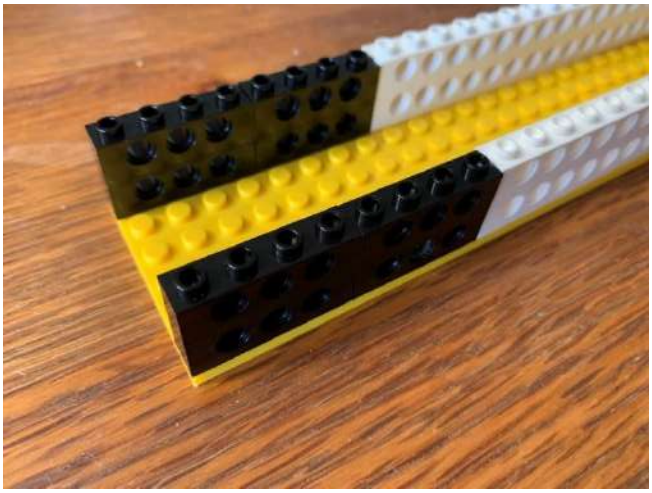
Step 2

Build spine of the violin.

3/4 size spine

Step 2b – connect B and C



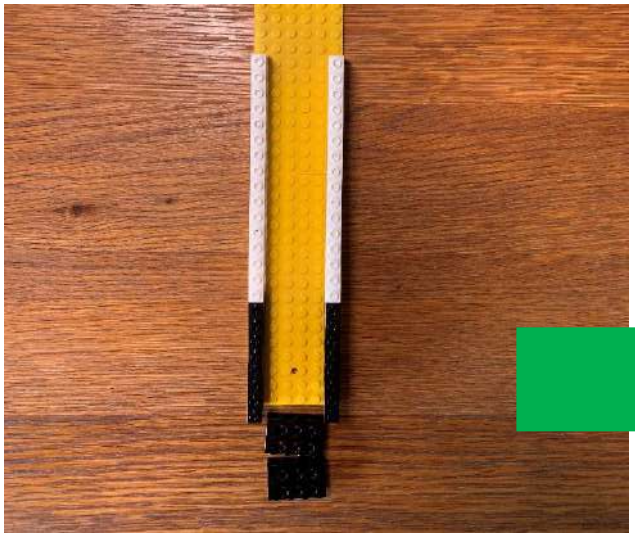


Step 2

Build spine of the violin.

3/4 size spine

Step 2c

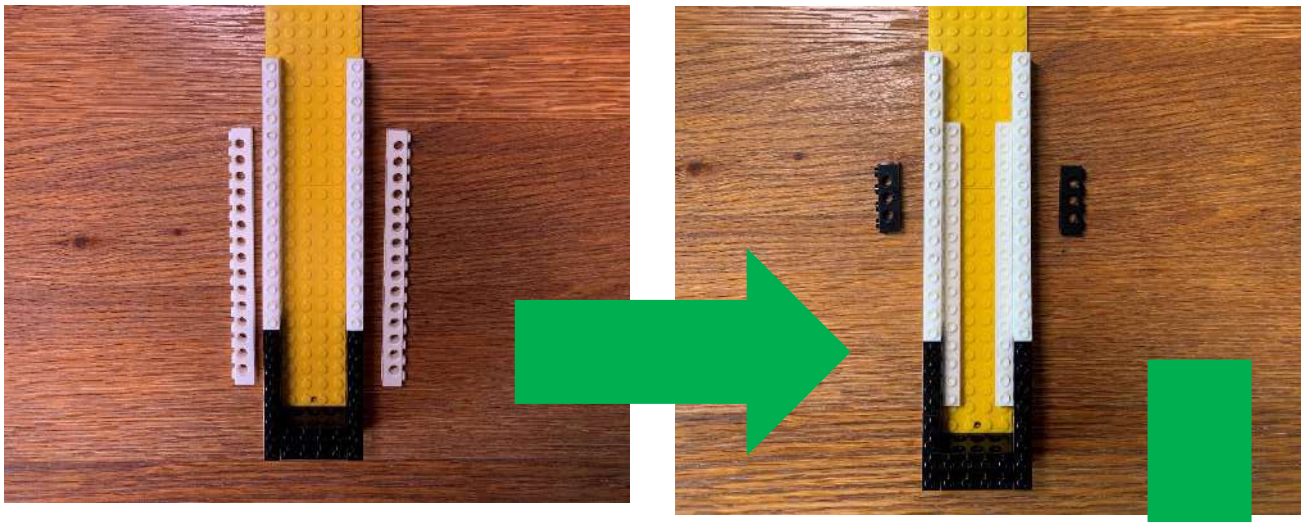


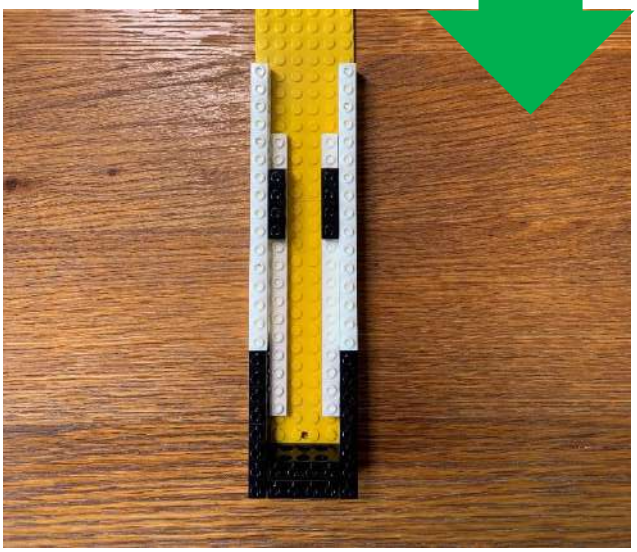
Step 2

Build spine of the violin.

3/4 size spine

Step 2d



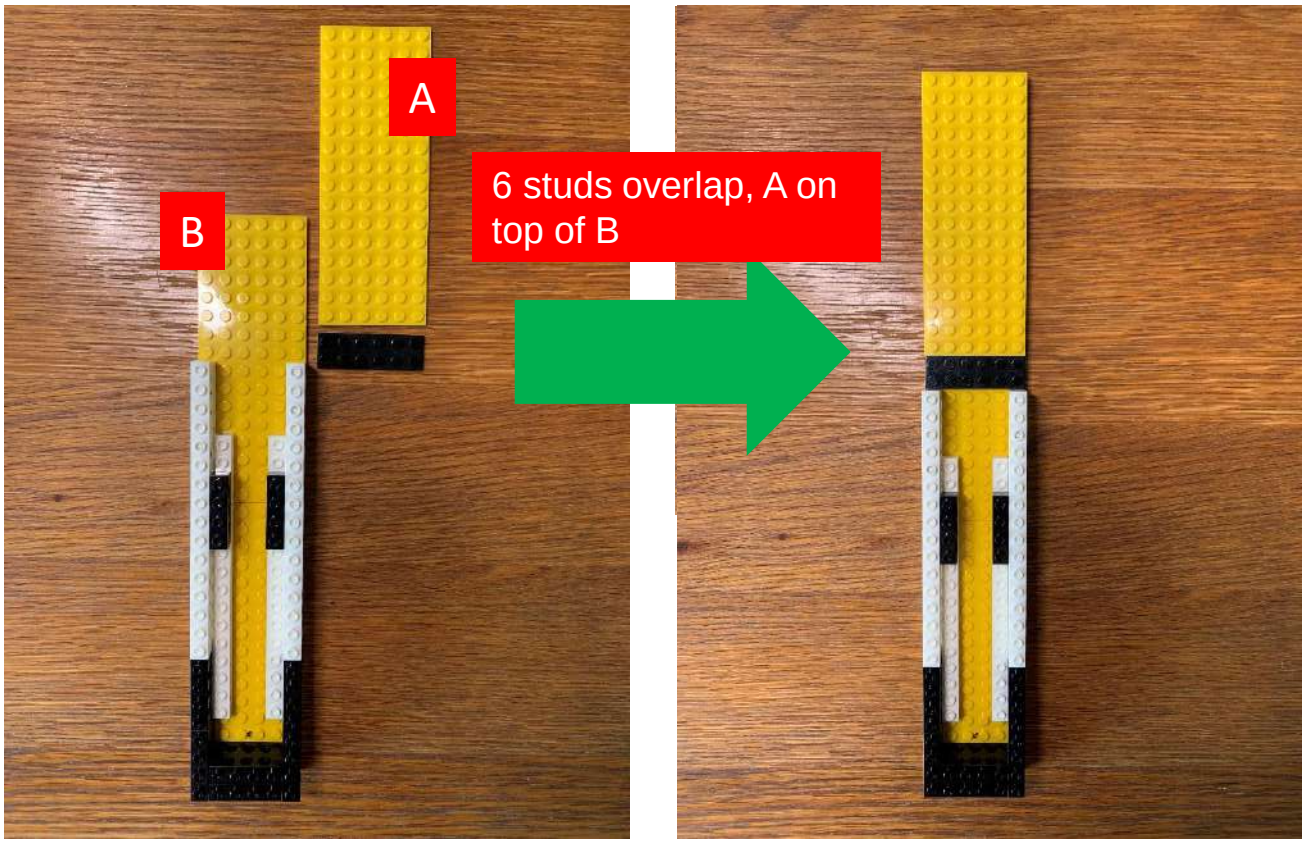


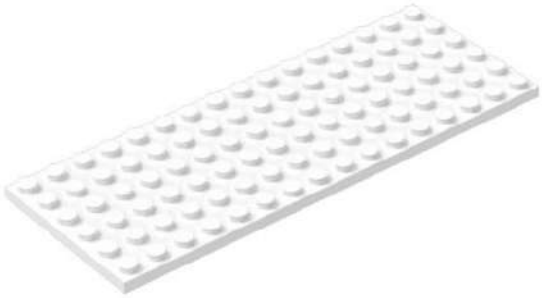
Step 2

Build spine of the violin.

3/4 size spine

Step 2e



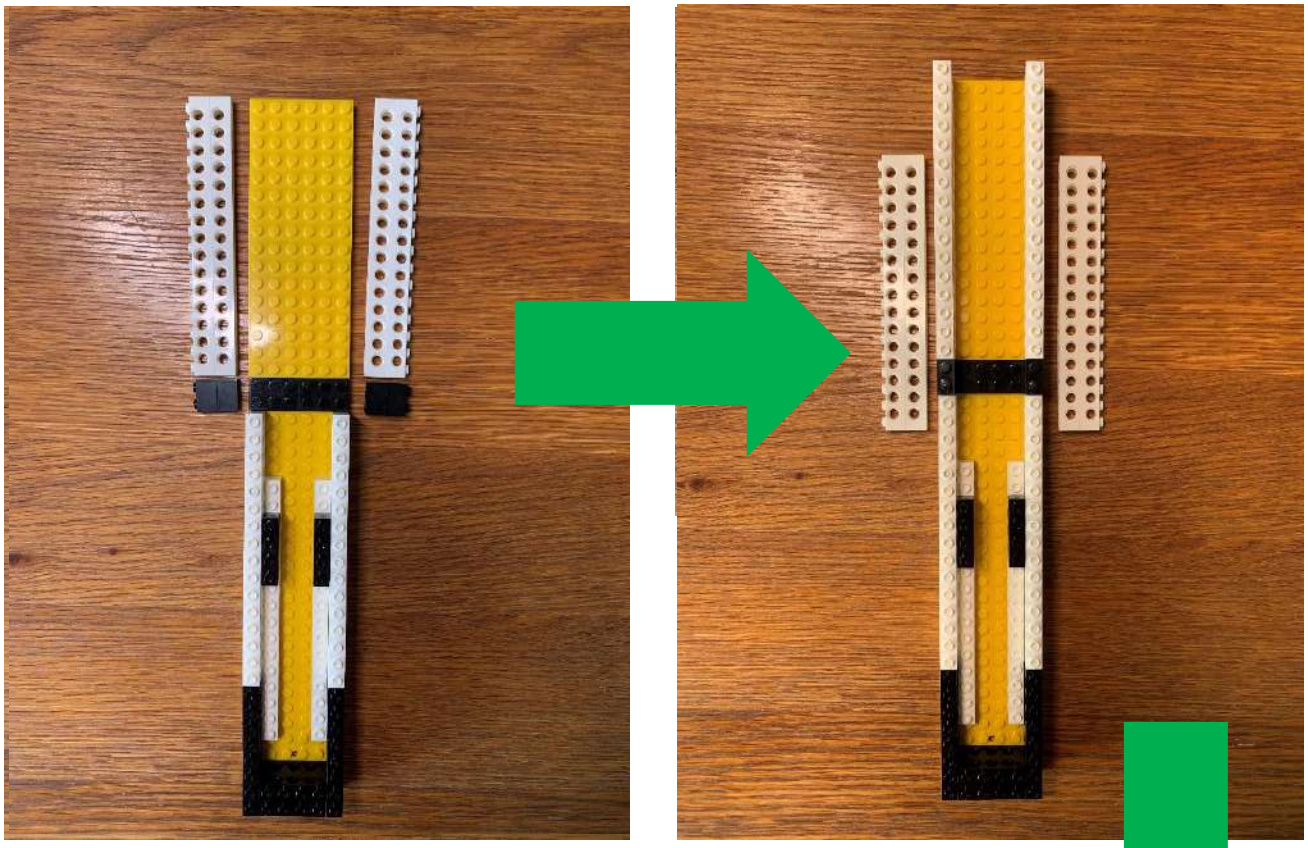


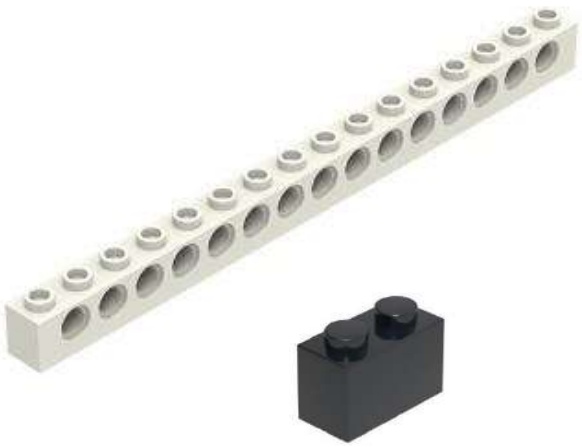
Step 2

Build spine of the violin.

3/4 size spine

Step 2f



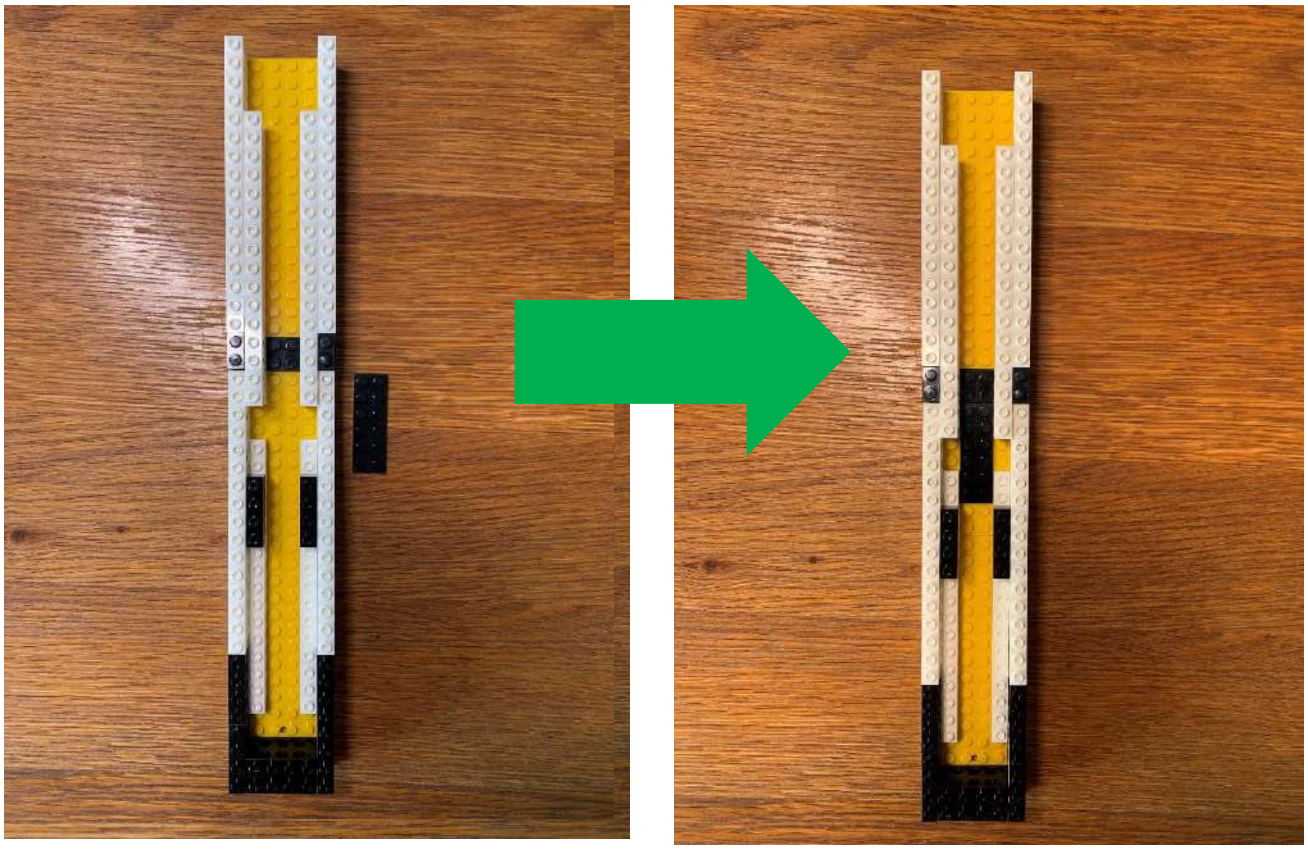


Step 2

Build spine of the violin.

3/4 size spine

Step 2g

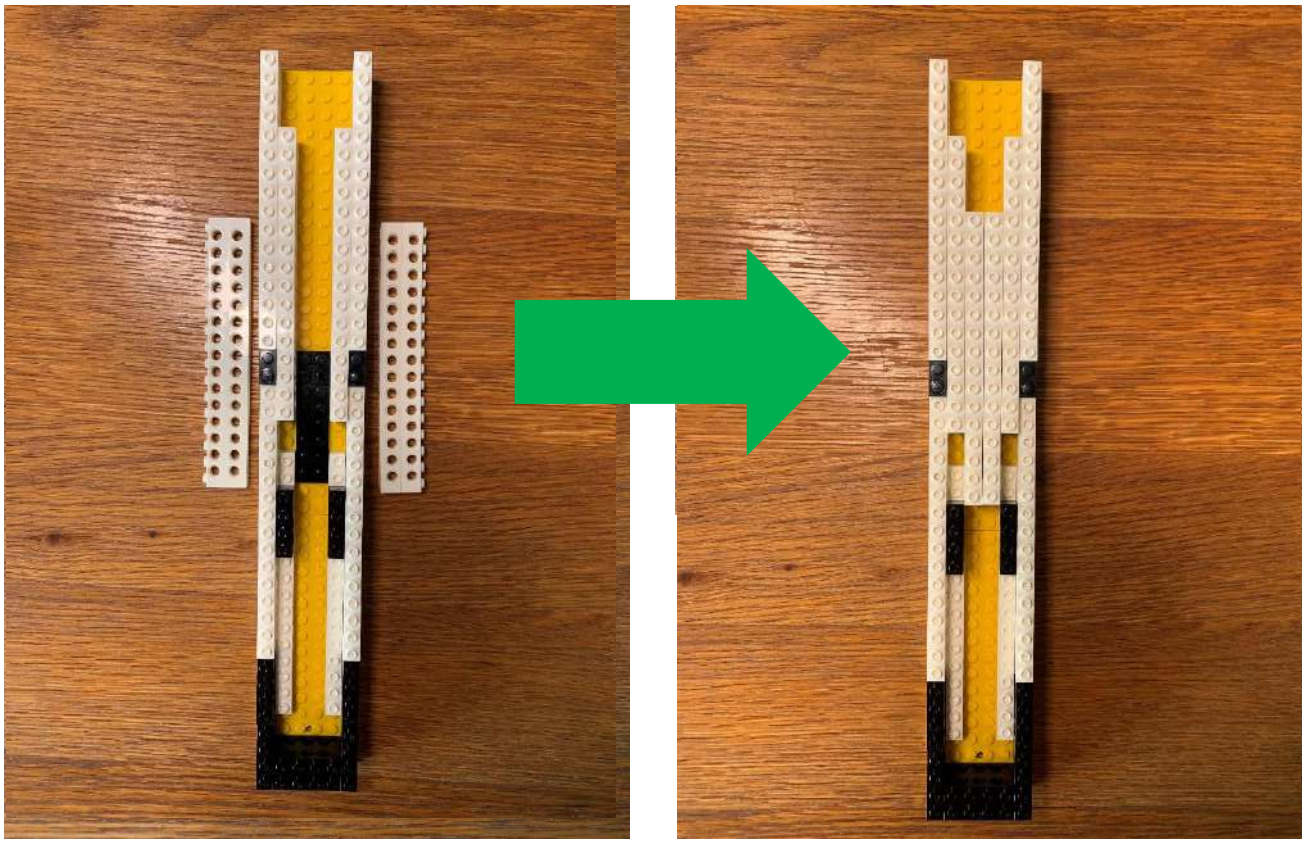


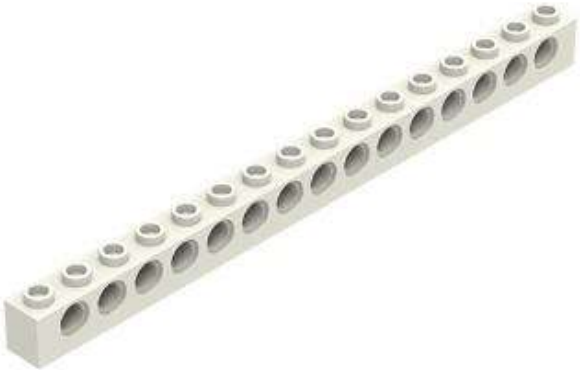
Step 2

Build spine of the violin.

3/4 size spine

Step 2h



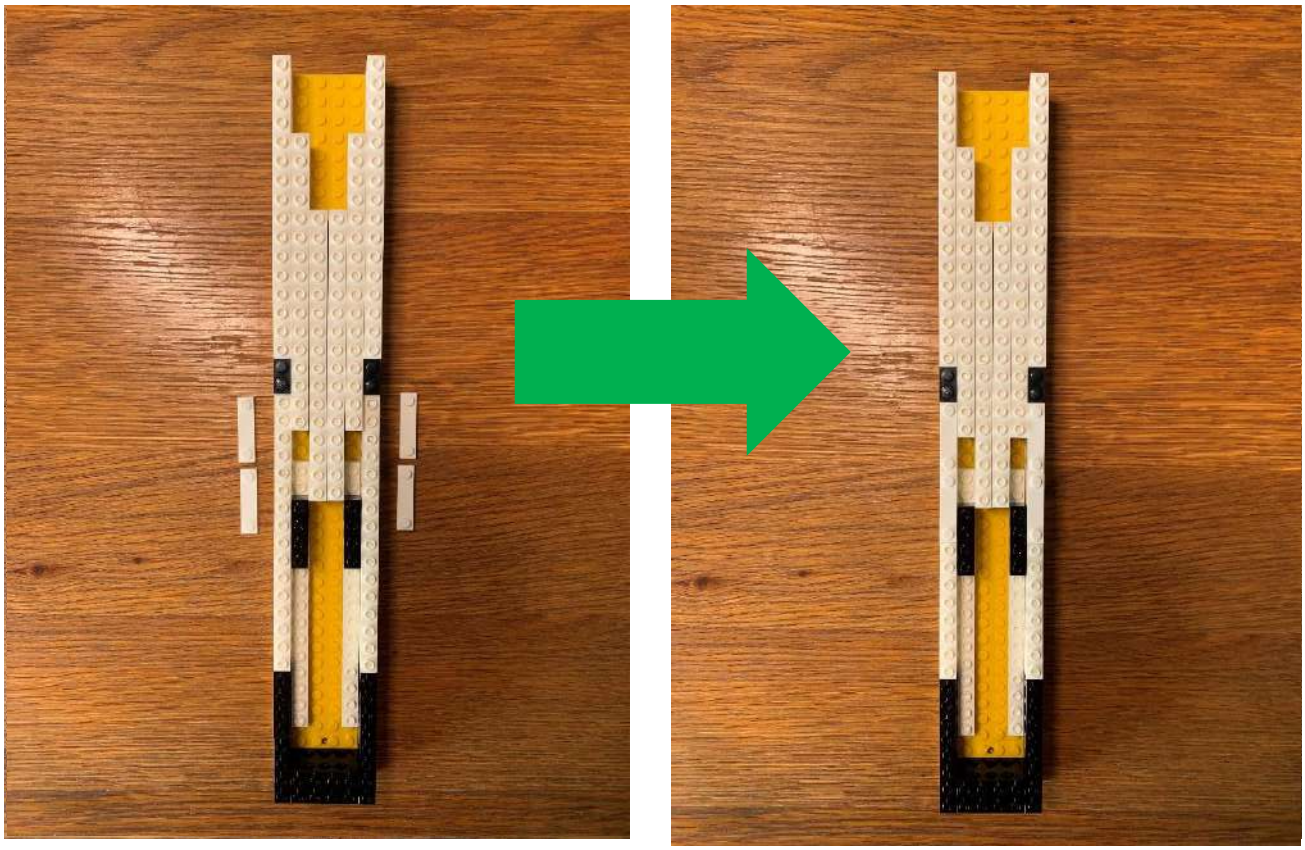


Step 2

Build spine of the violin.

3/4 size spine

Step 2i

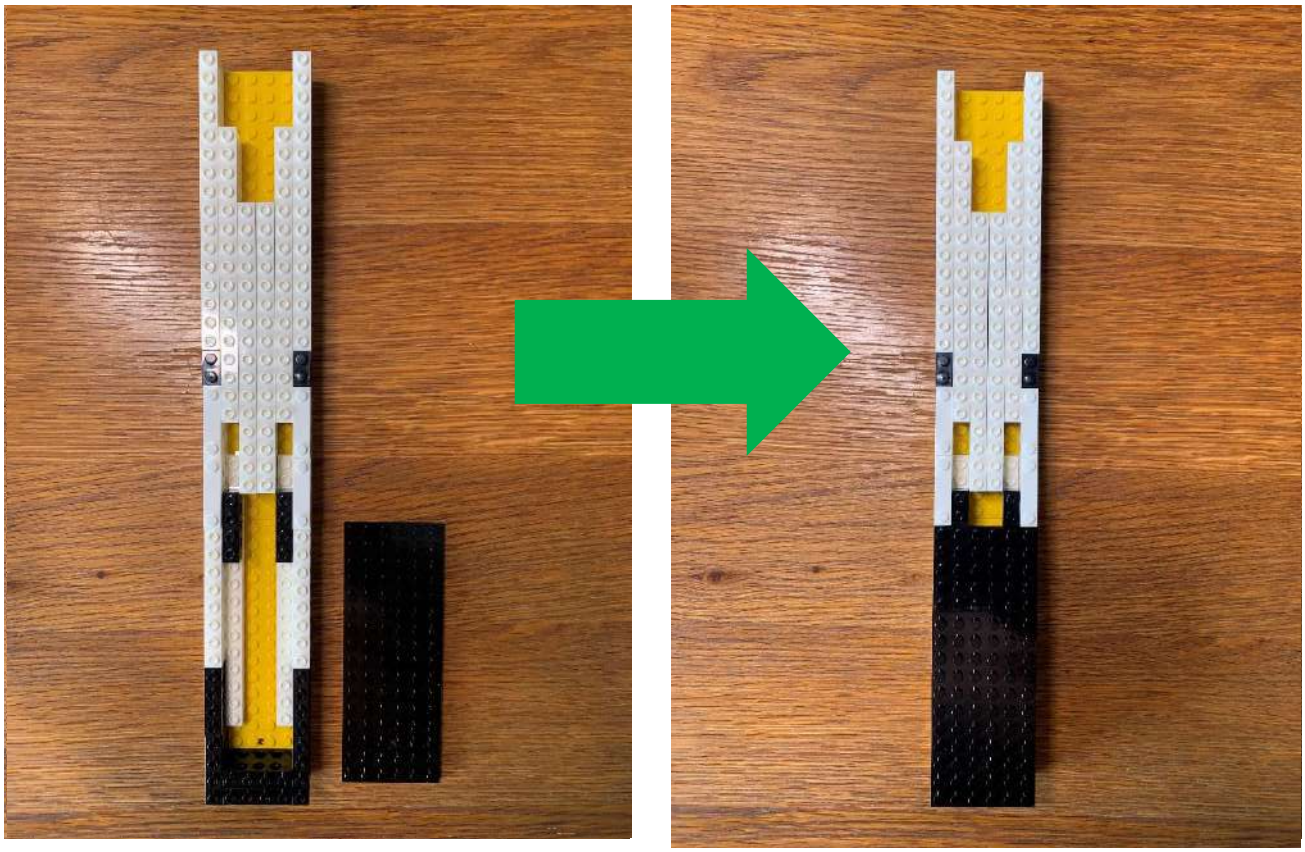


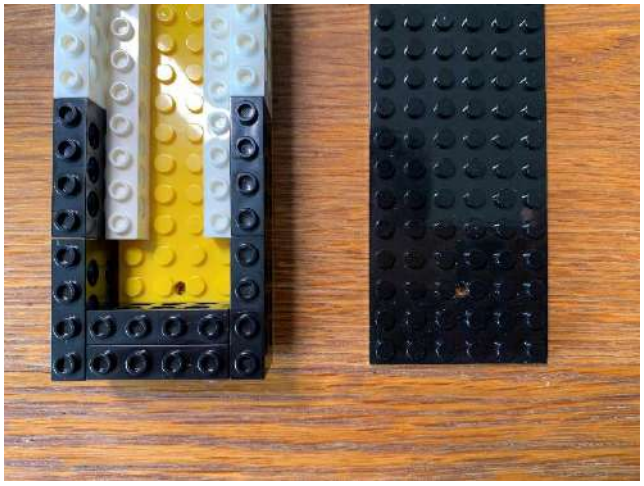
Step 2

Build spine of the violin.

3/4 size spine

Step 2j





Note:

Make sure the bottom plate is the one with hole at the lower half ot the plate.

Step 2

Build spine of the violin.

3/4 size spine

Note:

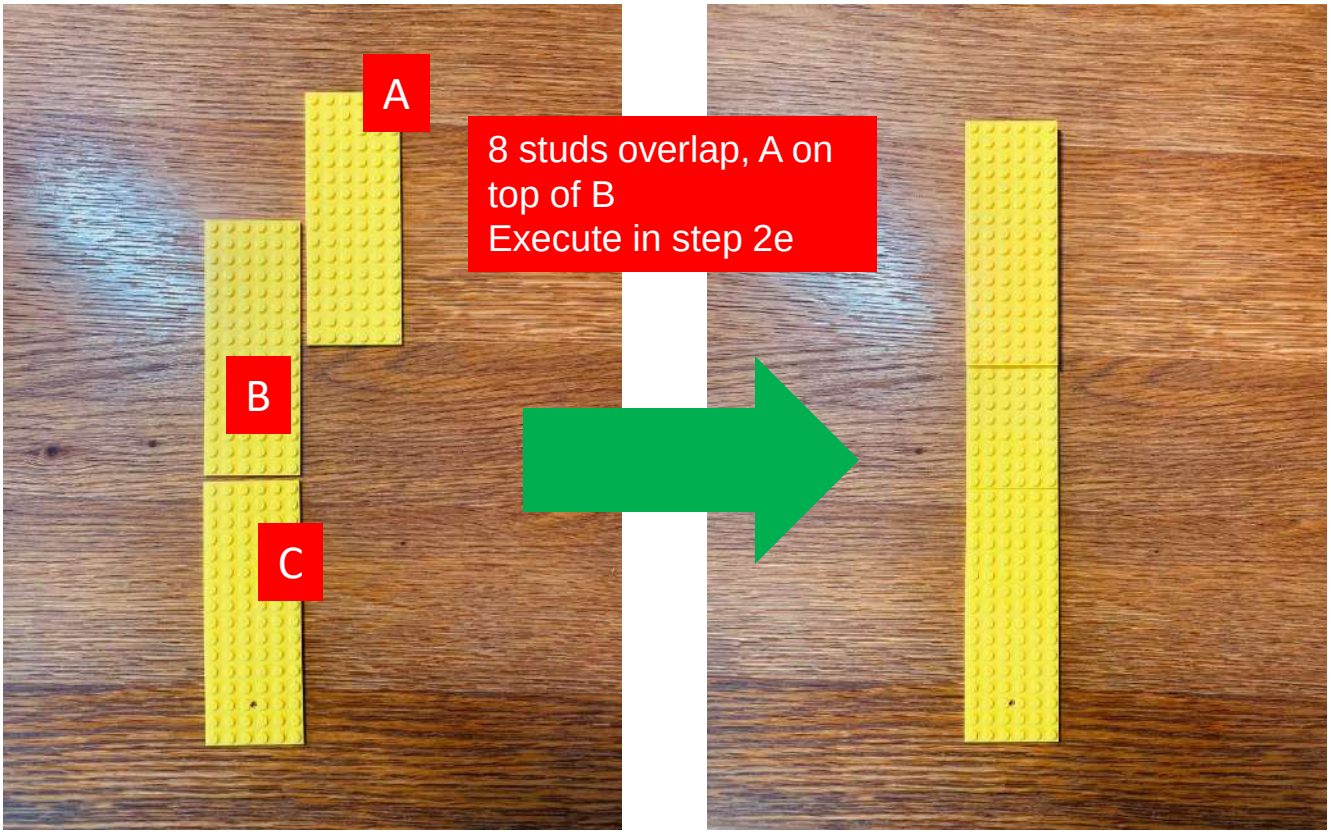
3/4 size spine is done, please skip to page 39 for step 3

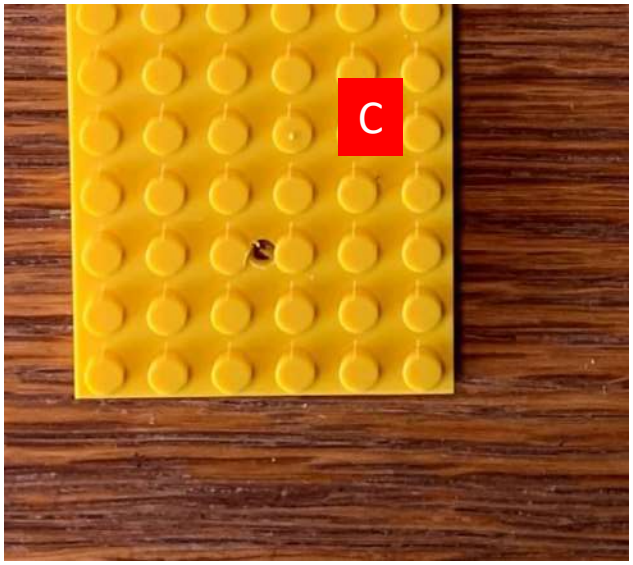
Step 2

Build spine of the violin.

1/2 size spine

Step 2a – lay out base of the back plate





Note:

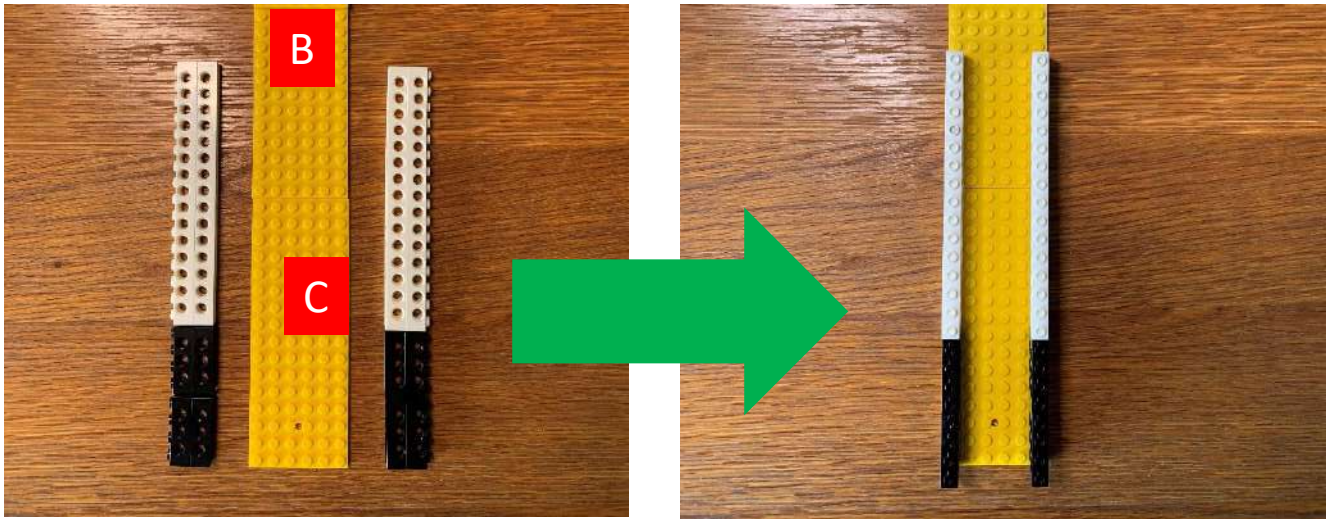
Make sure the bottom plate (C) is the one with hole at the lower half of the plate.

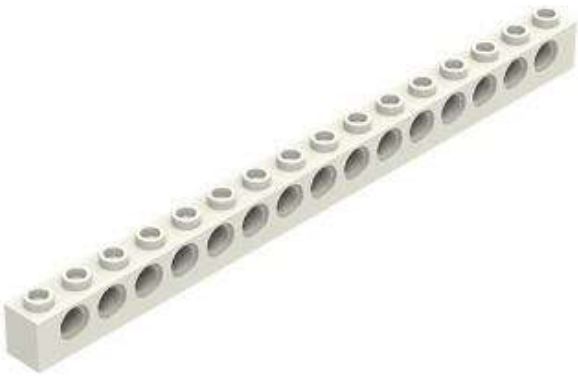
Step 2

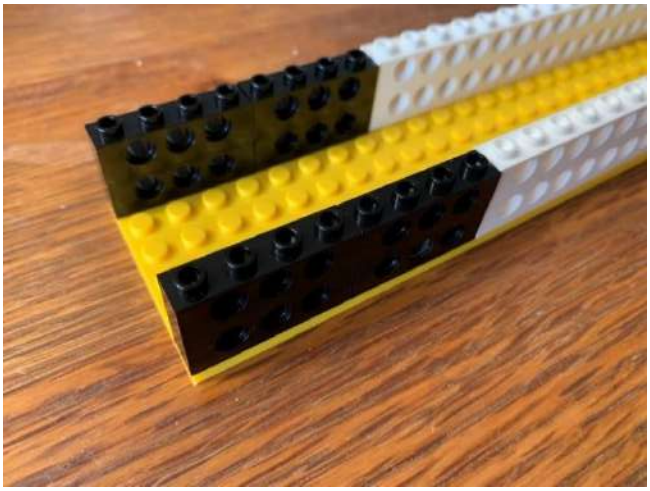
Build spine of the violin.

1/2 size spine

Step 2b – connect B and C





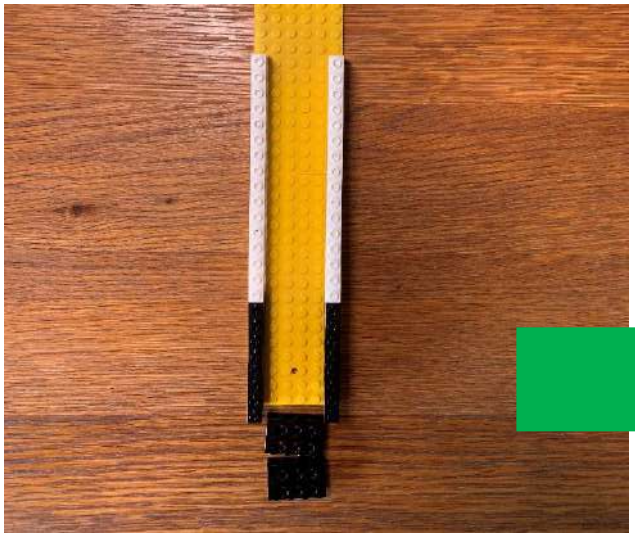


Step 2

Build spine of the violin.

1/2 size spine

Step 2c

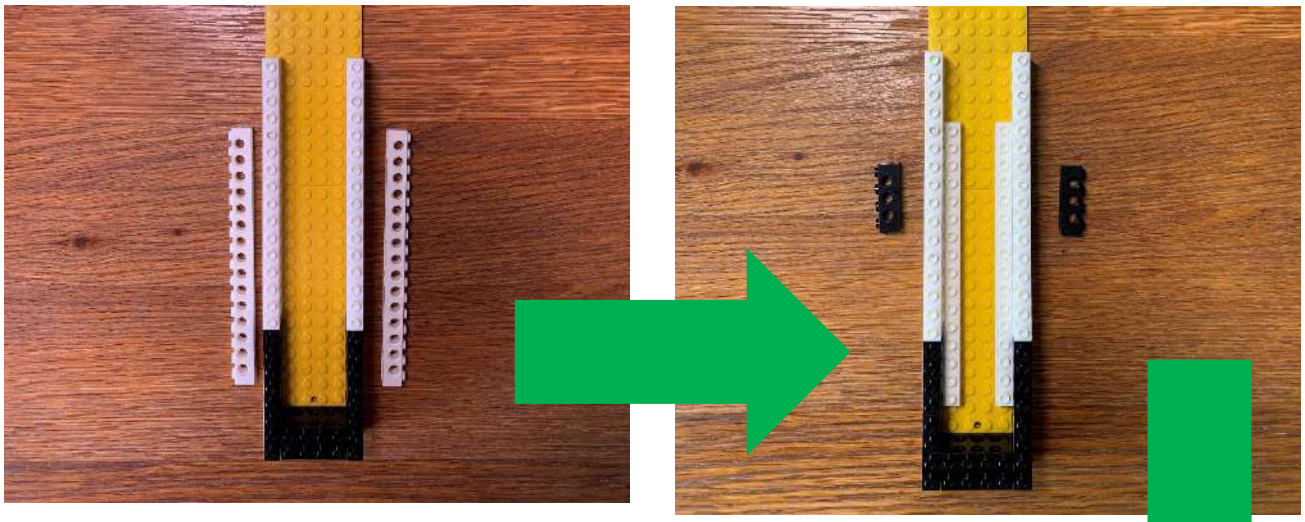


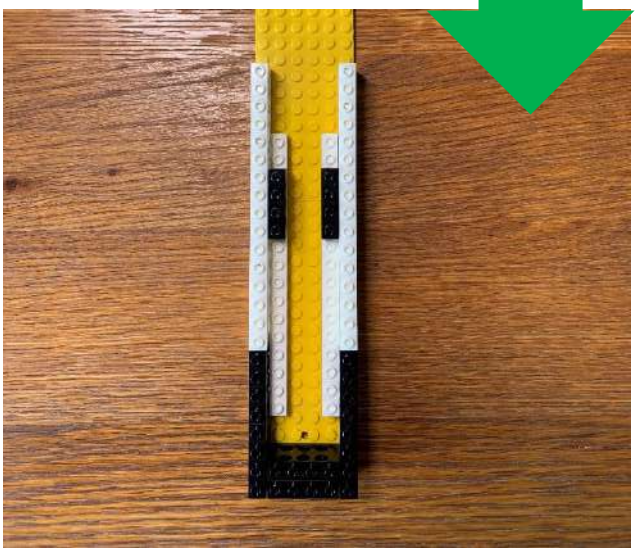
Step 2

Build spine of the violin.

1/2 size spine

Step 2d



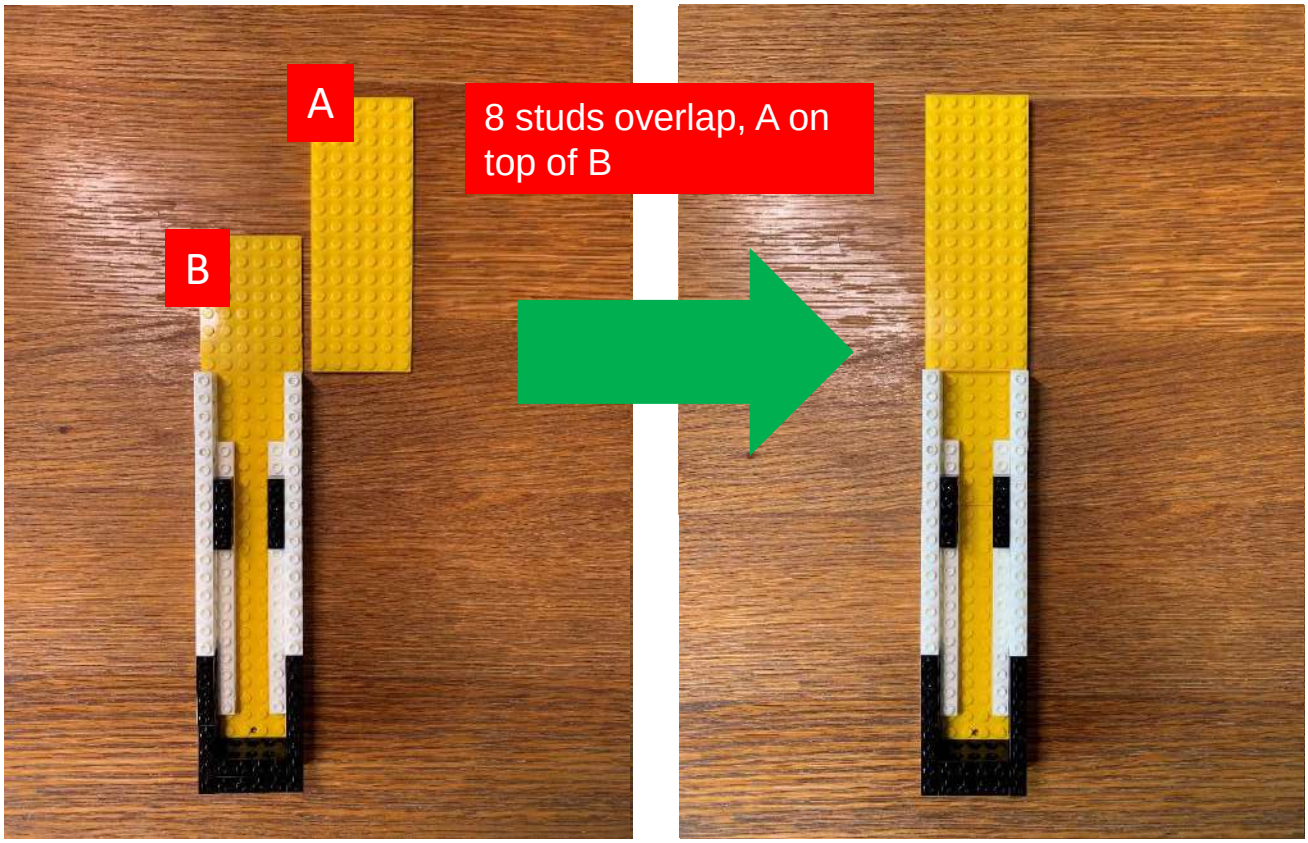


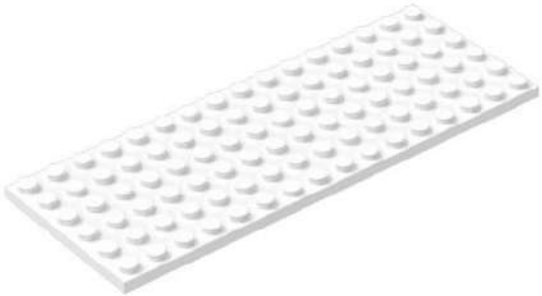
Step 2

Build spine of the violin.

1/2 size spine

Step 2e



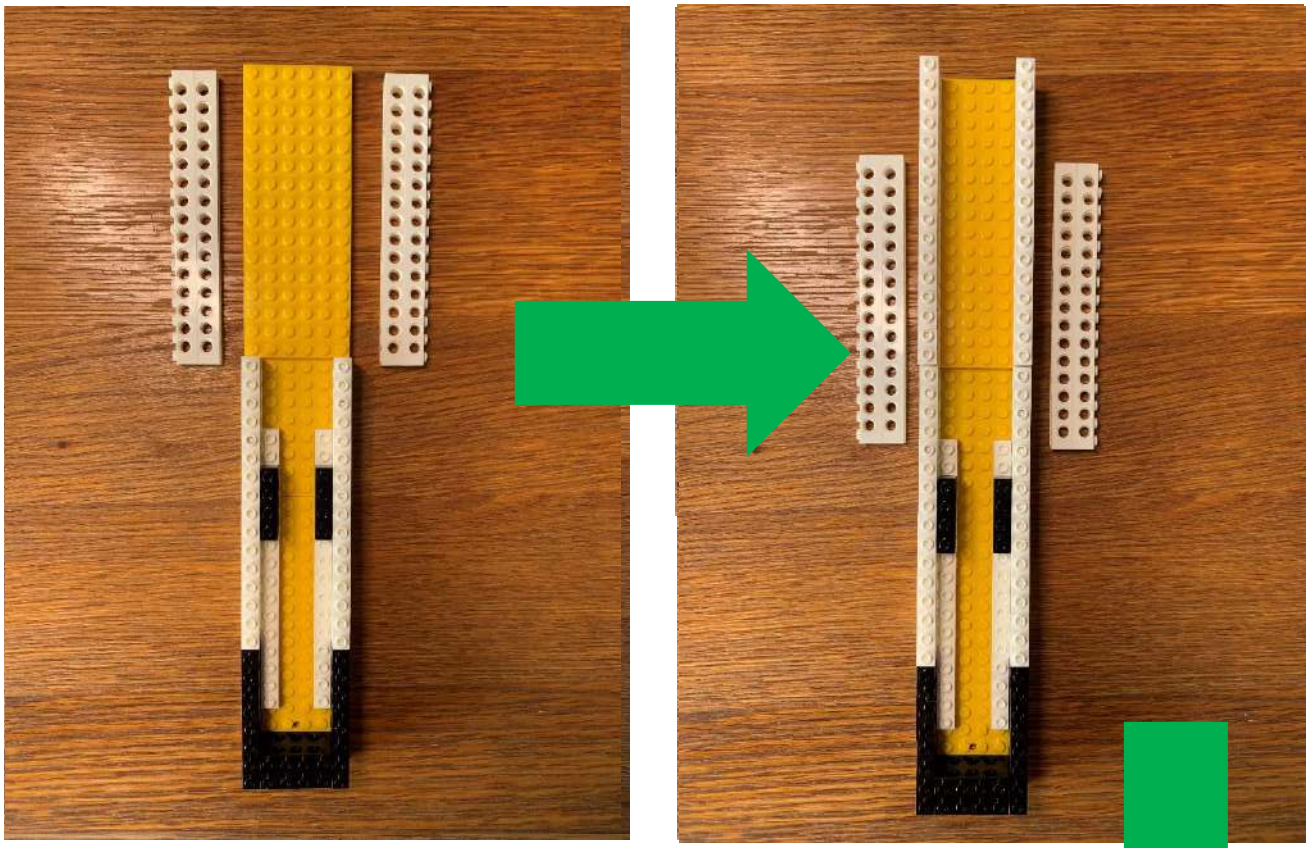


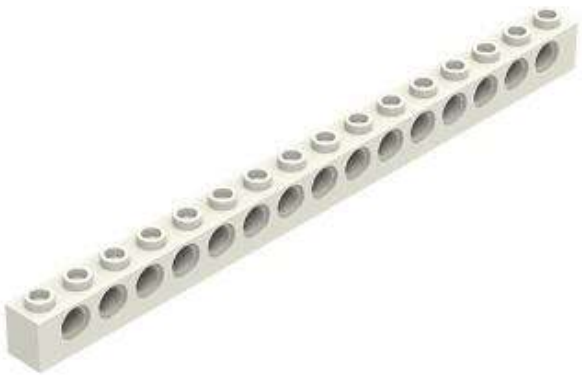
Step 2

Build spine of the violin.

1/2 size spine

Step 2f



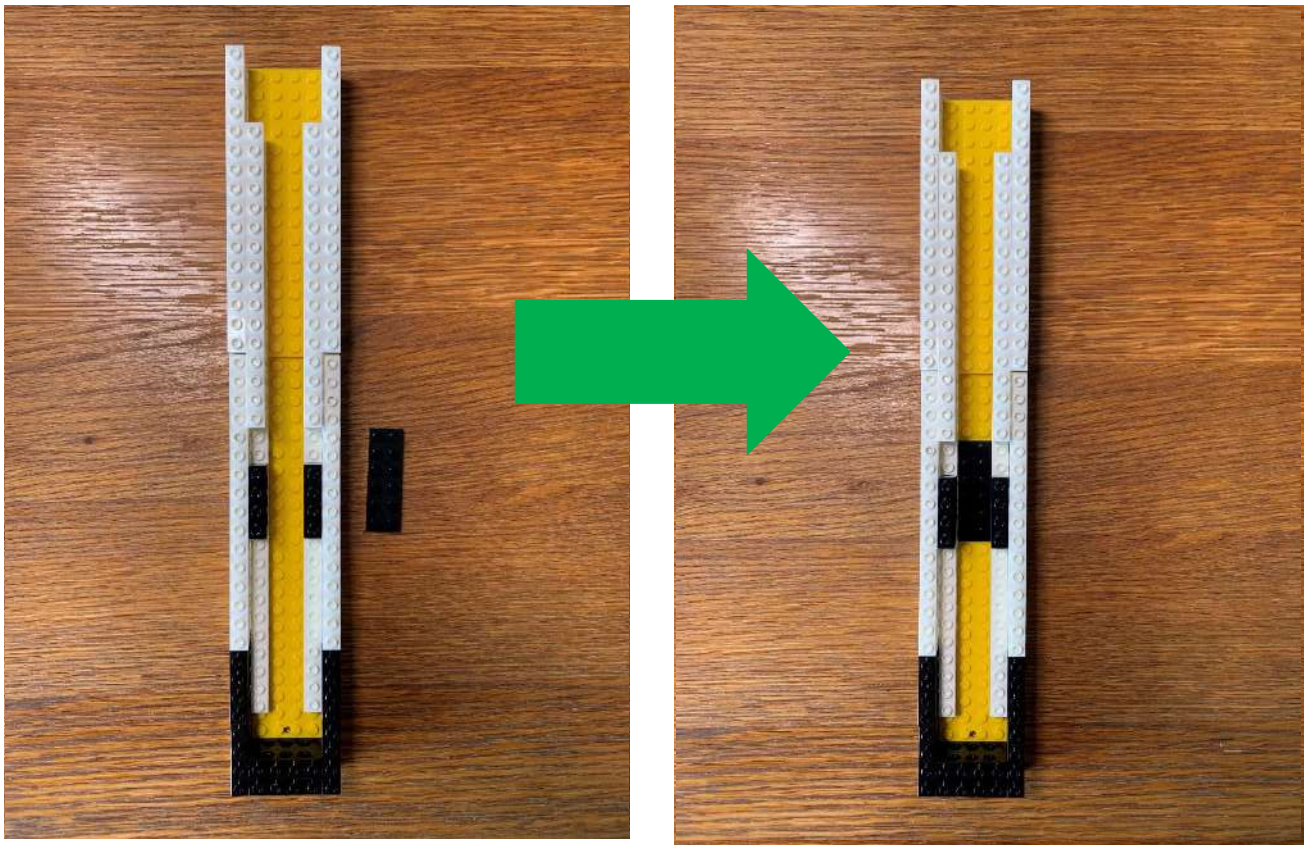


Step 2

Build spine of the violin.

1/2 size spine

Step 2g

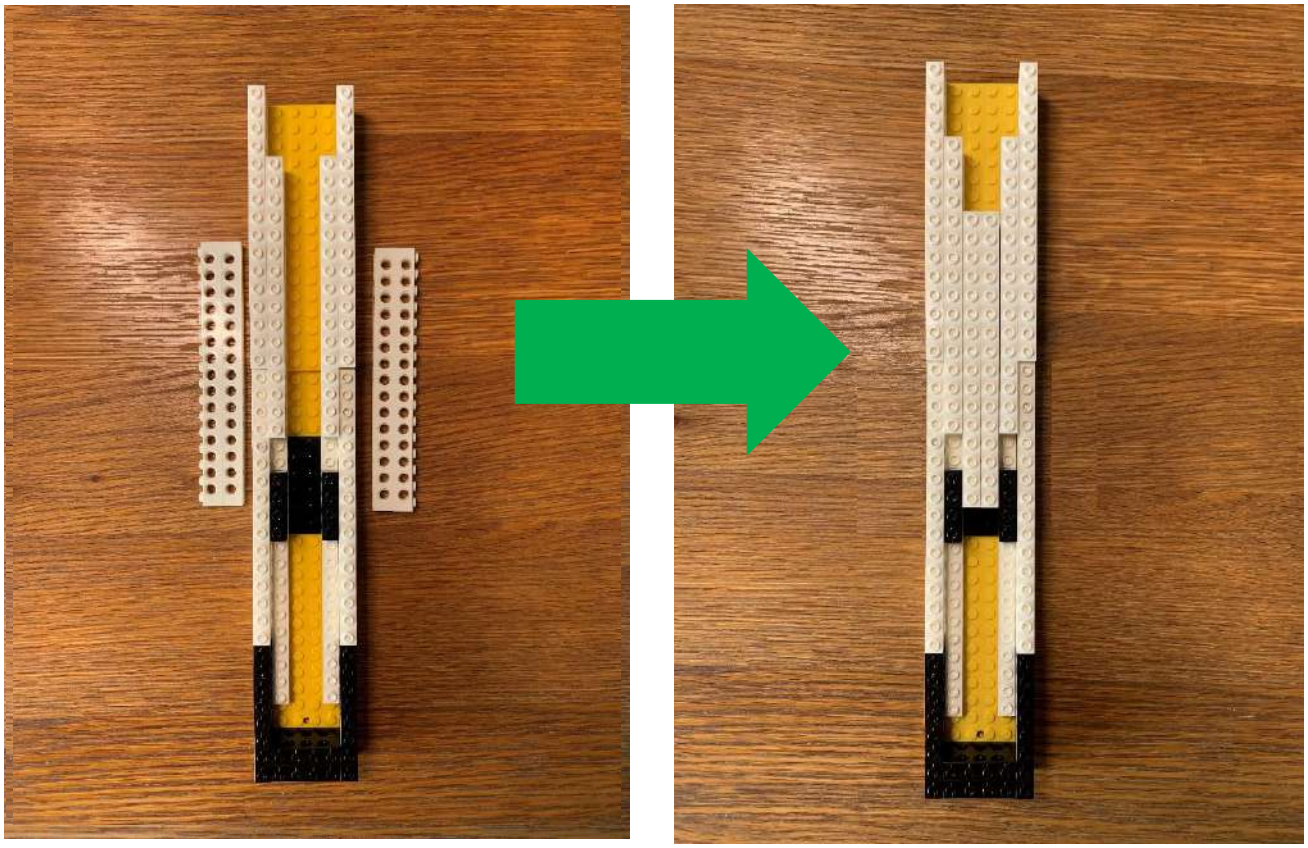


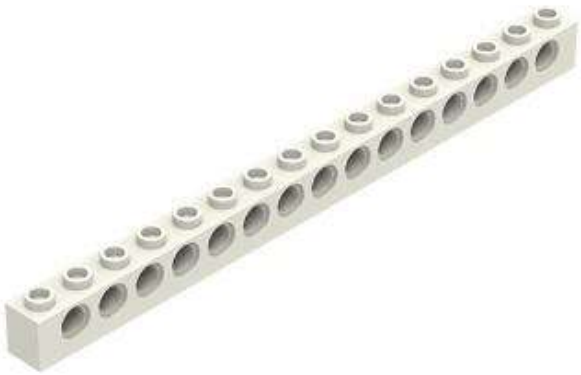
Step 2

Build spine of the violin.

1/2 size spine

Step 2h



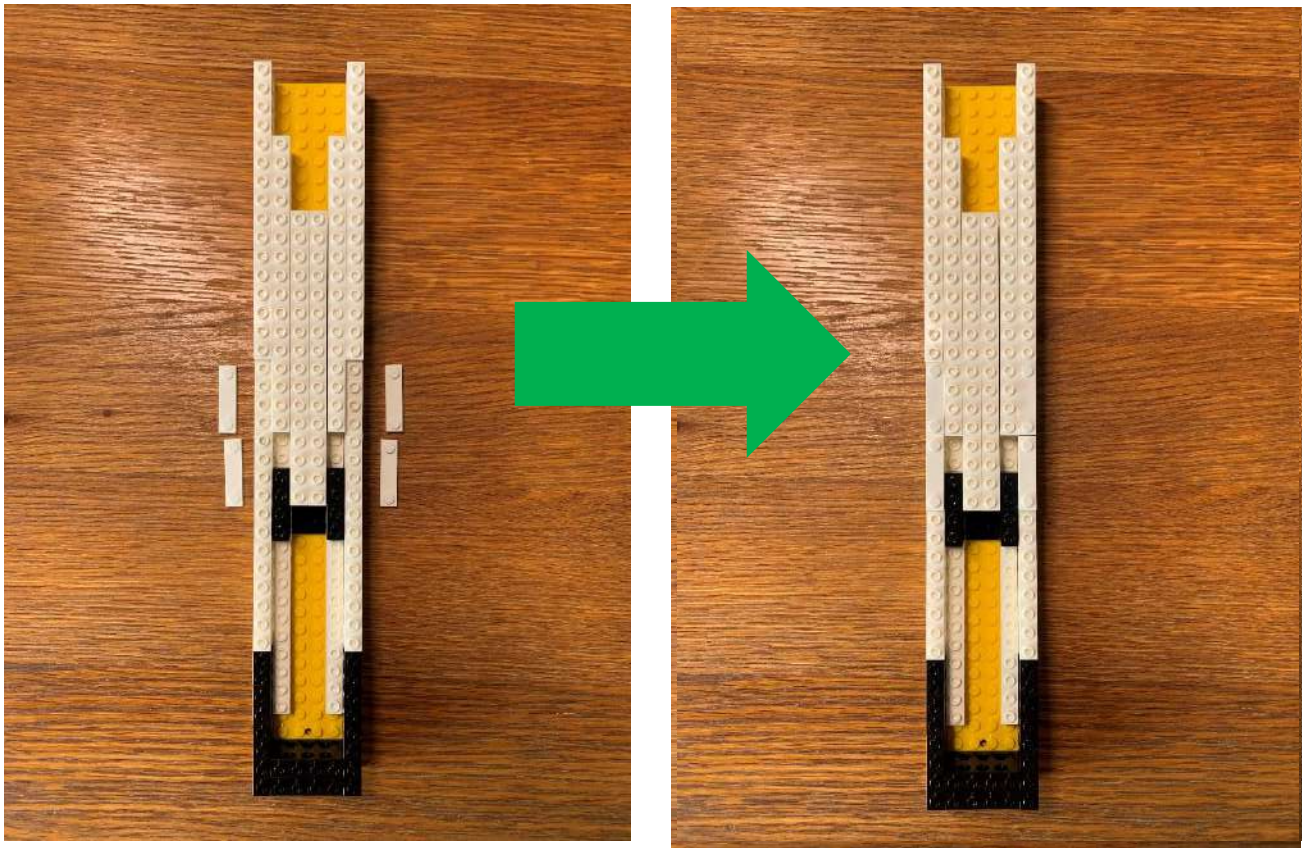


Step 2

Build spine of the violin.

1/2 size spine

Step 2i

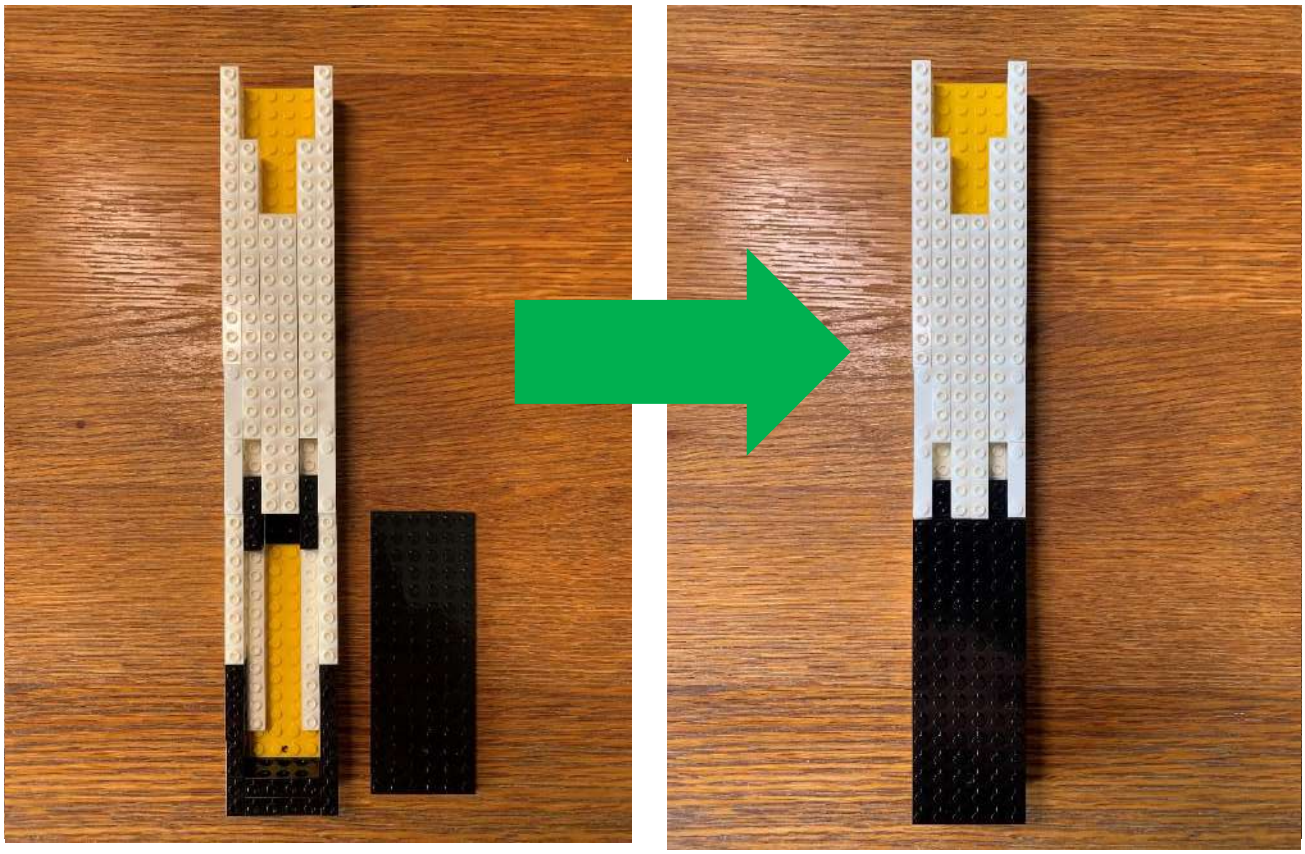


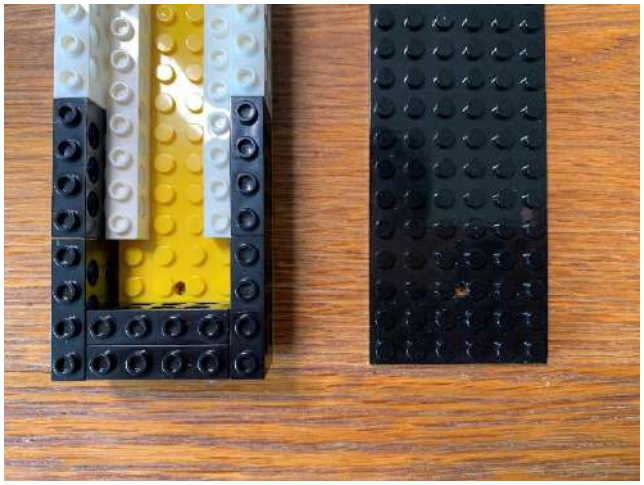
Step 2

Build spine of the violin.

1/2 size spine

Step 2j





Note:

Make sure the bottom plate is the one with hole at the lower half ot the plate.

Step 2

Build spine of the violin.

1/2 size spine

Note:

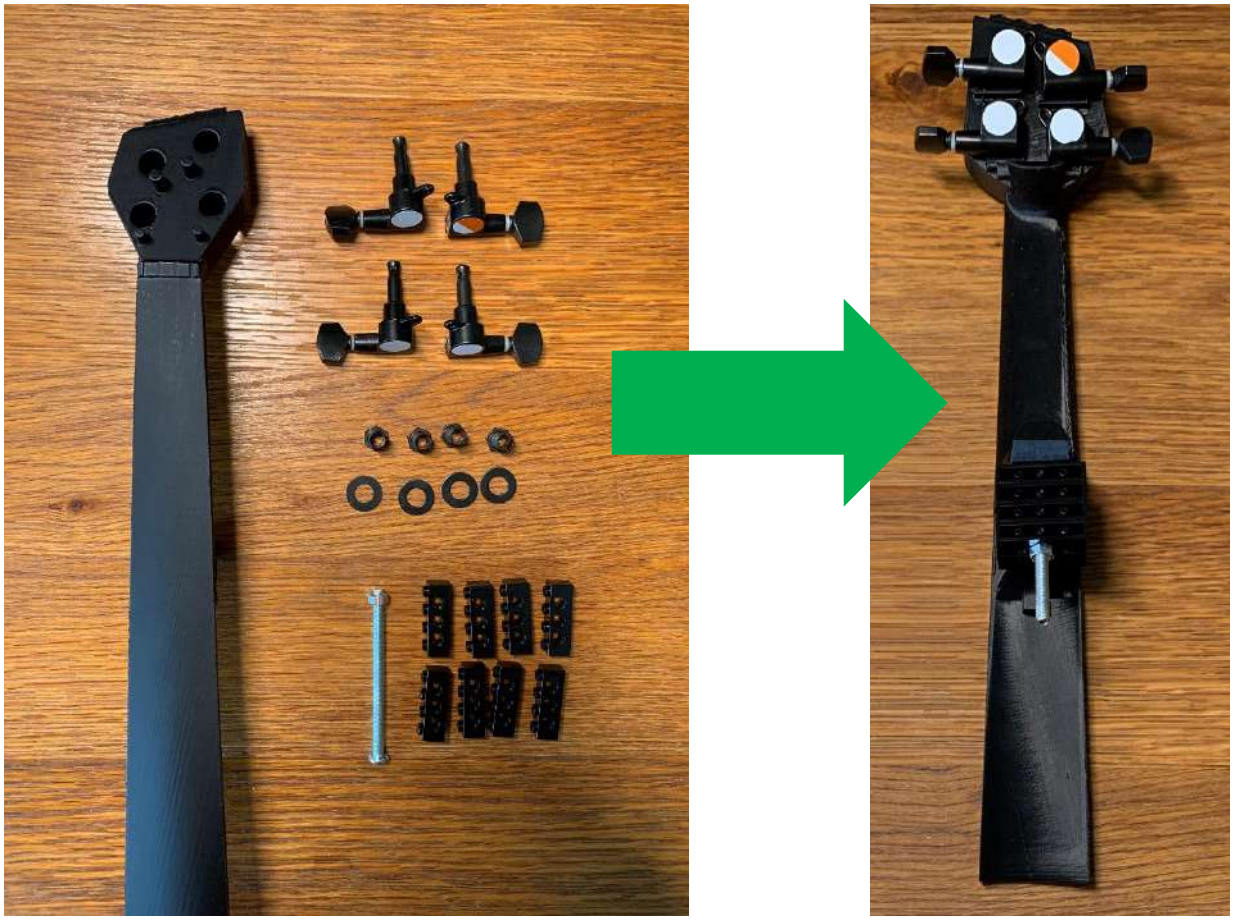
1/2 size spine is done, please go to page 39 for step 3

Step 3

Build neck and tuning pegs of the violin.

Note:

In some packages, you may find the neck and tuning pegs already integrated. In that case, you can skip step 3.



Step 3

Build neck and tuning pegs of the violin.

Step 3a – install pegs

Plug the 4 tuning pegs exactly the same as the image demonstrated below. Push the peg inwards hard to minimize the gap in between surfaces.

Step 3

Build neck and tuning pegs of the violin.

Step 3b – install pegs

Install washers and nuts.
Tighten the nut.

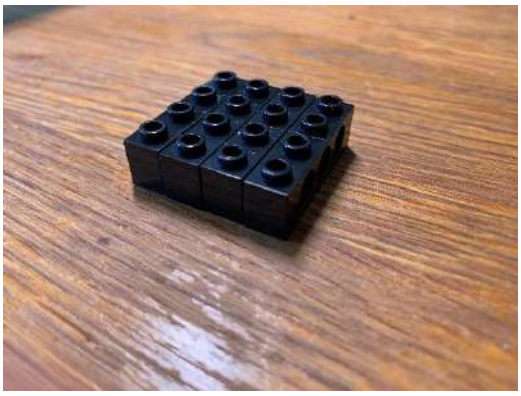
Note:

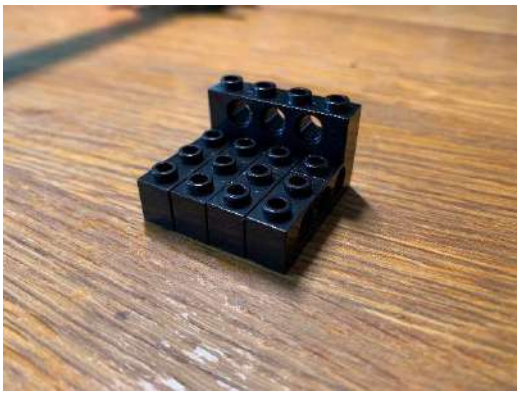
This tool maybe helpful when you tighten the nut.

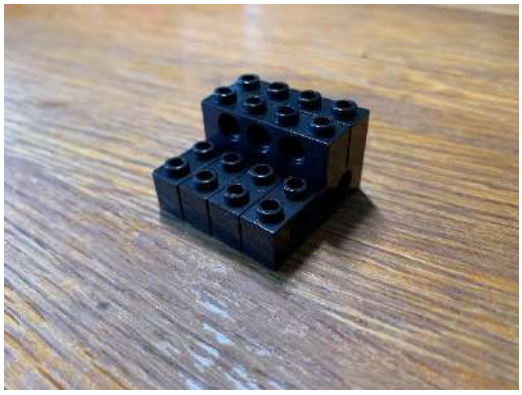
Step 3

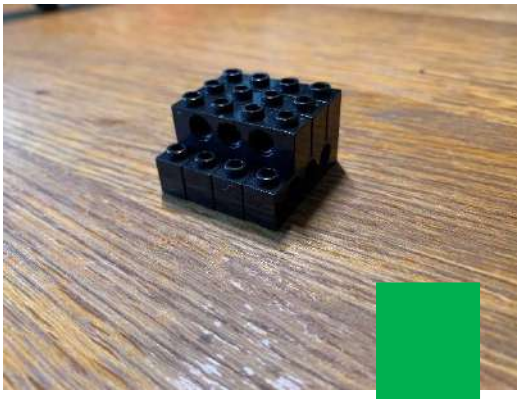
Build neck and tuning pegs of the violin.

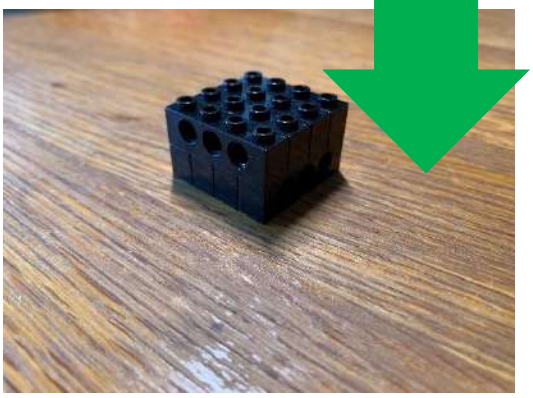
Step 3c – building a square block for attachment







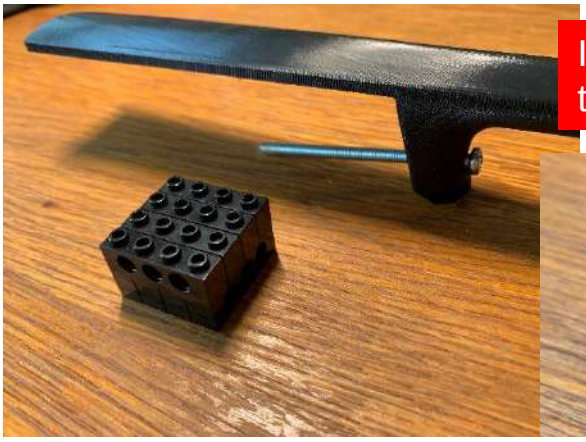




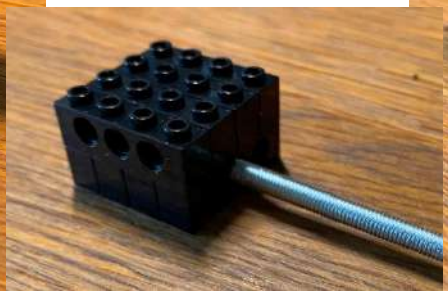
Step 3

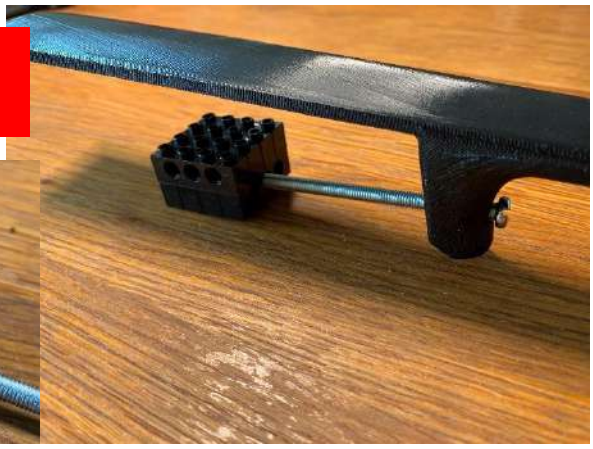
Build neck and tuning pegs of the violin.

Step 3d – attach with screw

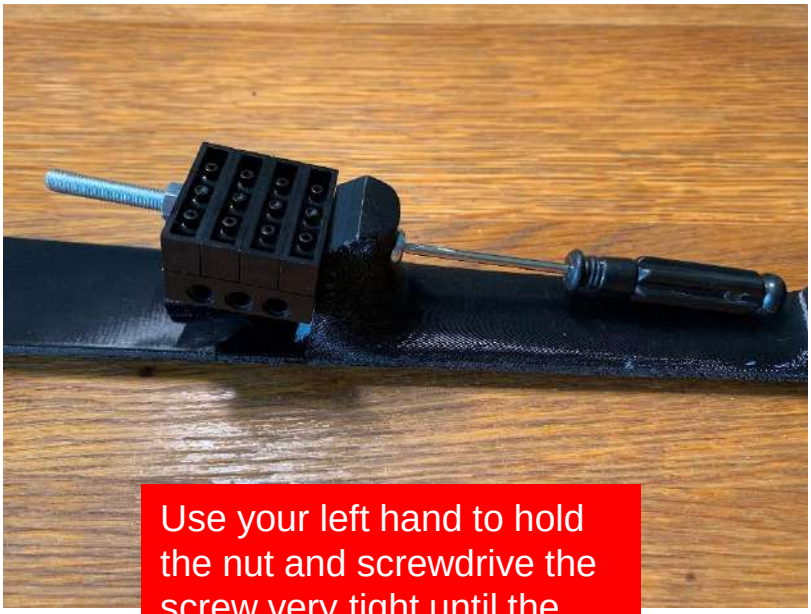


Insert the screw into the lower hole





Put on the nut



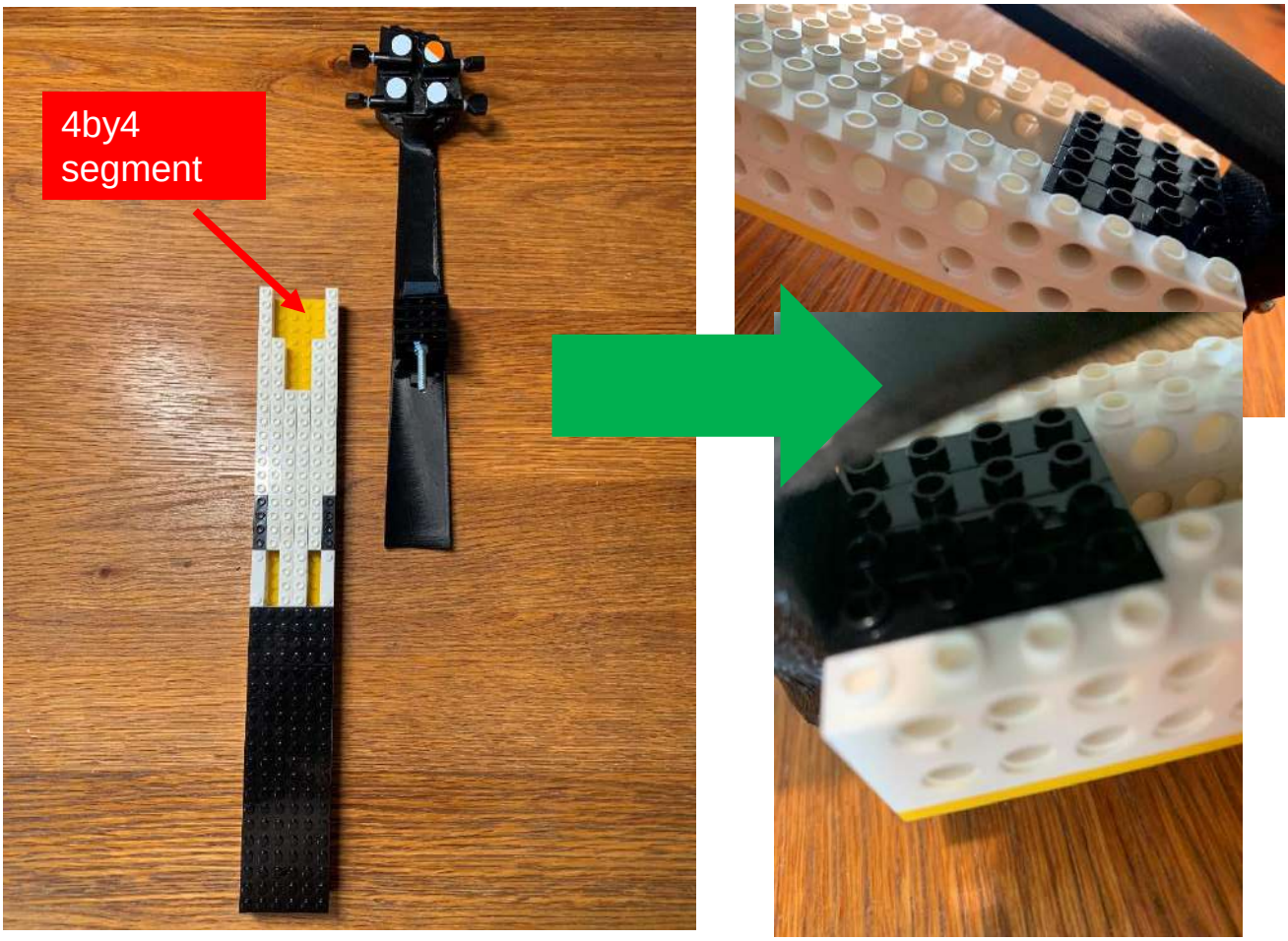
Use your left hand to hold the nut and screwdrive the screw very tight until the square block is firmly attached with violin neck.

Step 4

Attach violin neck to violin spine

Step 4a

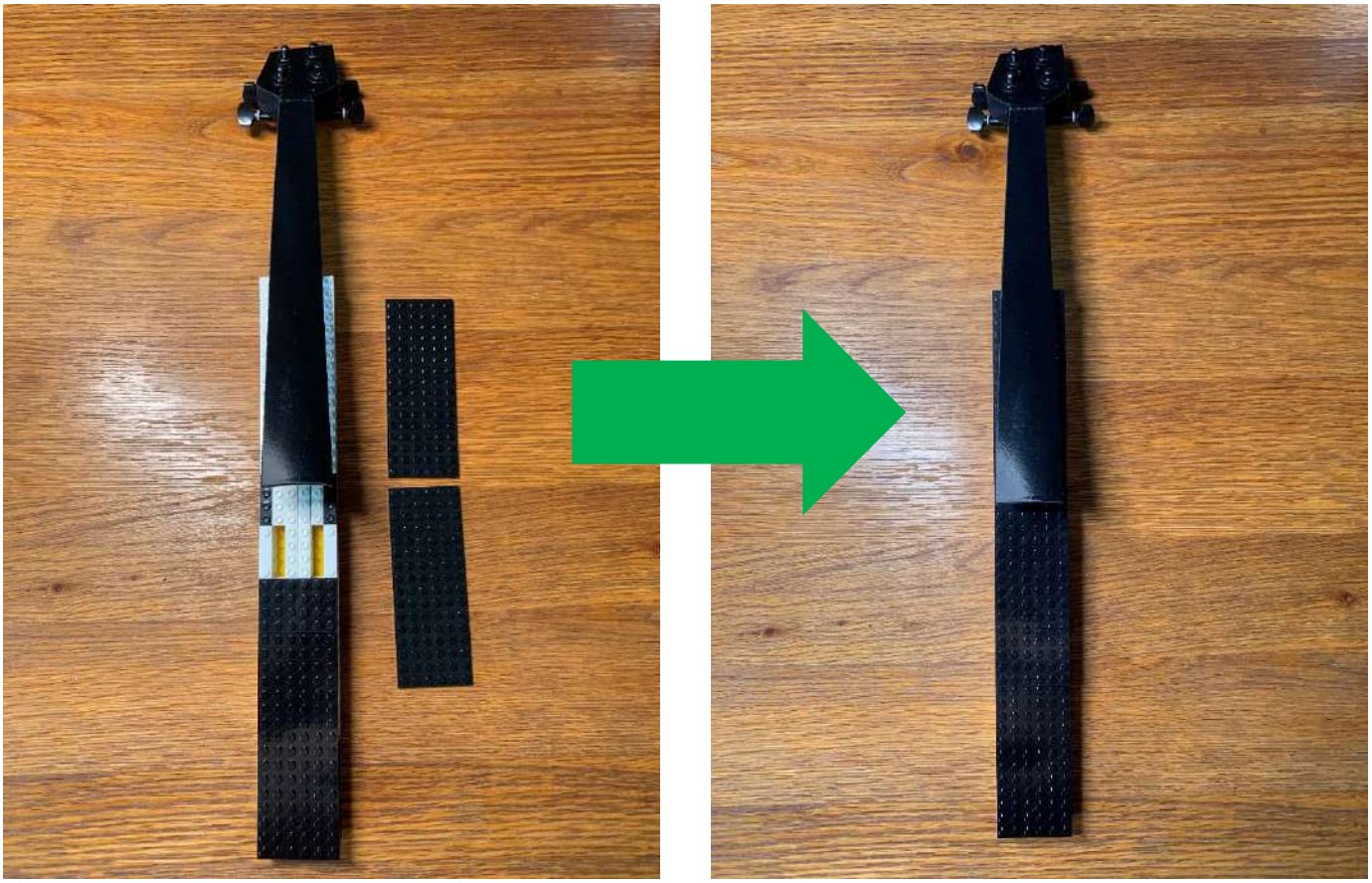
Put the square block of the violin neck into the 4 by 4 segment on top of the violin spine.

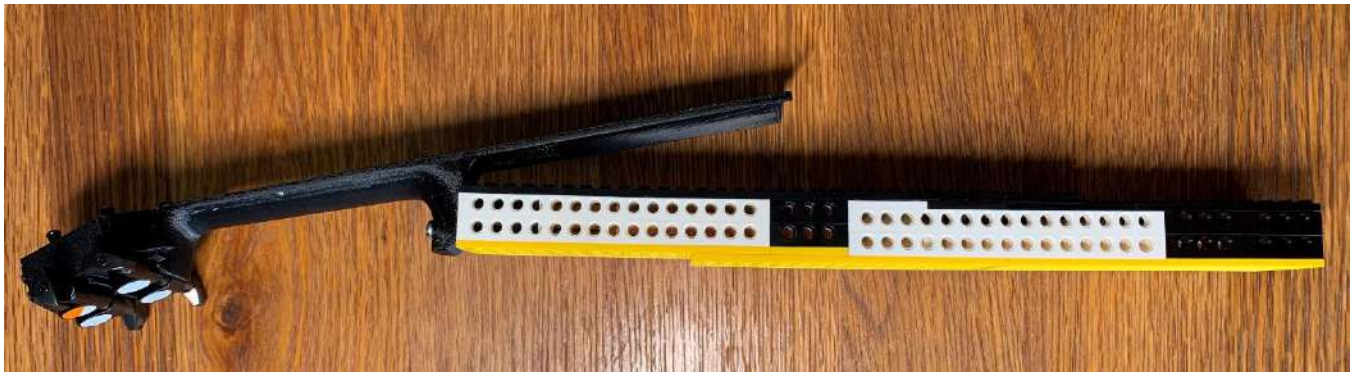


Step 4

Attach violin neck to violin spine

Step 4b



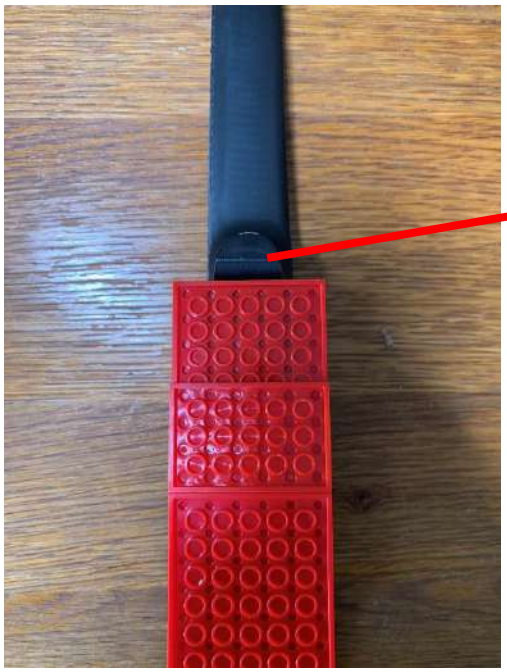


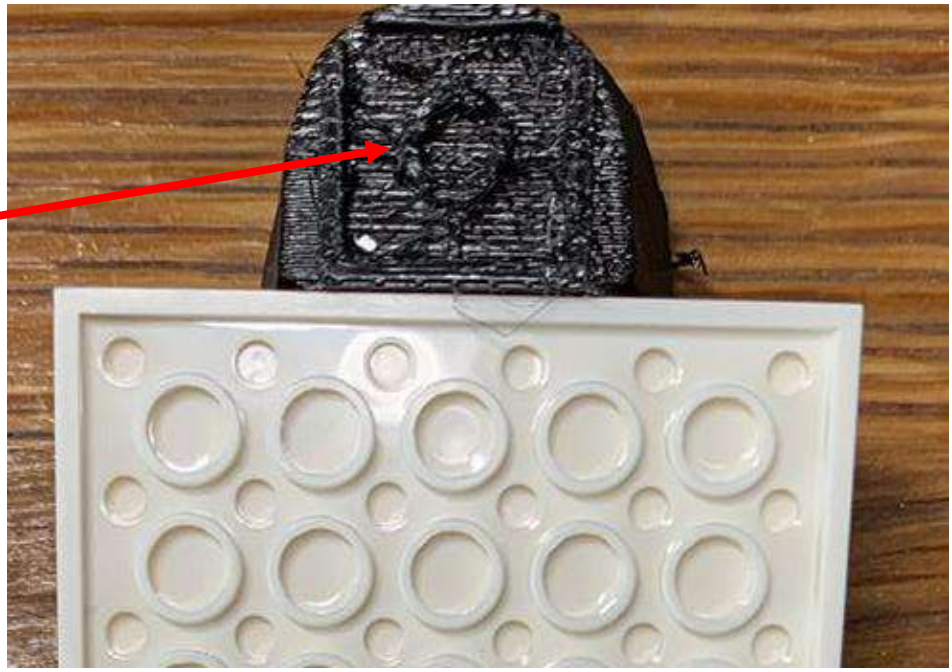
Step 4

Lock violin neck to violin spine

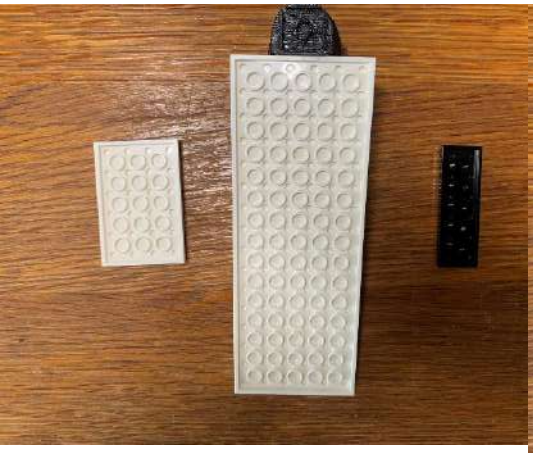
Step 4c – optional

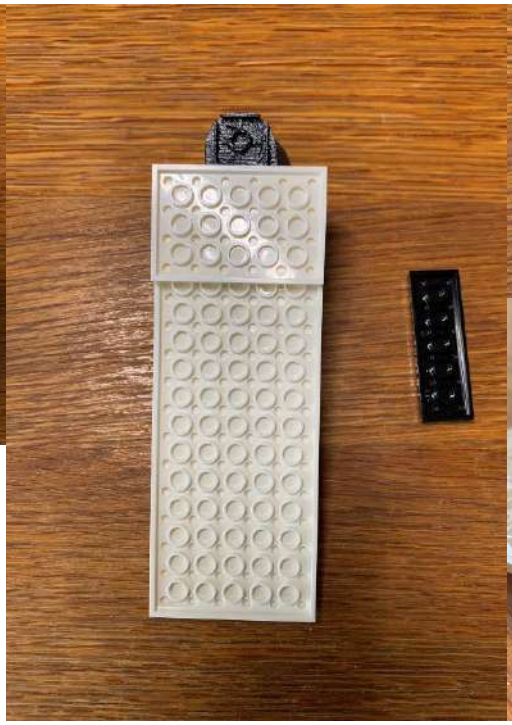
In some versions of products, you may find the end of violin neck has 2*2 Lego plate

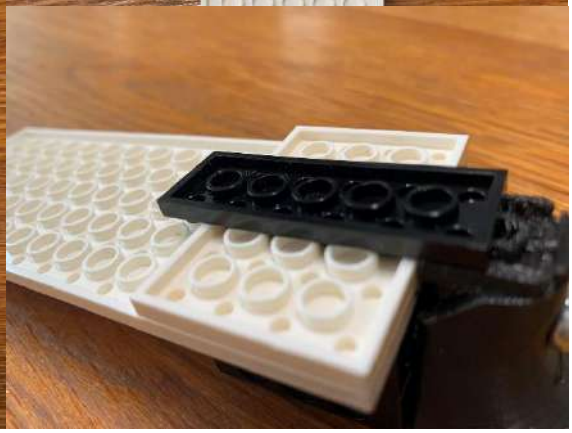




In case of such, you can futher lock the neck and violin body as follow

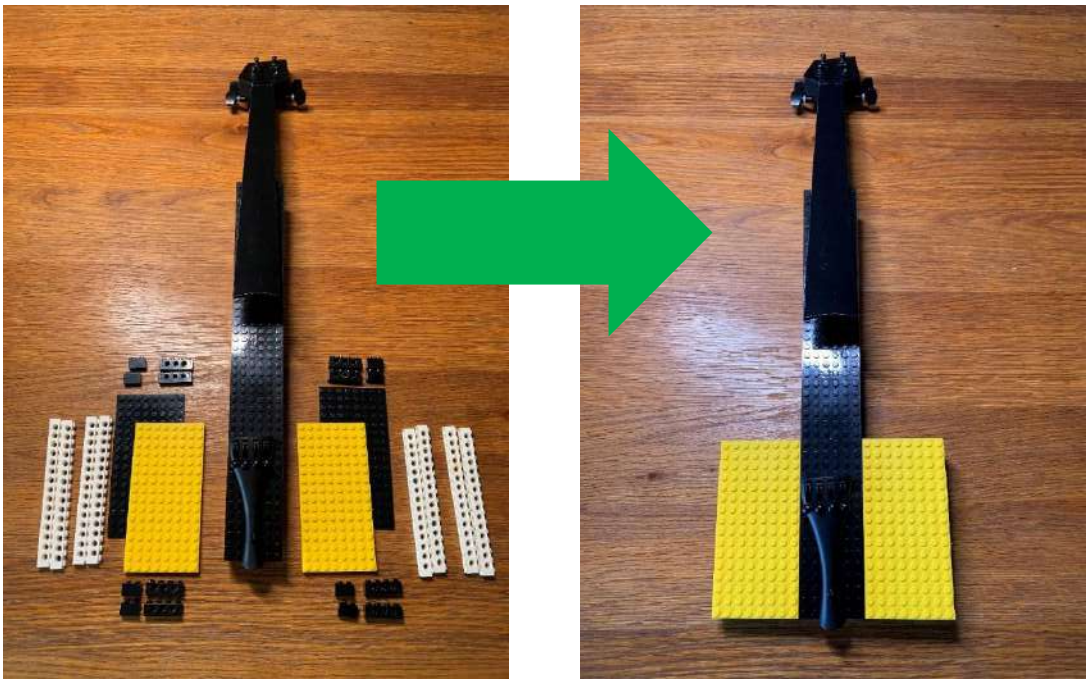




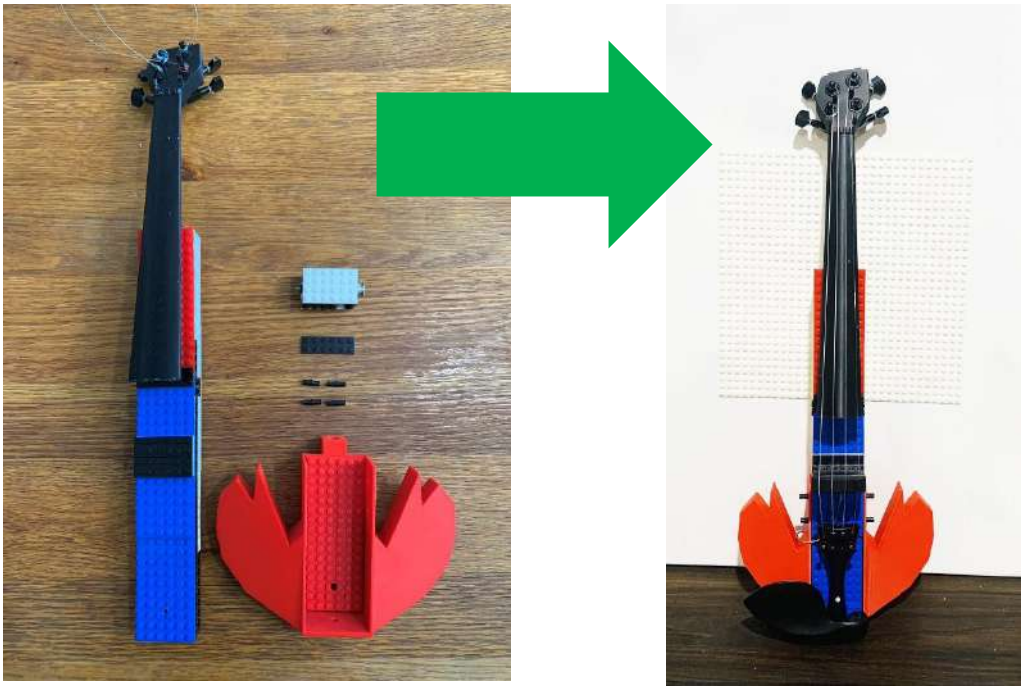


Build sidebox ➡ Install tailpiece ➡ Bridge

You product package includes brick sidebox parts, in case you want to implement it, start from the next page.



As an add-on, Fire sidebox or Thunder sidebox may be included in your product package, In case you want to implement it, start from page 70.

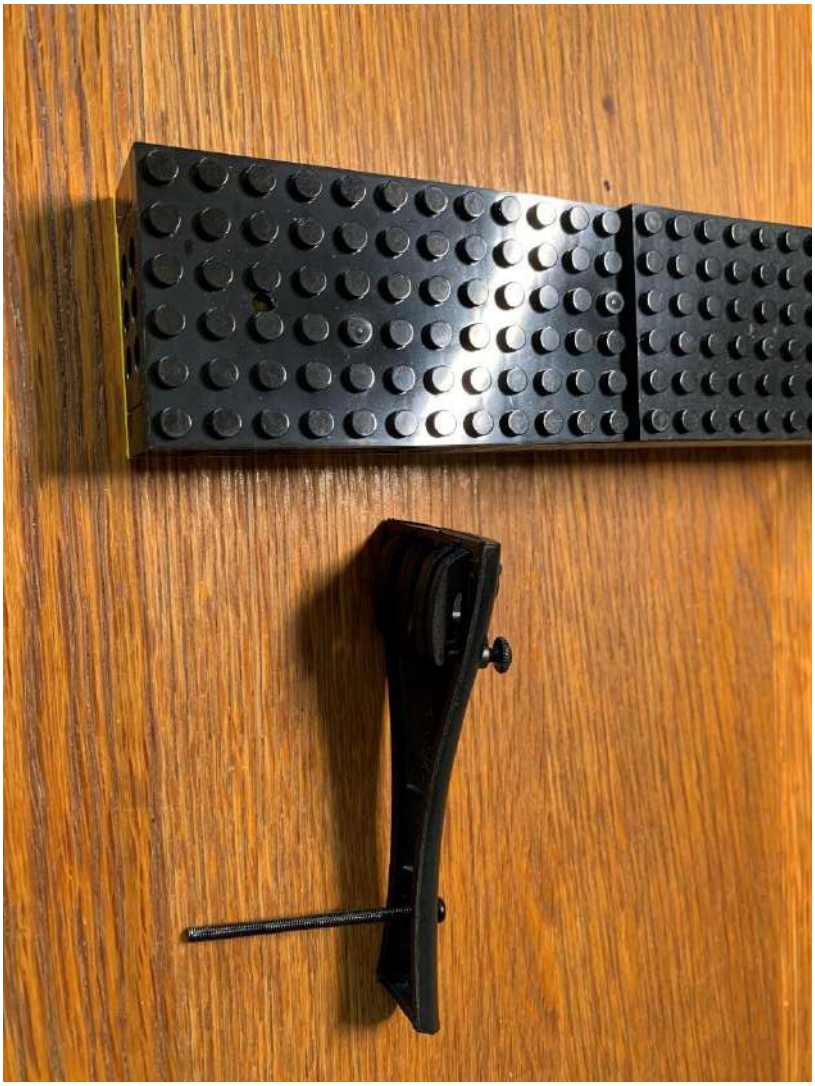


Step 5

Attach tailpiece with violin spine

Step 5a

Put the screw into the hole on tailpiece.

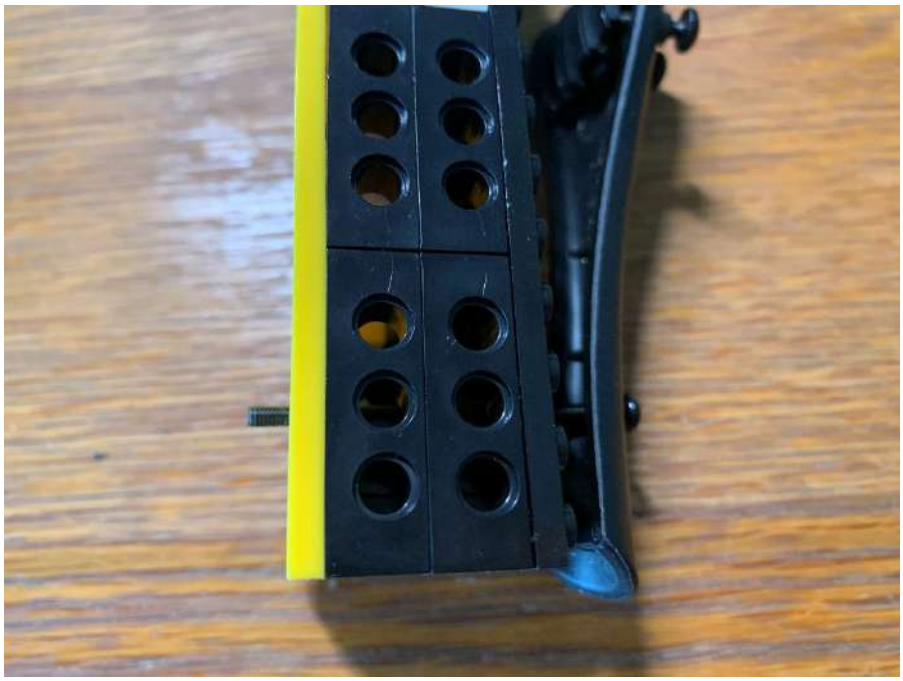


Step 5

Attach tailpiece with violin spine

Step 5b

Put the screw with tailpiece into the hole located at bottom of the violin spine.



Step 5

Attach tailpiece with violin spine

Step 5c

Put the round part through the screw and nut on top of them

Note:

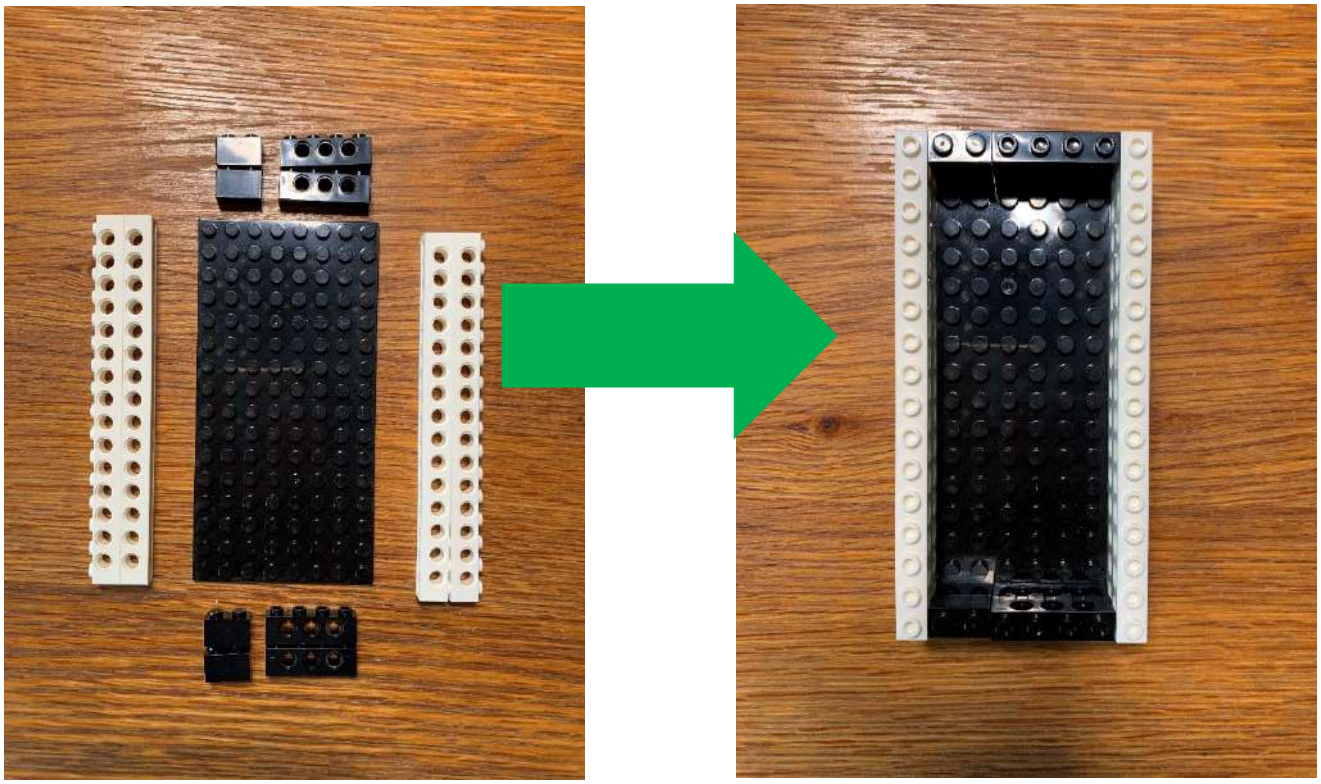
Please leave some space in between tailpiece and top surface.

You should be able to move the tailpiece and lift it up with some angle.

Step 5

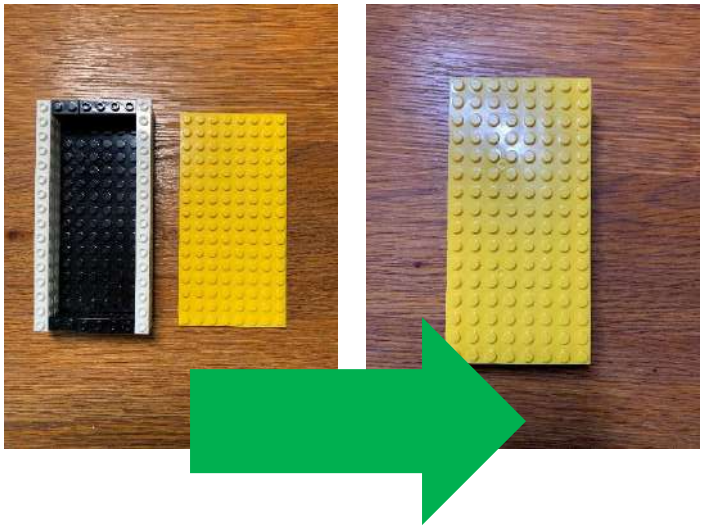
Attach side boxes to violin spine

Step 5d



Note:

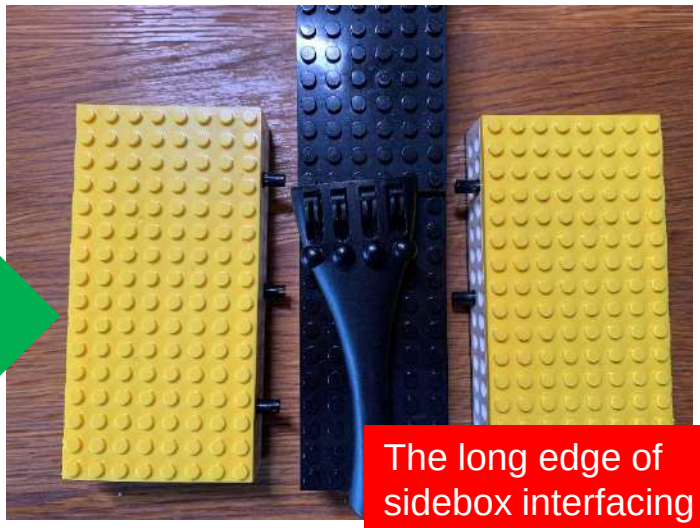
Repeat the same process again to build another side box.

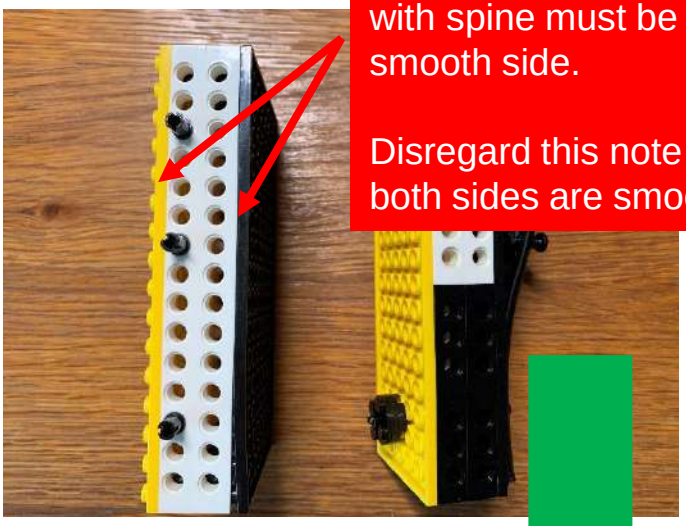


Step 5

Attach side boxes to violin spine

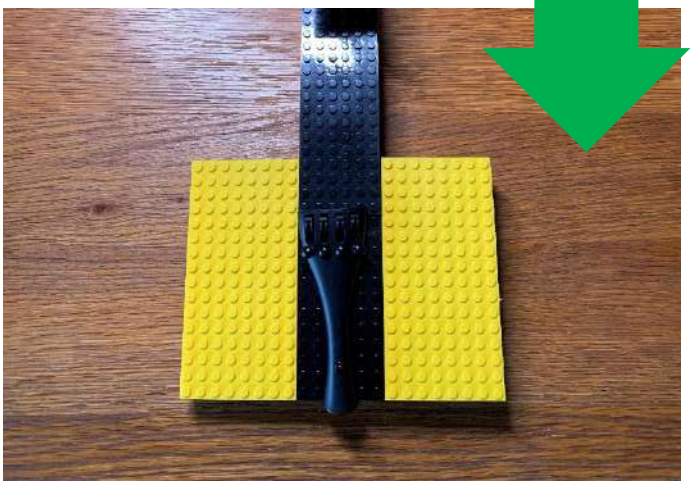
Step 5e – attach side box





The long edge of sidebox interfacing with spine must be the smooth side.

Disregard this note if both sides are smooth



Note:

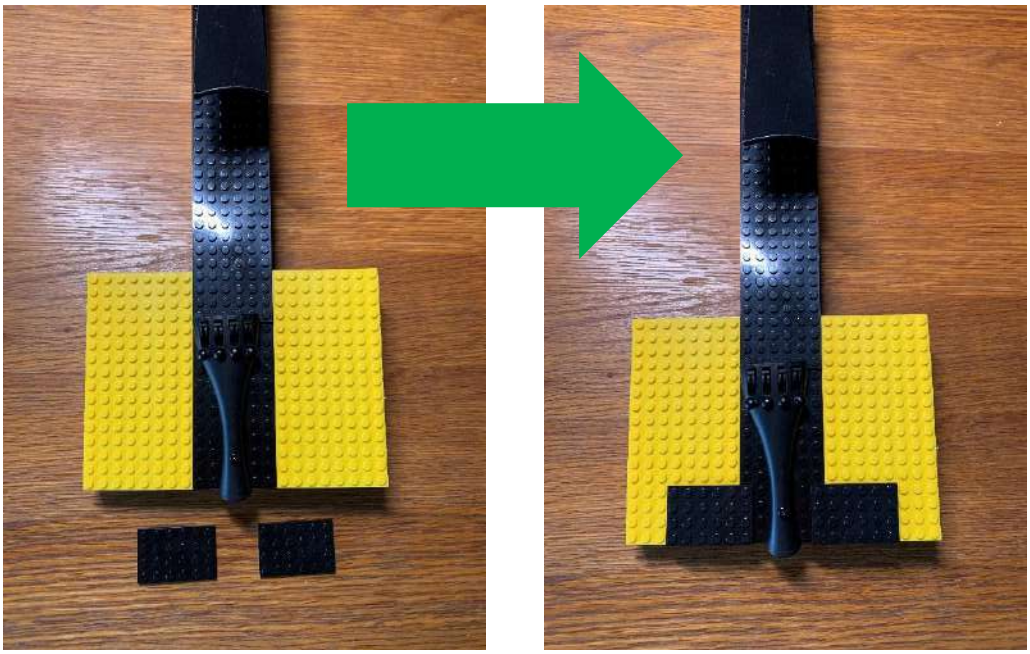
Put three sticks into the holes on each side of the side box, and then plug the box into the spine. Adjust position of the stick in case it can not be pushed in.

Make sure the bottom edge is aligned to the spine.

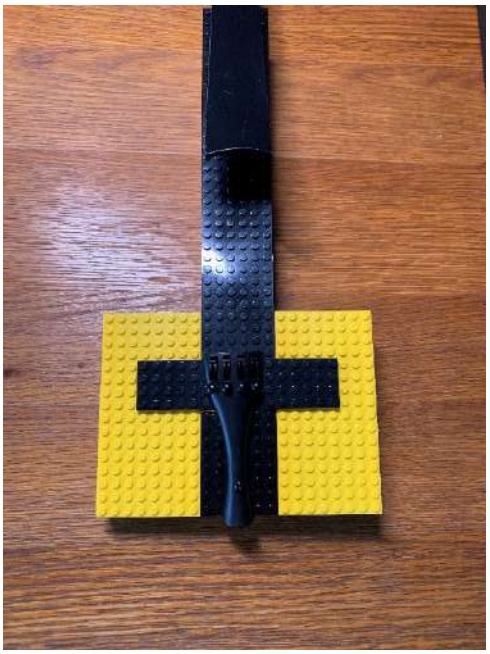
Step 6

Lock side boxes to violin spine

Step 6a – front lock option 1



option 2

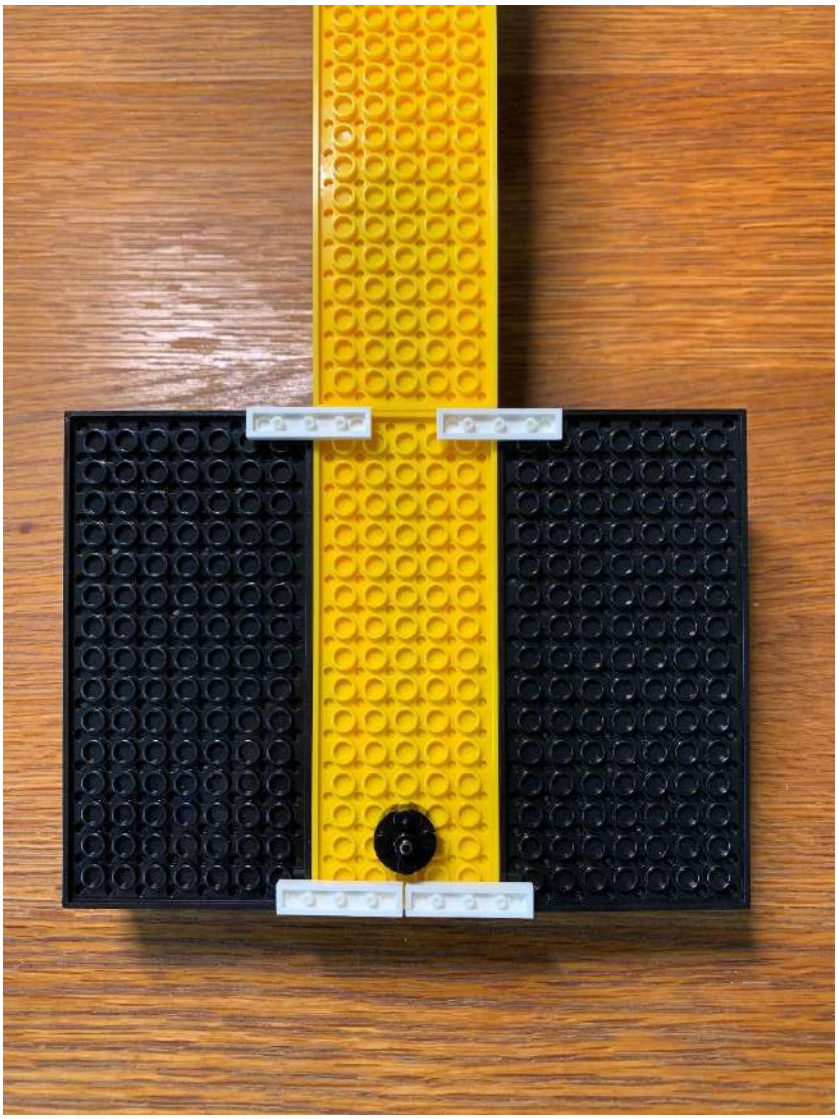


option 3 – use other color plate to lock

Step 6

Lock side boxes to violin spine

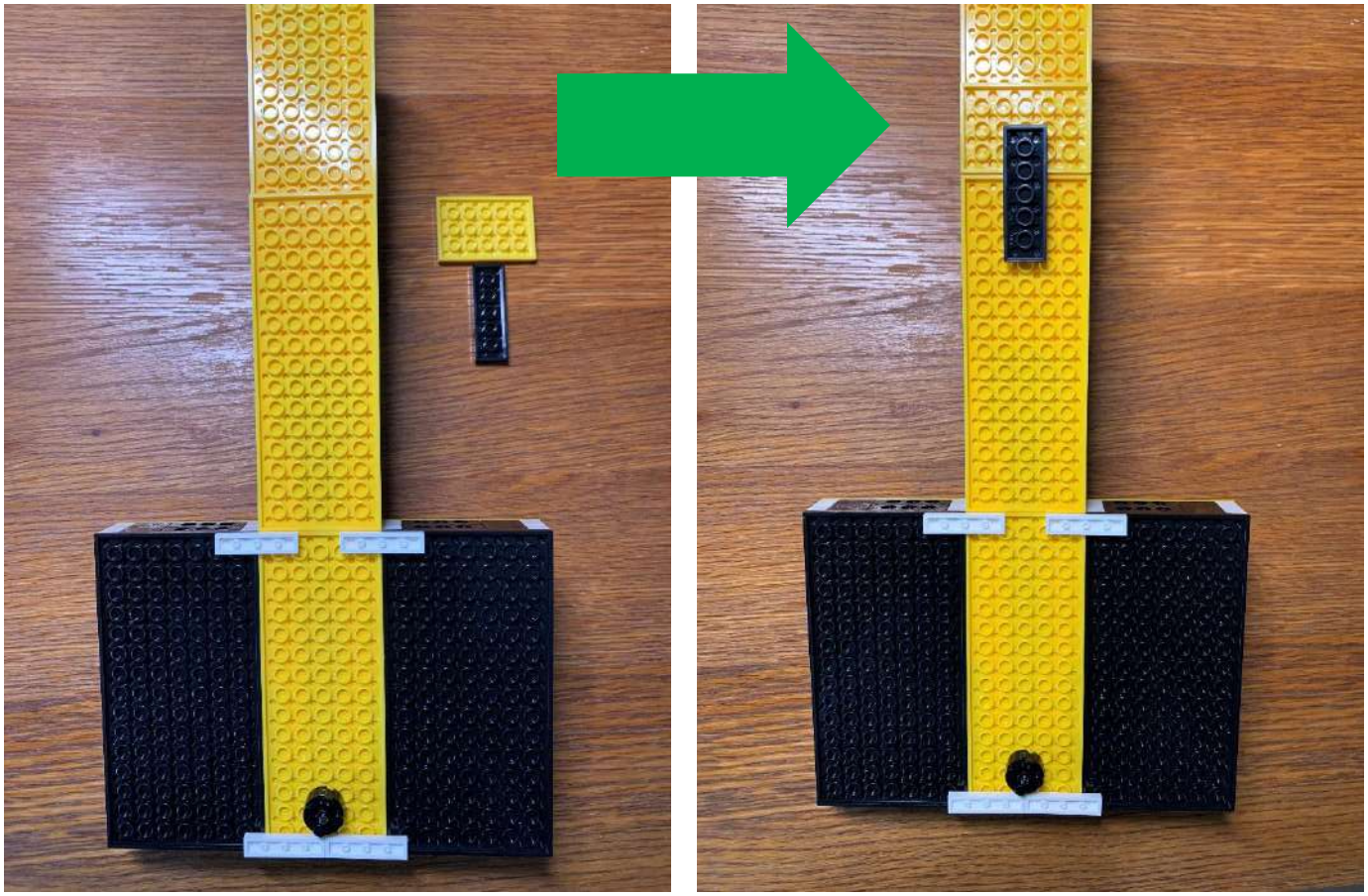
Step 6b – back lock



Step 6

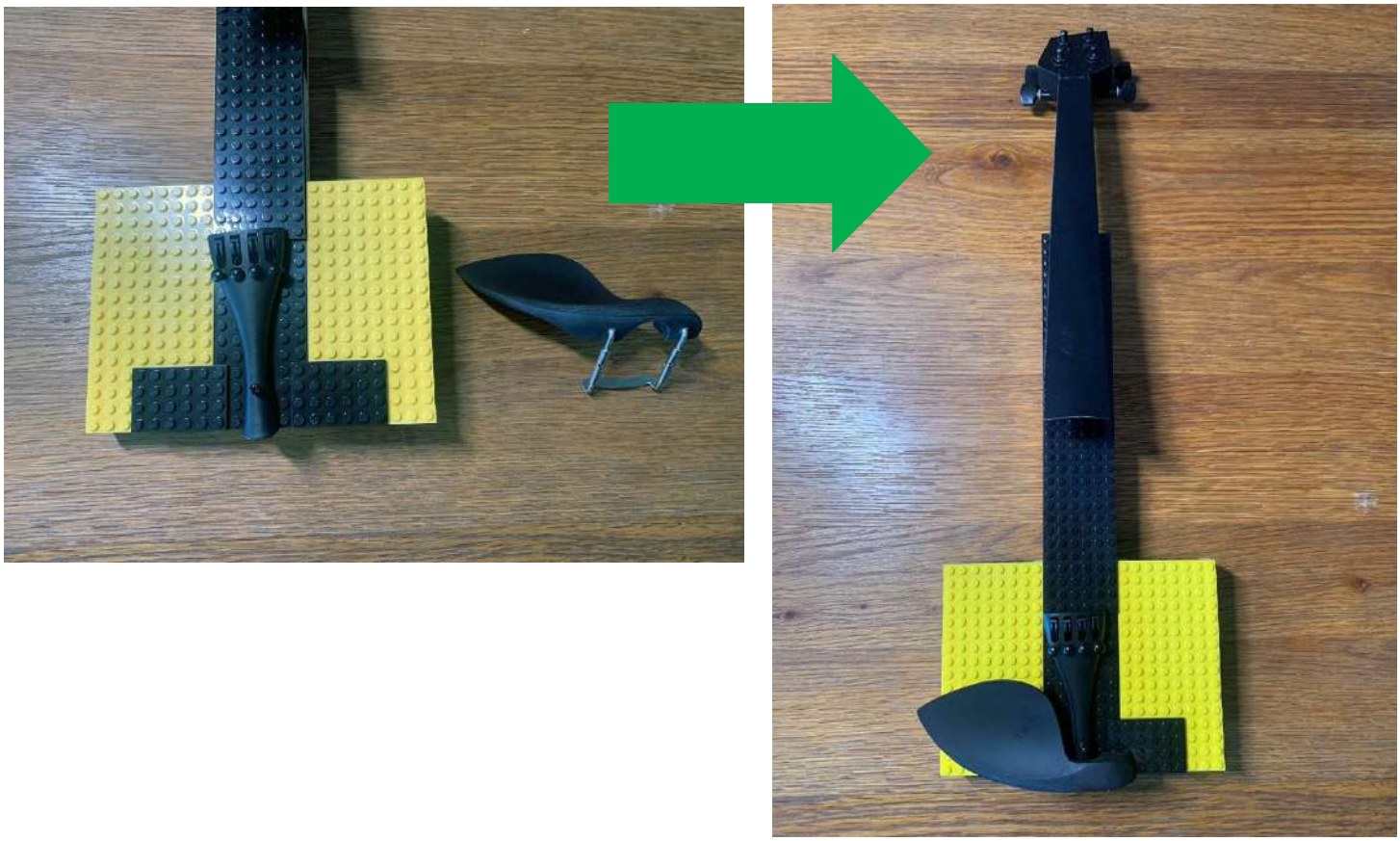
Lock side boxes to violin spine

Step 6c – back lock



Step 7

Attach chinrest to violin body

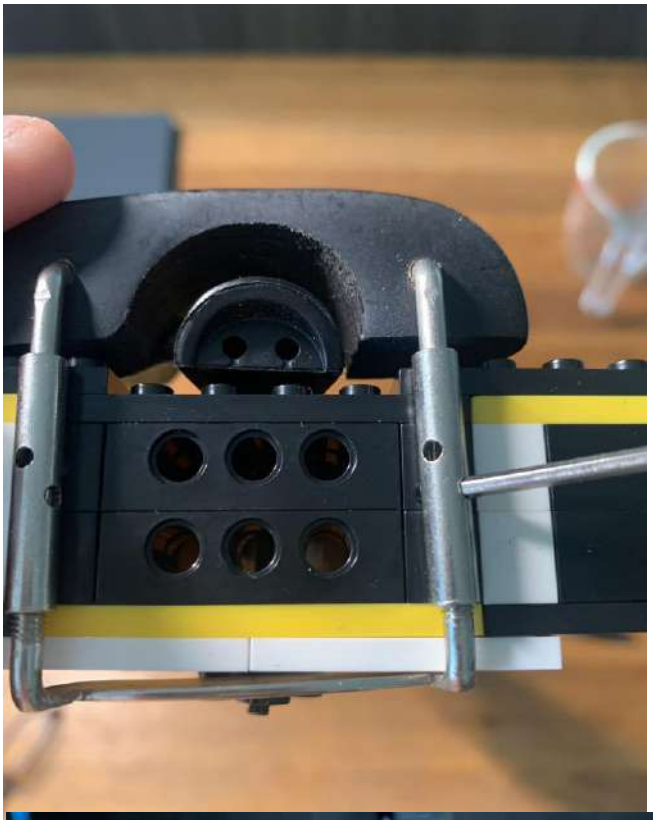


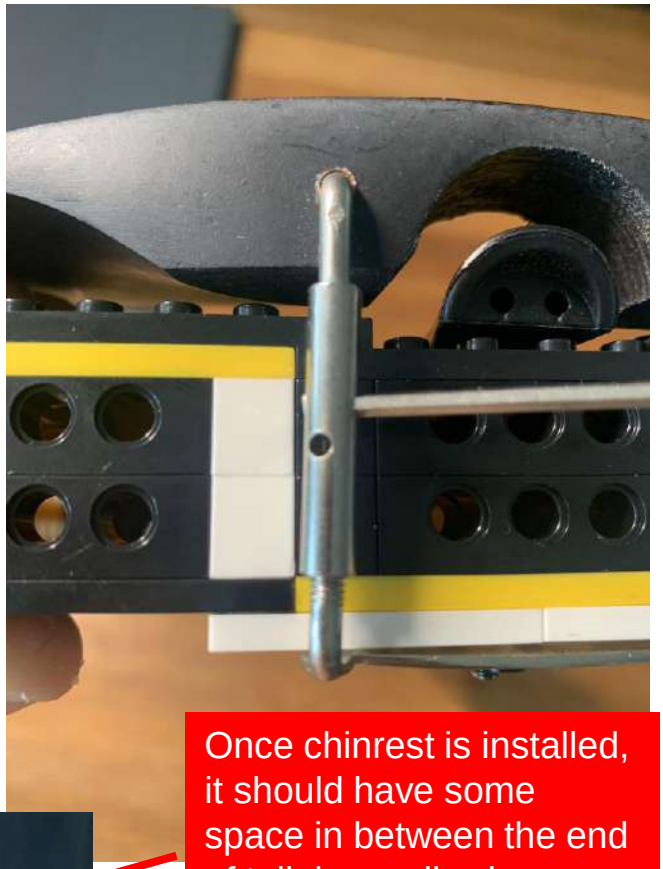
Step 7

Attach chinrest to violin body

Step 7a

Place the chinrest to the bottome of the spine, align in the middle.
Use the small screwdriver, put one side in the hole and rotate clock-wise.
Change to another hole and do the same until it is very tight.





Once chinrest is installed, it should have some space in between the end of tailpiece, allowing tailpiece to lift up with some angle

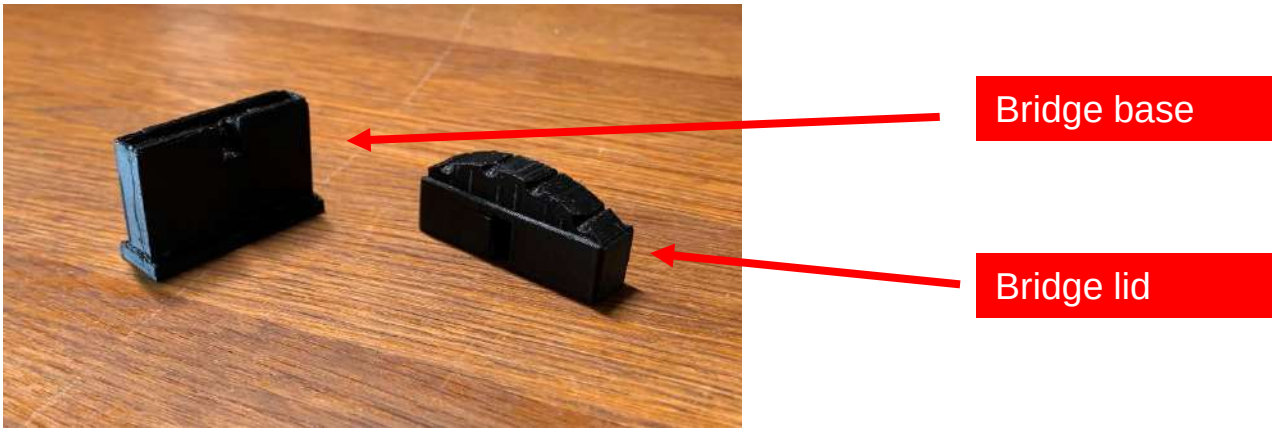
Use the following part to create the space if needed

Step 8 – No soundbox

Attach bridge/soundbox to violin body

Note:

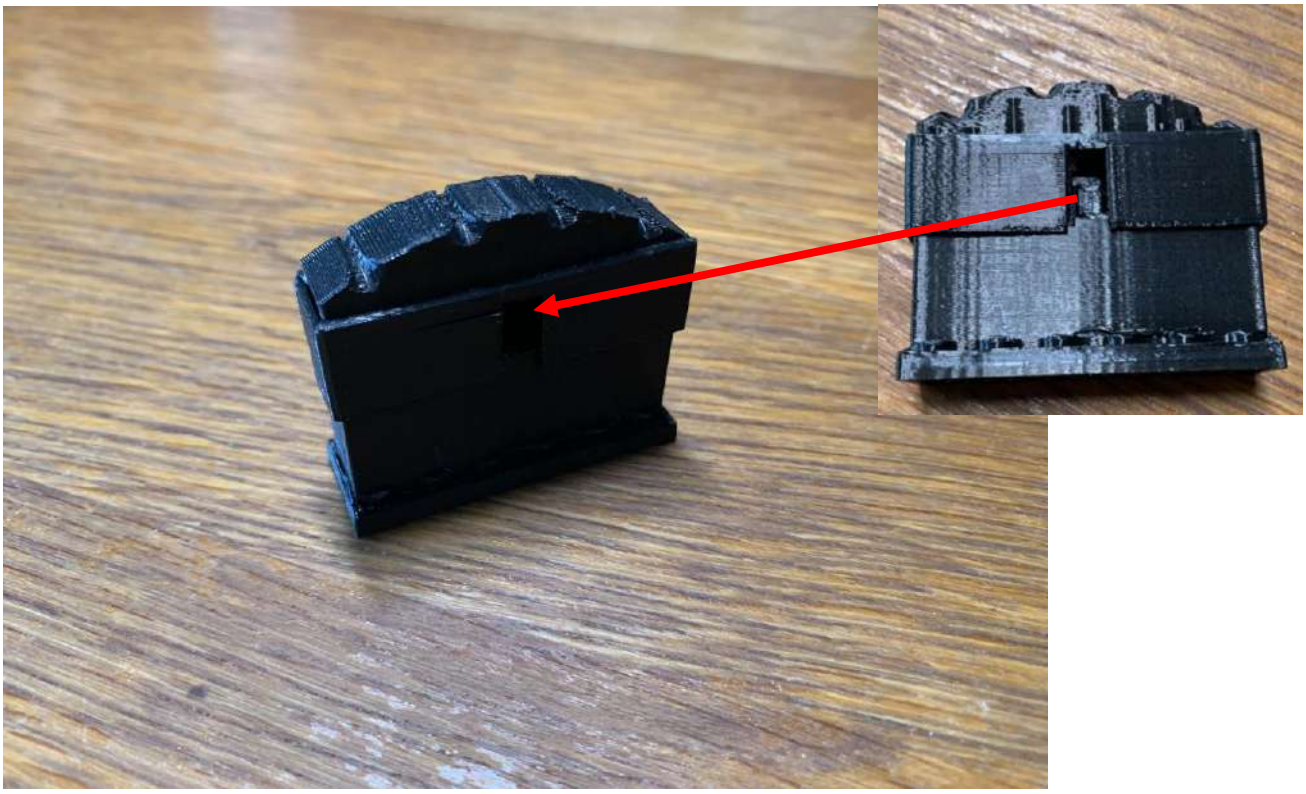
In case your package includes soundbox, please go to page 61



Step 8 – No soundbox

Attach bridge/soundbox to violin body

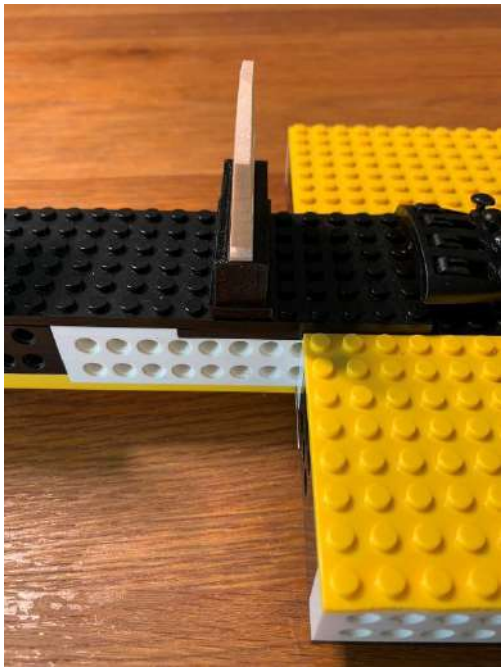
Place bridge into the bridge holder and put it on top of the spine



Step 8 – No soundbox

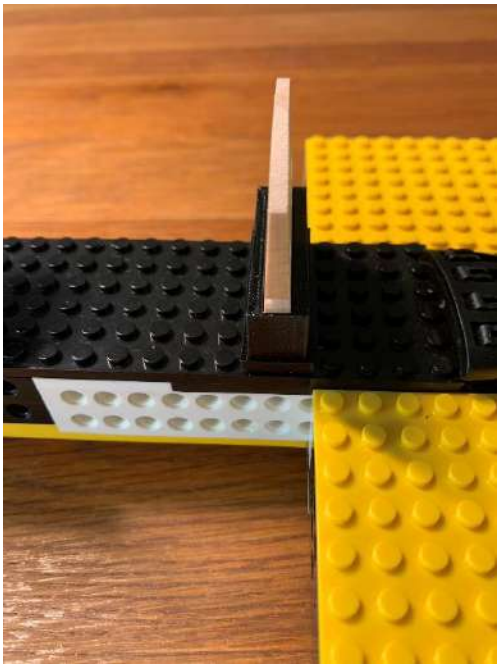
Attach bridge/soundbox to violin body

Postion of violin bridge varies from sizes



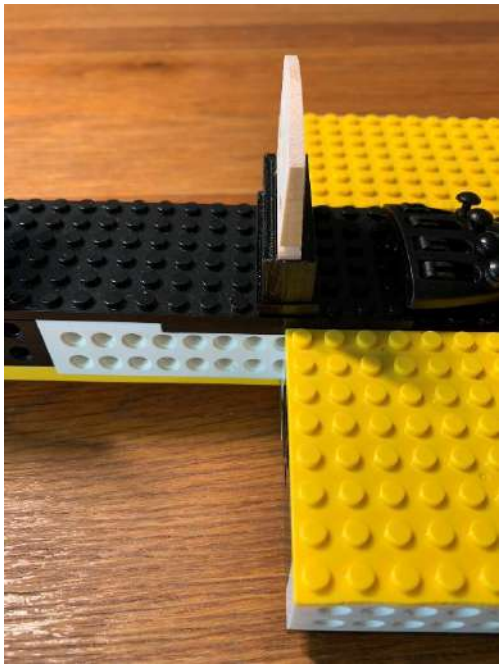
4/4 size

1 stud to the Yellow edge



3/4 size

0 stud to the Yellow edge



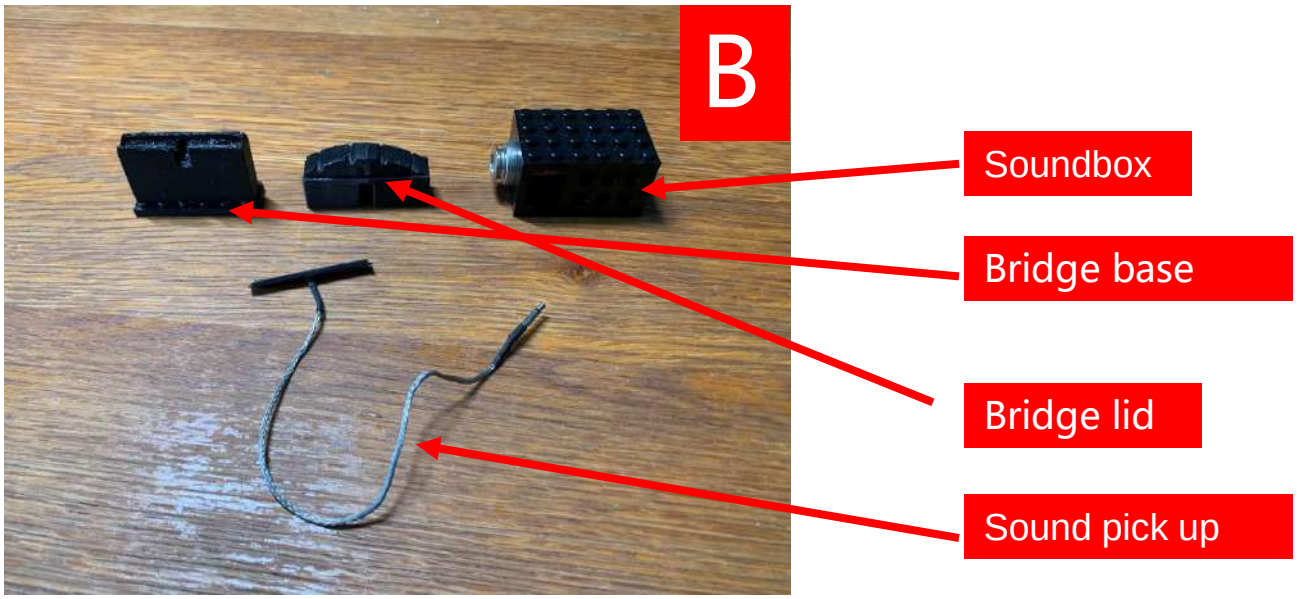
1/2 size

-1 stud to the Yellow edge

Step 8 – With soundbox

Attach bridge/soundbox to violin body

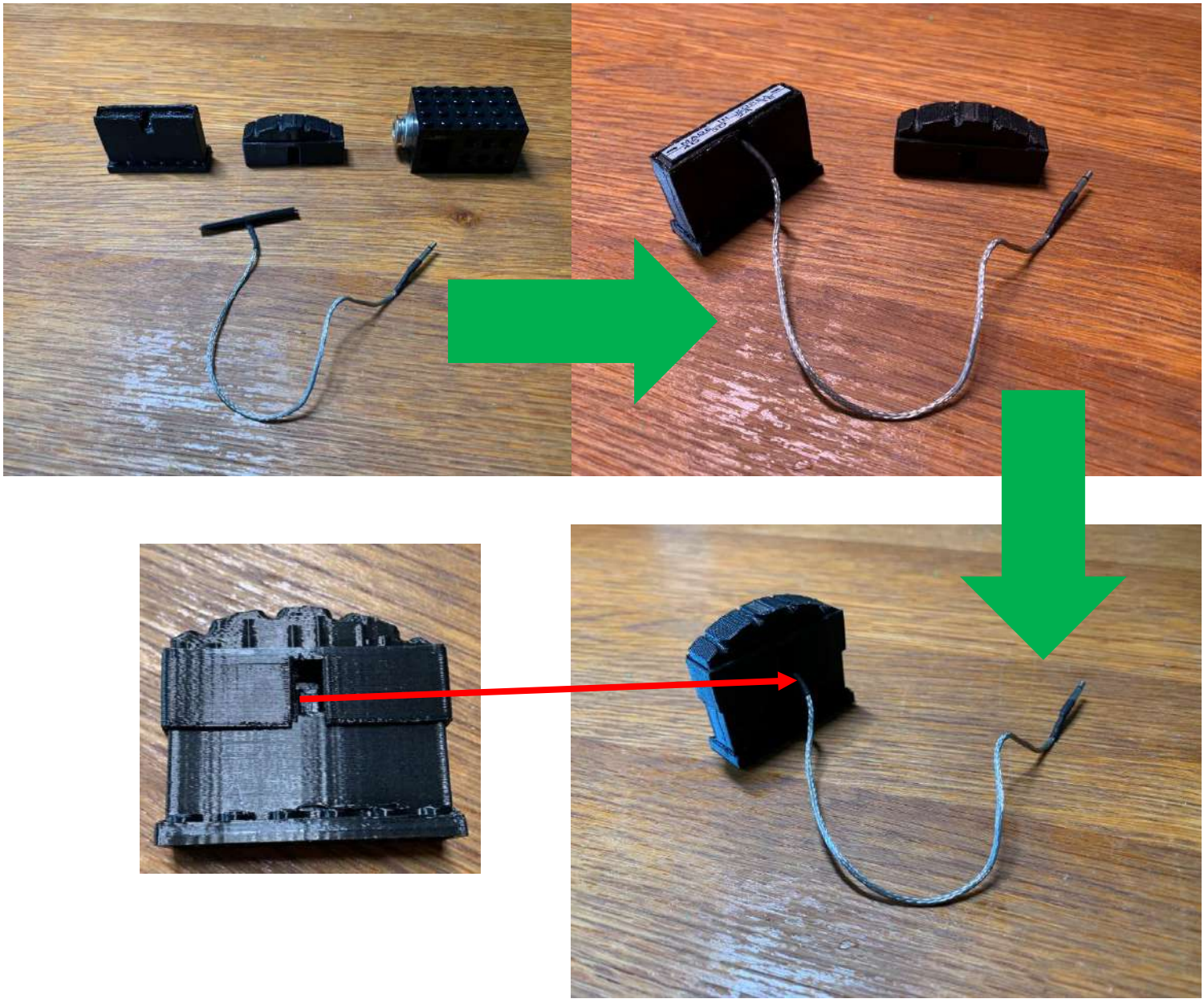
Install bridge with soundbox



Step 8

Attach bridge/soundbox to violin body

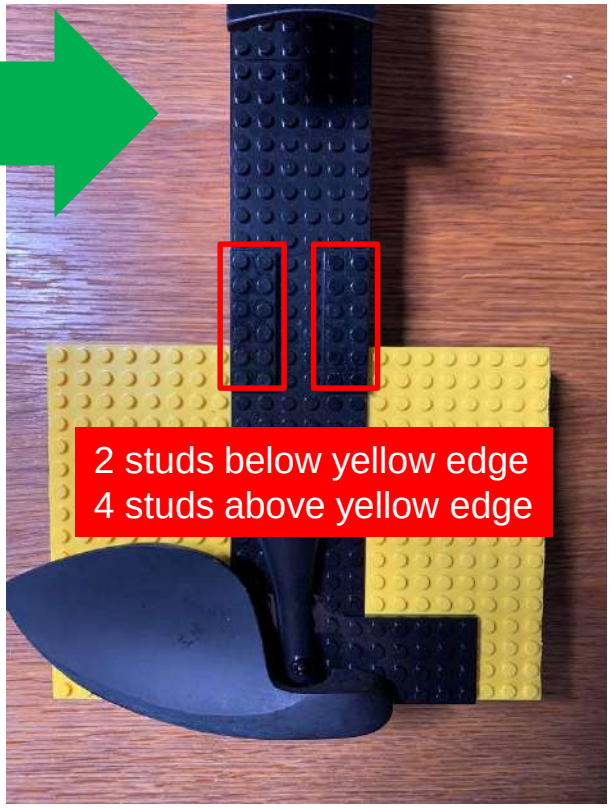
Step 8a



Step 8

Attach bridge/soundbox to violin body

Step 8b



Step 8

Attach bridge/soundbox to violin body

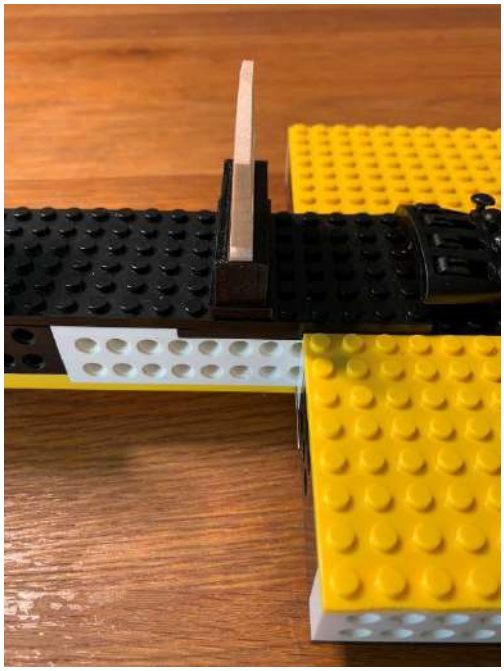
Step 8c

Place bridge holder and bridge on top of the spine

Step 8 – With soundbox

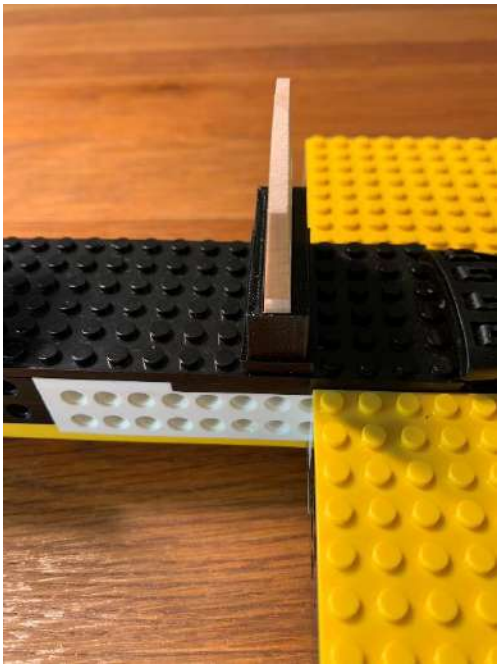
Attach bridge/soundbox to violin body

Postion of violin bridge varies from sizes



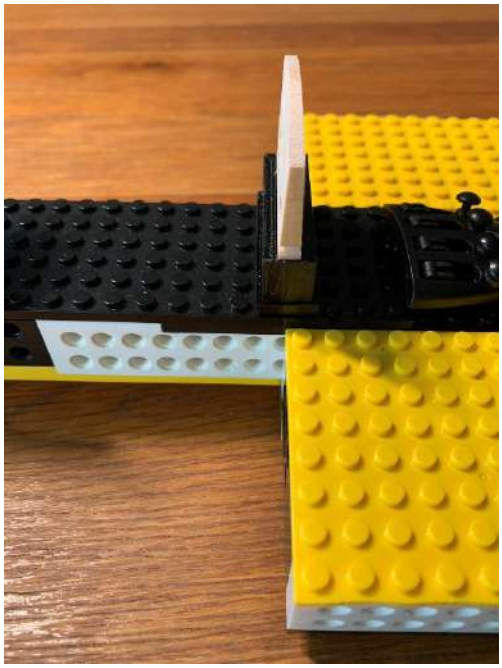
4/4 size

1 stud to the Yellow edge



3/4 size

0 stud to the Yellow edge



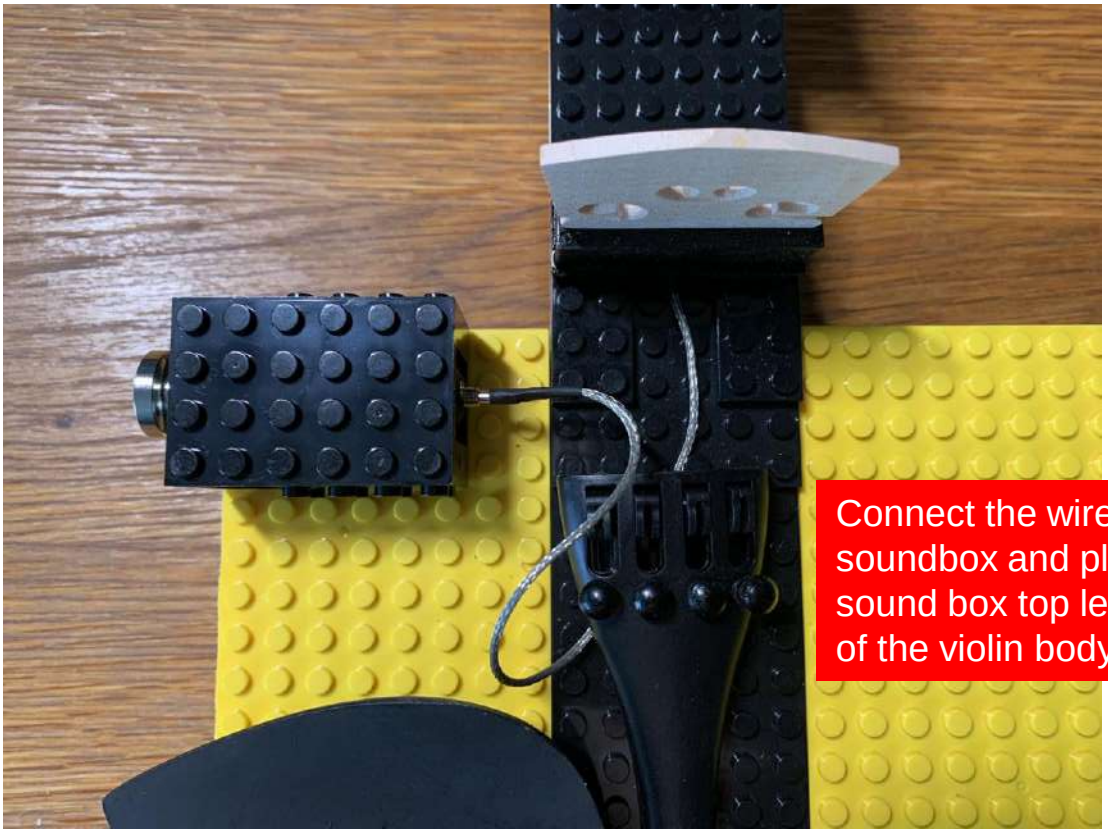
1/2 size

-1 stud to the Yellow edge

Step 8

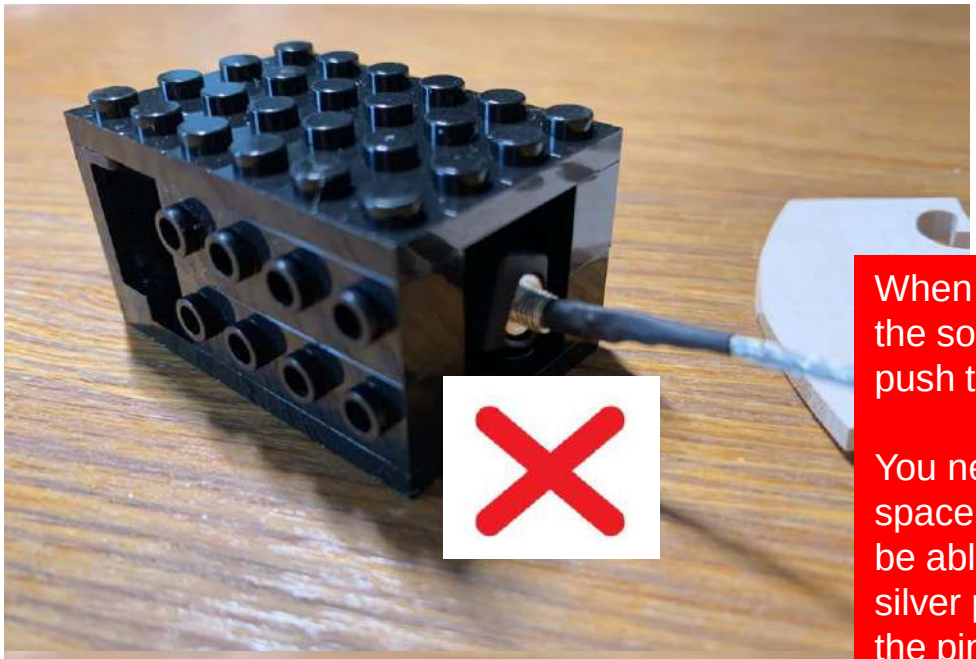
Attach bridge/soundbox to violin body

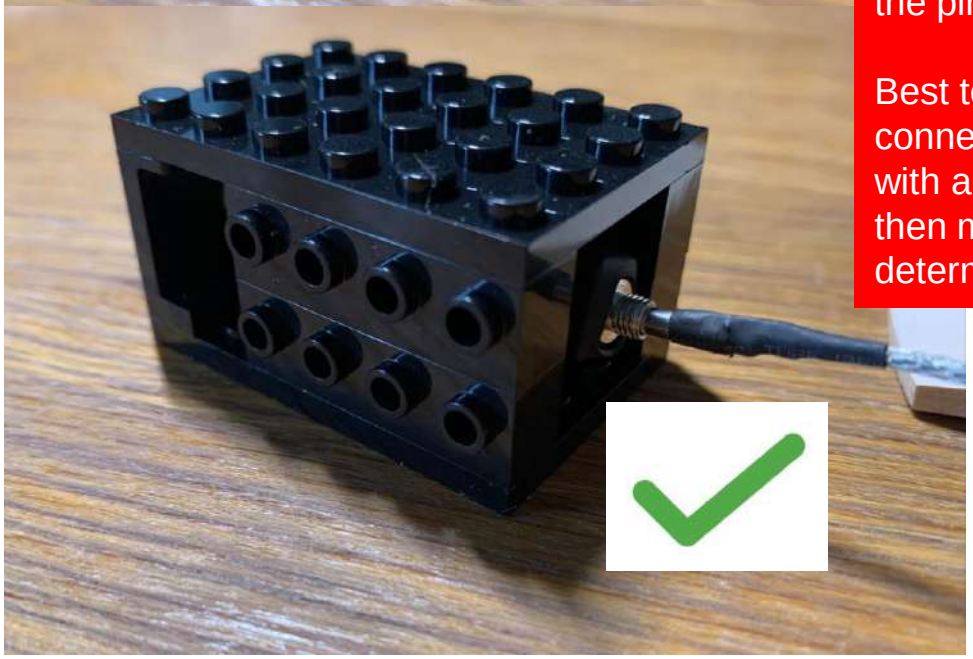
Step 8d



Step 8

Attach bridge/soundbox to violin body





When connecting wire to the soundbox, DO NOT push the pin to the end,

You need to leave some space, i.e. you should still be able to see the end of silver pin when connected the pin to the box.

Best testing method is to connect the soundbox with ampifier/speaker, then move the pin in/out to determin best position.

Install string and tune

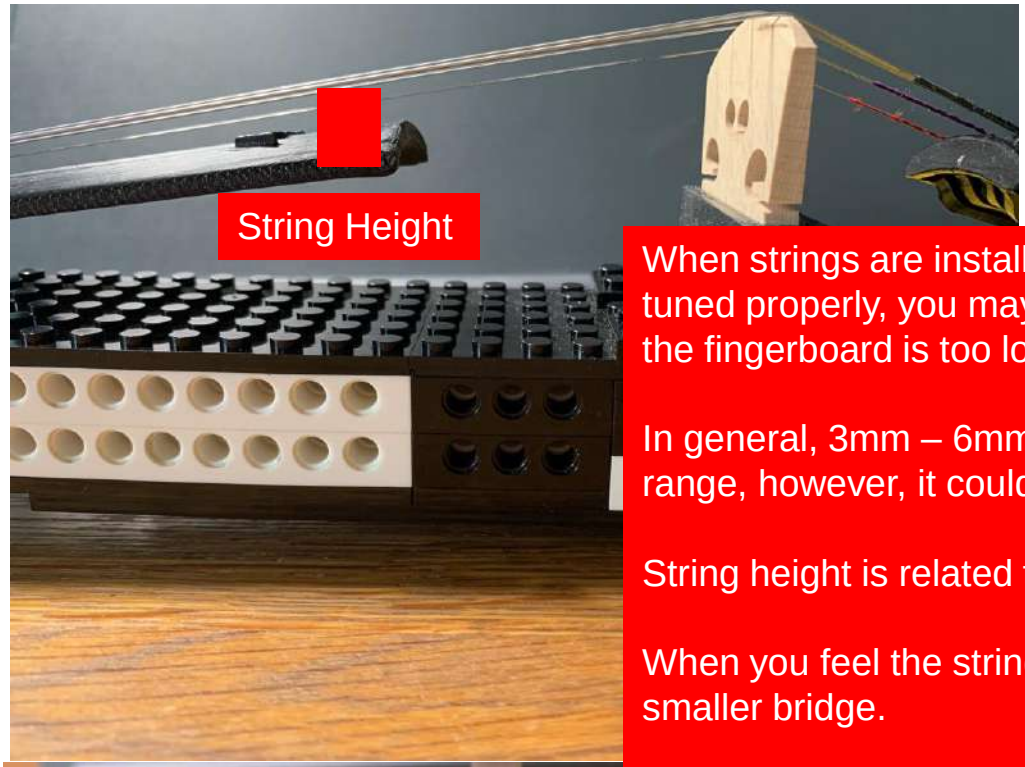
Note:

We have a video demonstration to guide you through installing strings and tuning, you can access this link directly or scan the qr code

https://funkidviolin.com/how-to-string-restring-violin-and-how-to-tune/

Attach bridge/soundbox to violin body

Note



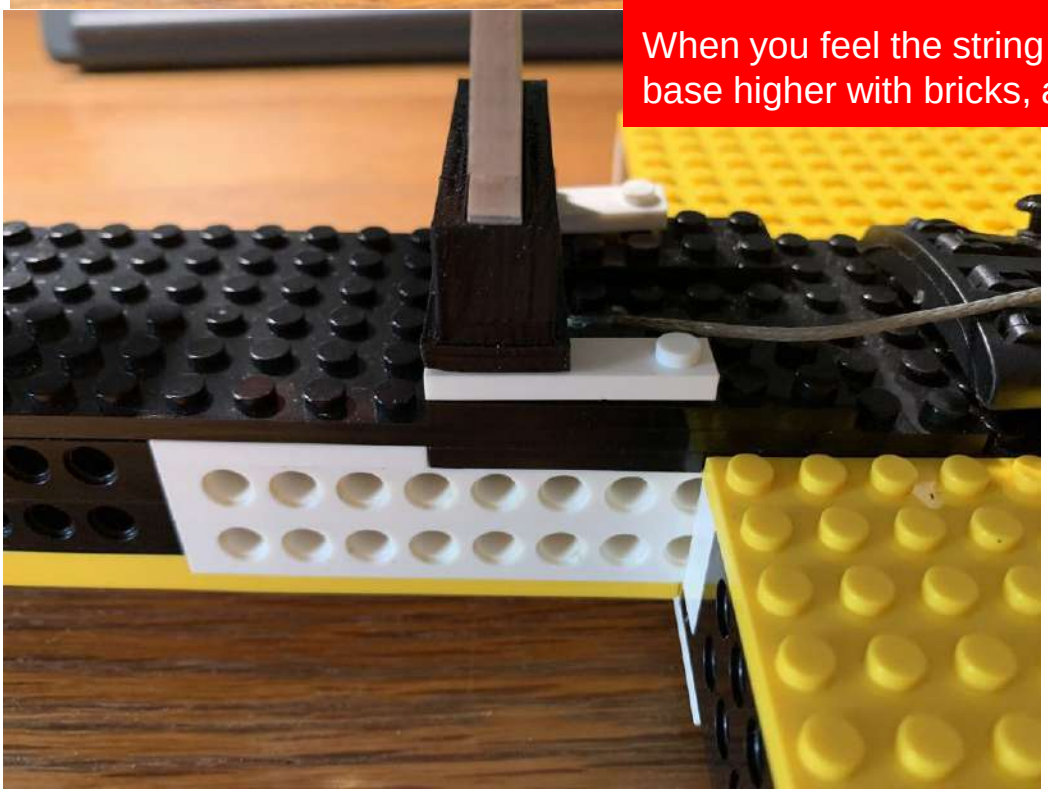
When strings are installed and after they are tuned properly, you may find string height to the fingerboard is too low or too high.

In general, 3mm – 6mm range is appropriate range, however, it could be a personal choice.

String height is related to the bridge height.

When you feel the string is too high, use the smaller bridge.

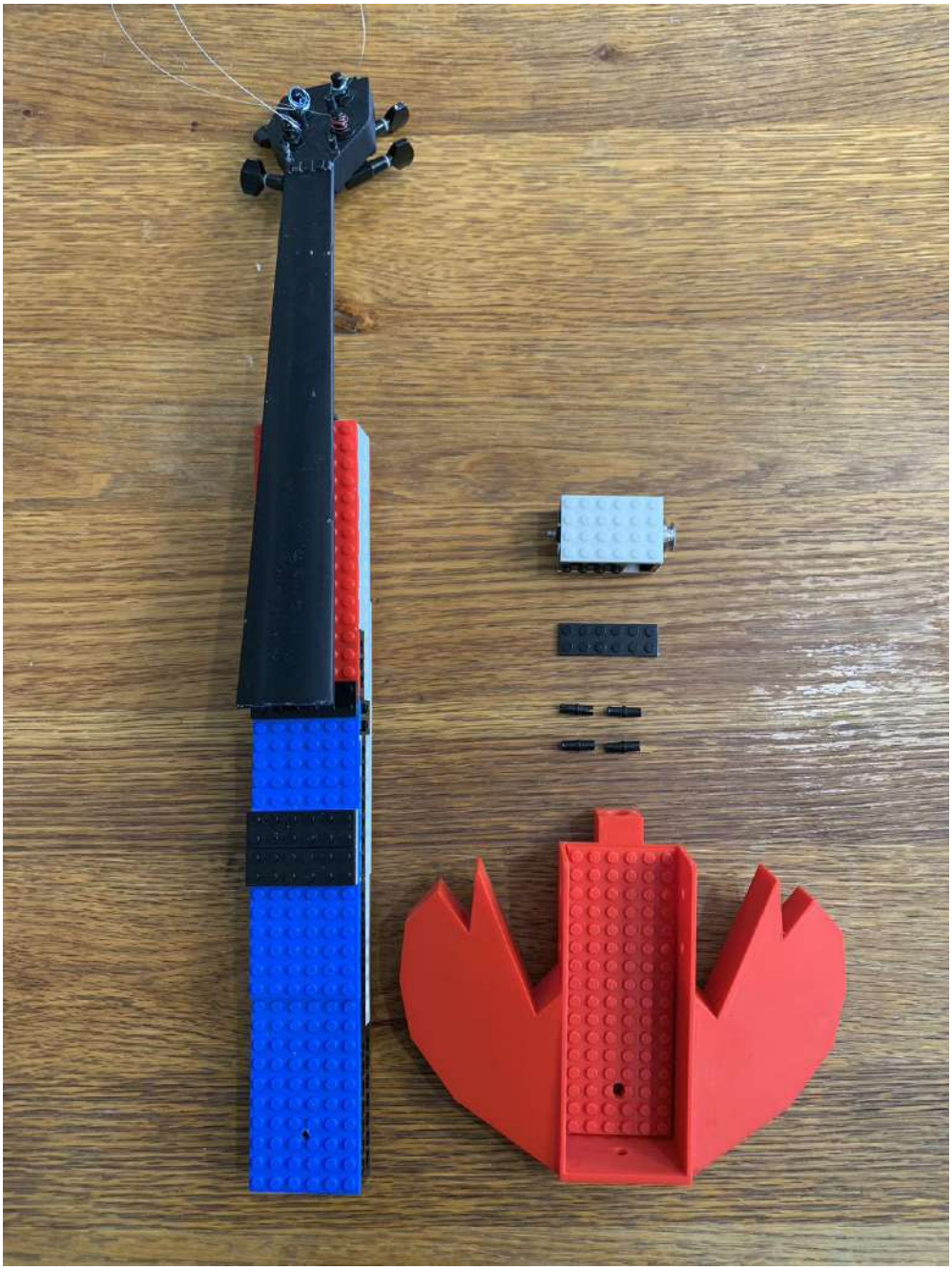
When you feel the string is too low, make the base higher with bricks, as seen to the left



Step 5

Fire sidebox is used as exmaple, Thunder sidebox follows the same steps

Step 5a

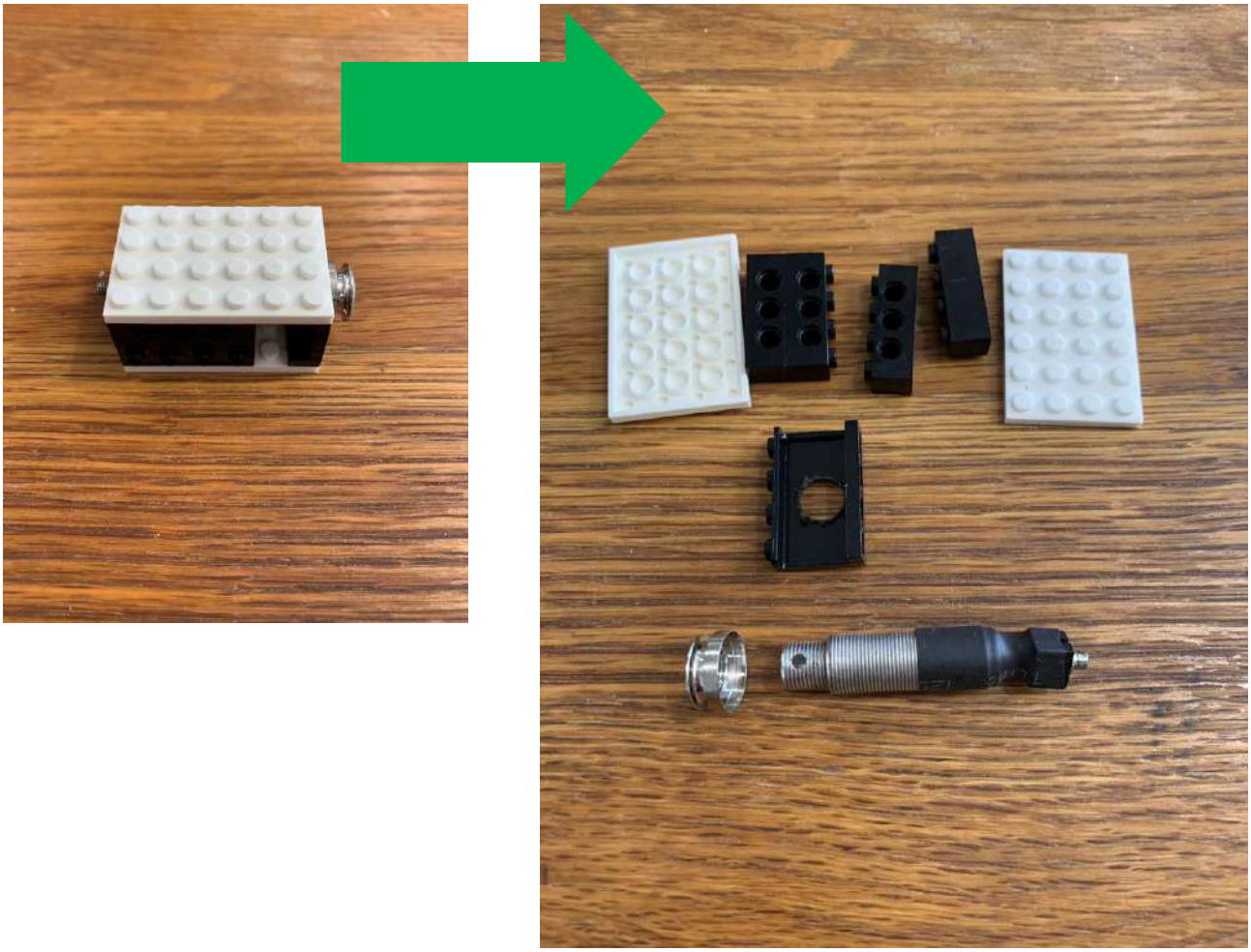


Step 5

Fire sidebox is used as exmaple, Thunder sidebox follows the same steps

Step 5b

Disassemble soundbox

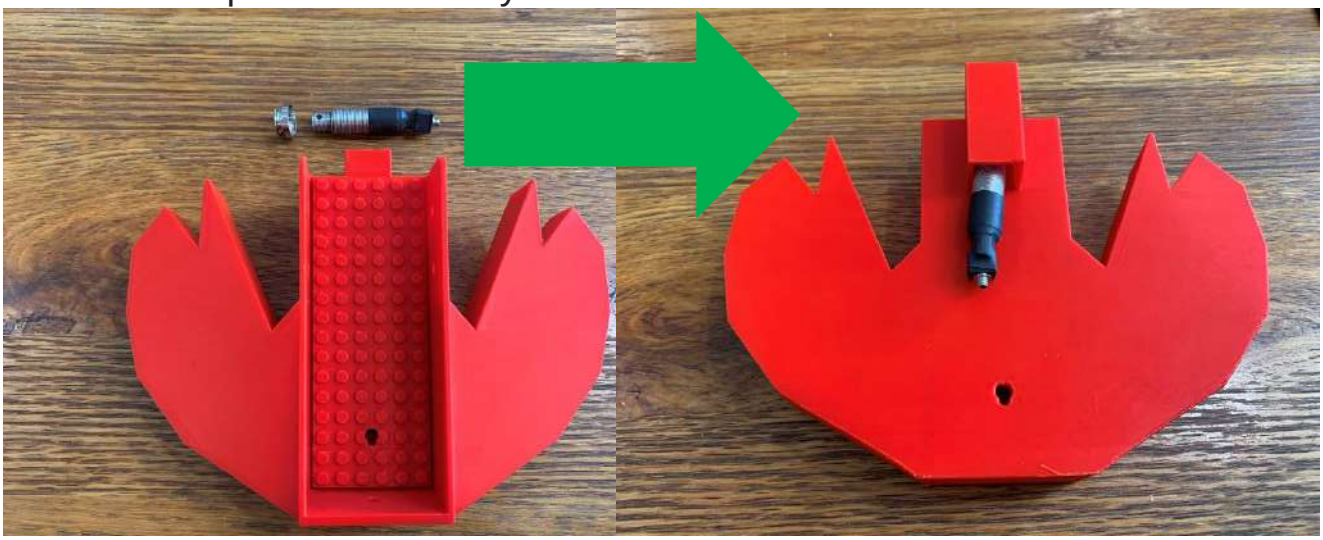


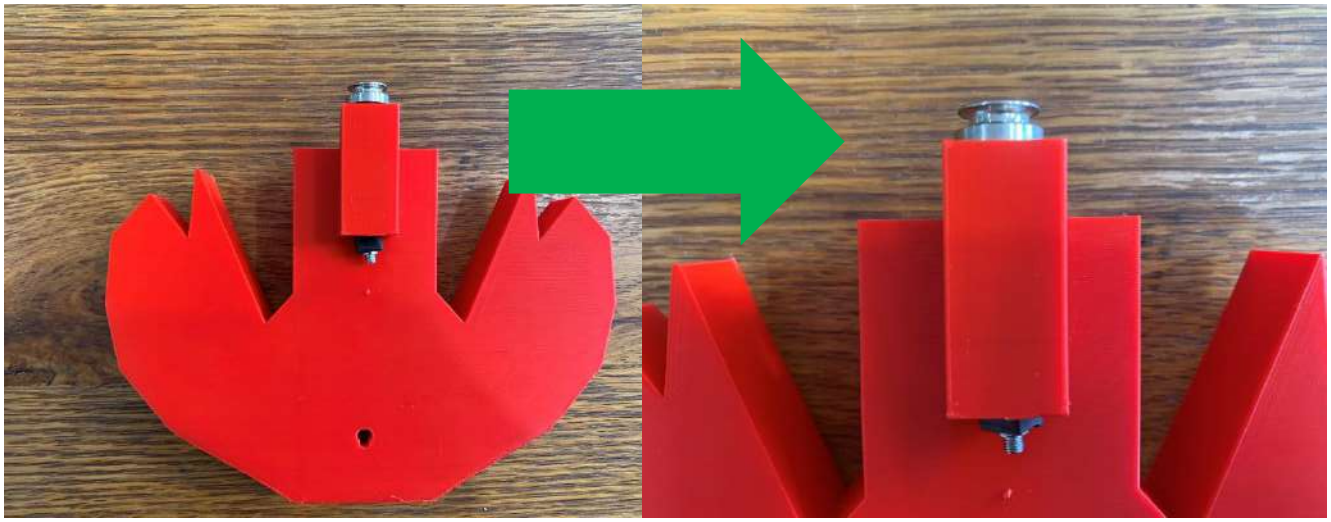
Step 5

Fire sidebox is used as exmaple, Thunder sidebox follows the same steps

Step 5c

Put the sound pickup (with 6.5mm jack) through the hole located at the back
Screw the top to make it firmly attached



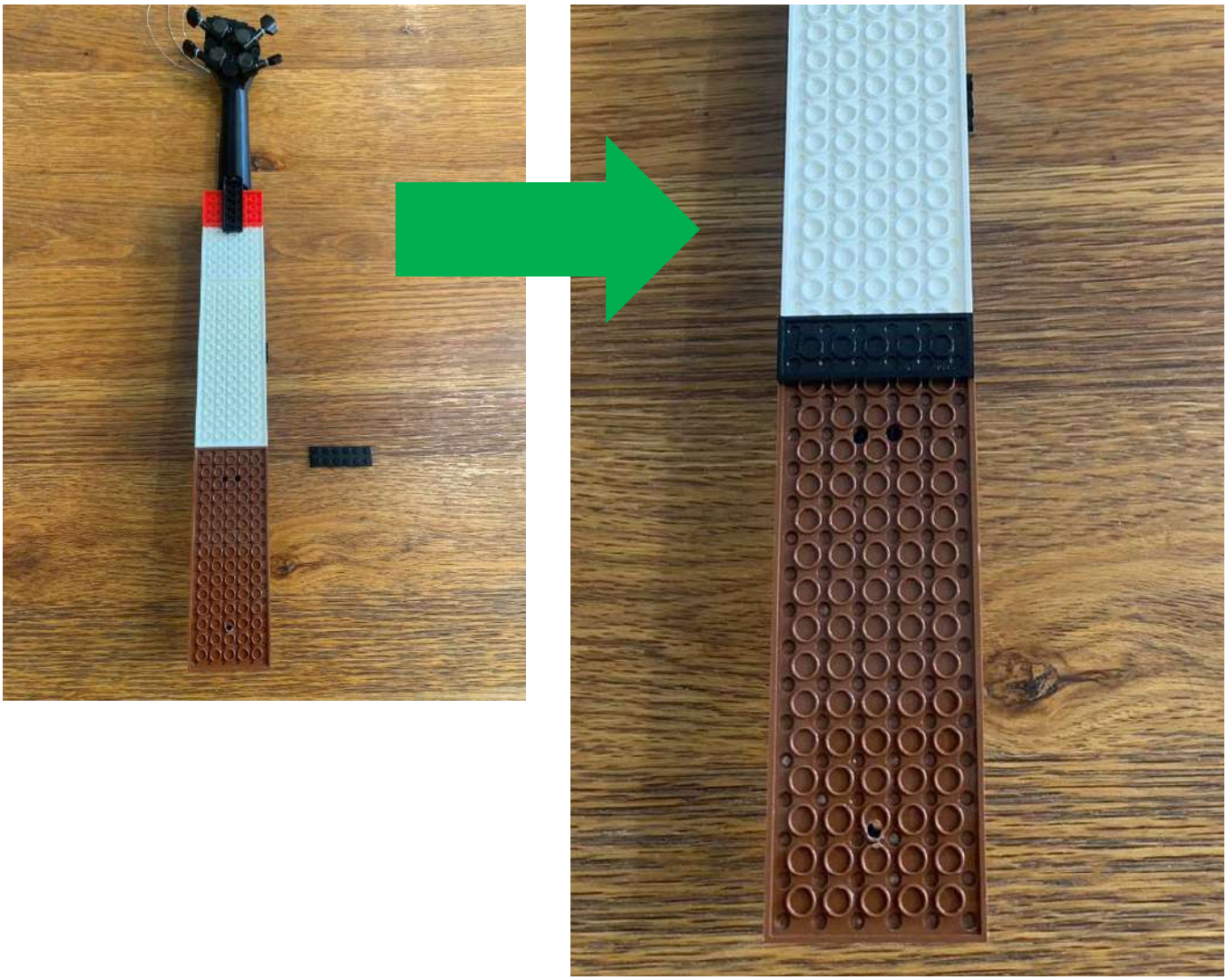


Step 5

Fire sidebox is used as exmaple, Thunder sidebox follows the same steps

Step 5d

Lock the two backplates with 2*6 plate，put it in the middle.

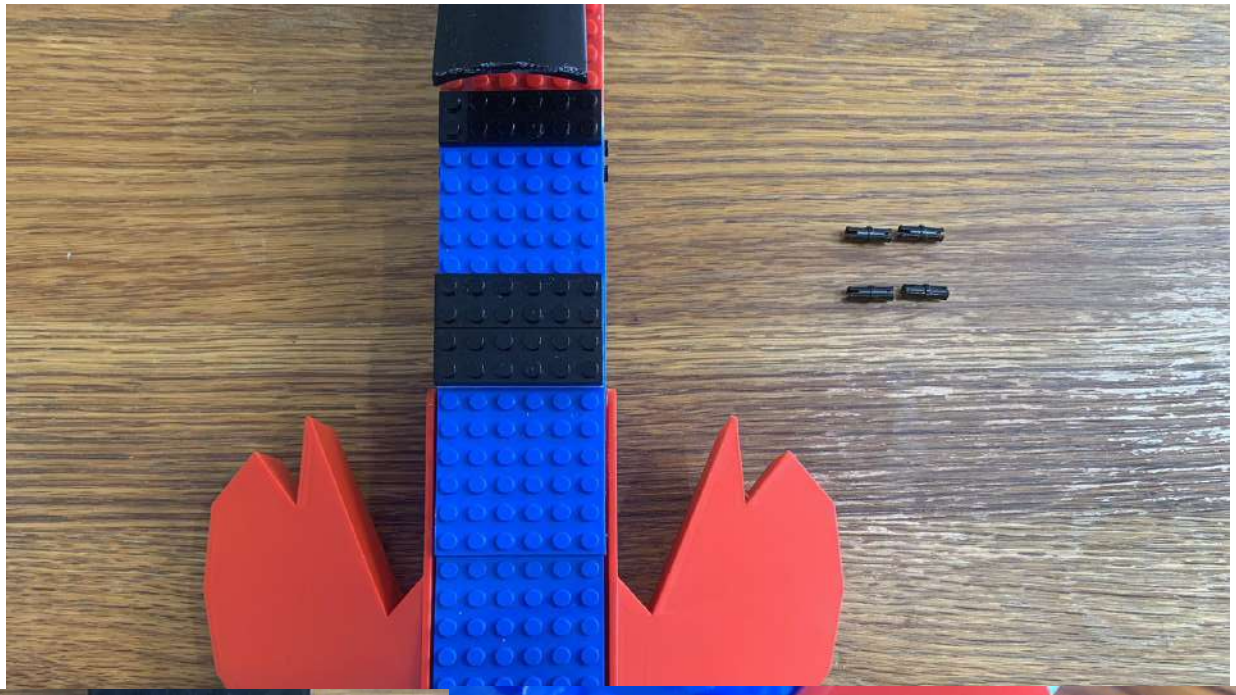


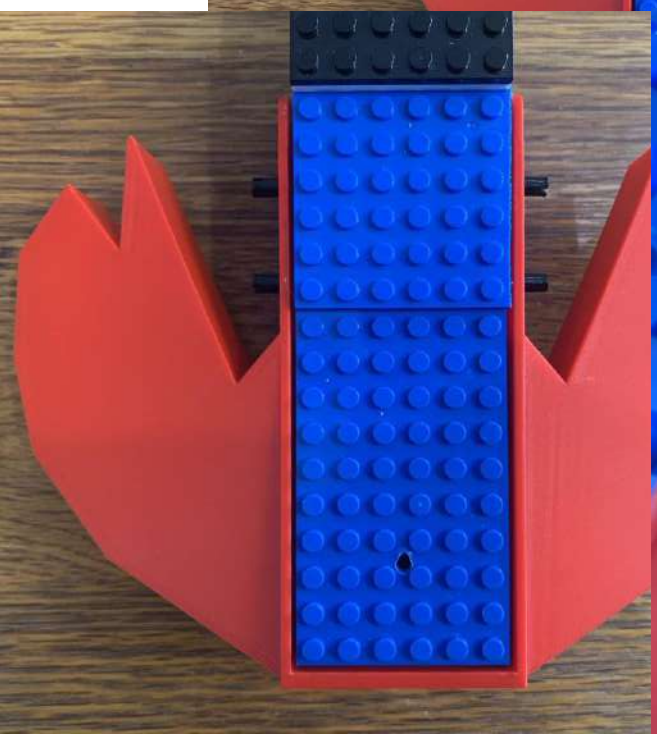
Step 5

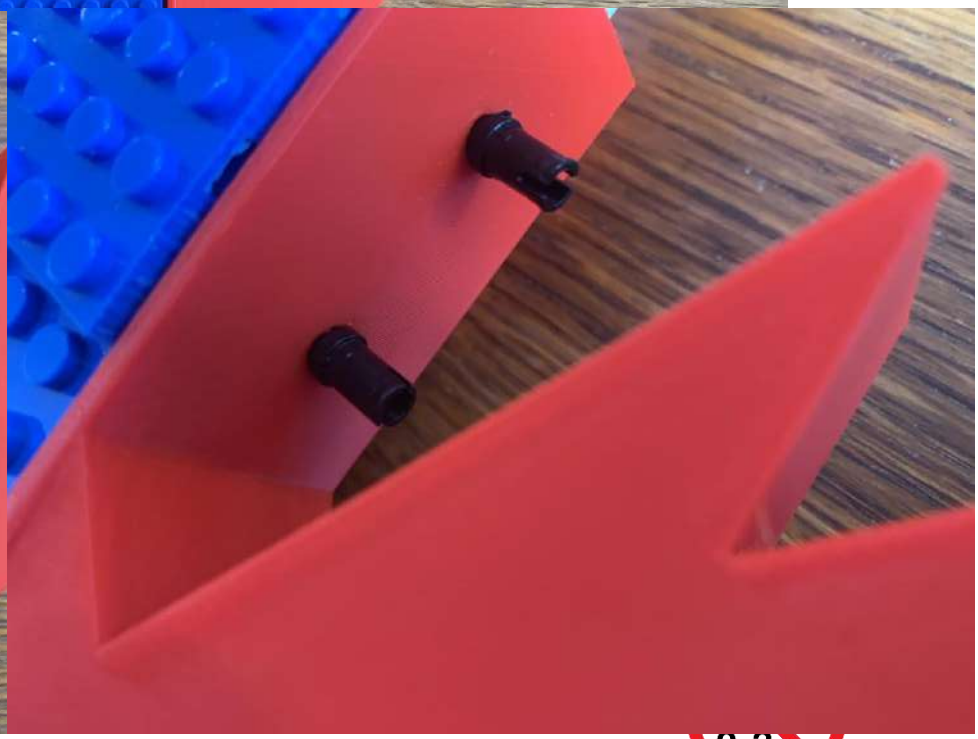
Fire sidebox is used as exmaple, Thunder sidebox follows the same steps

Step 5e

Use 4 sticks to firmly attach spine to fire sidbox





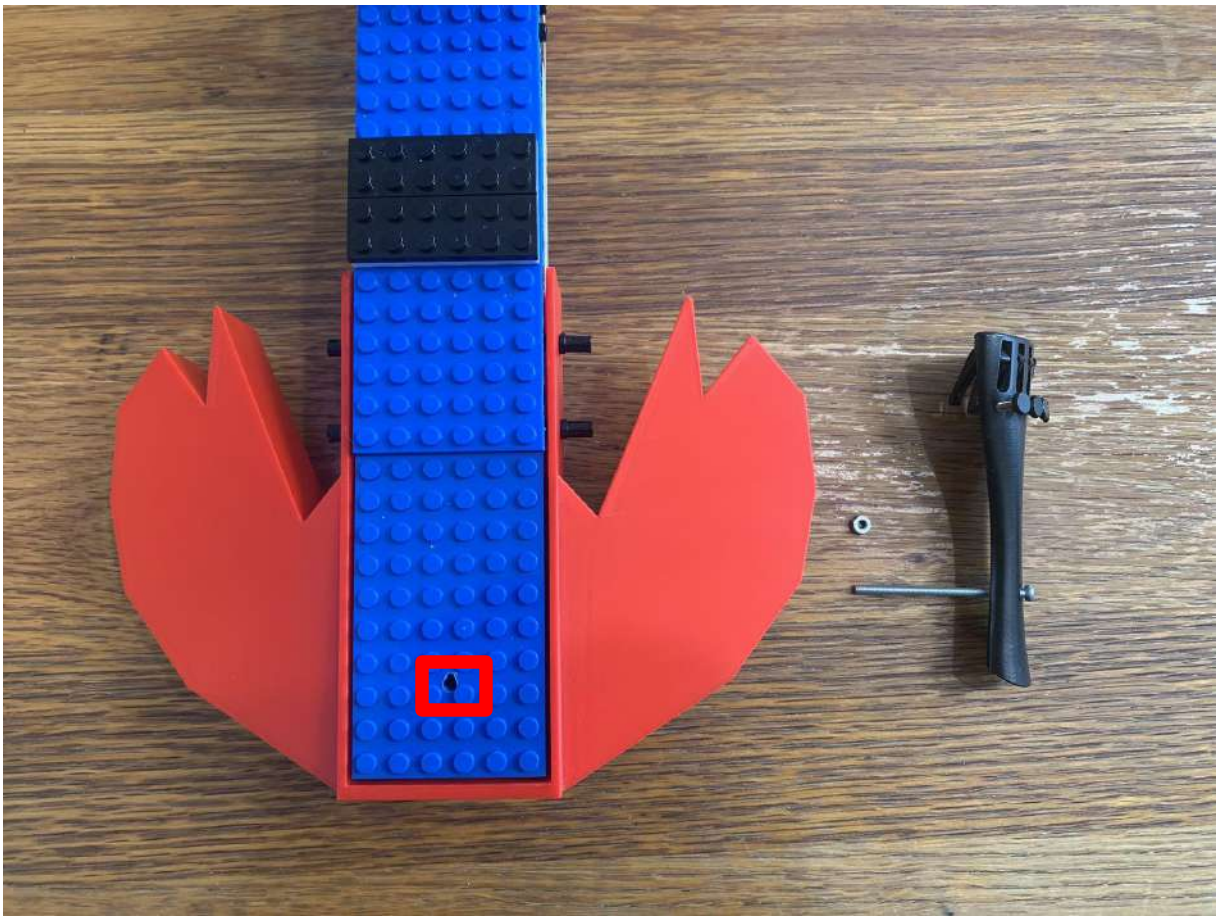


Step 6

Fire sidebox is used as exmaple, Thunder sidebox follows the same steps

Step 6a

Install tailpiece

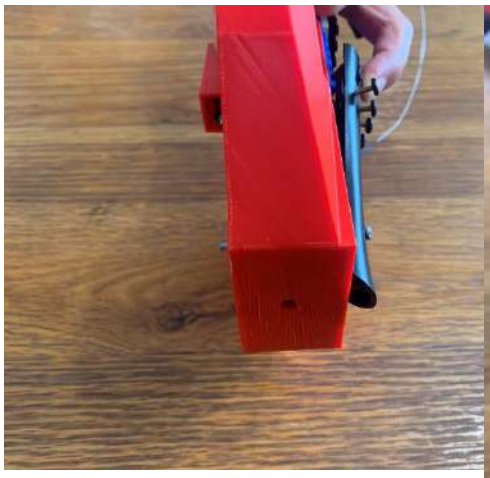


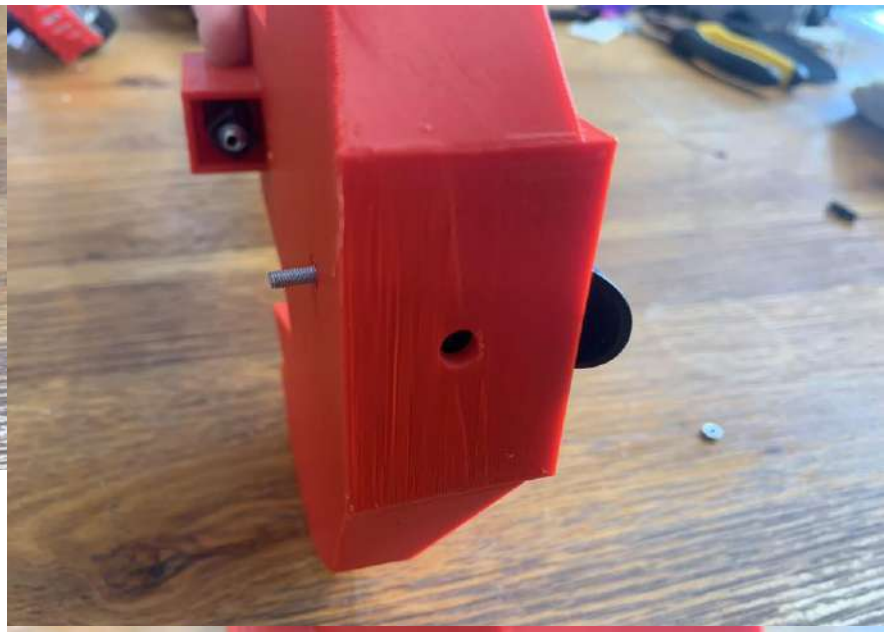
Step 6

Fire sidebox is used as exmaple, Thunder sidebox follows the same steps

Step 6b

Put the screw with tailpiece into the hole located at bottom of the violin spine

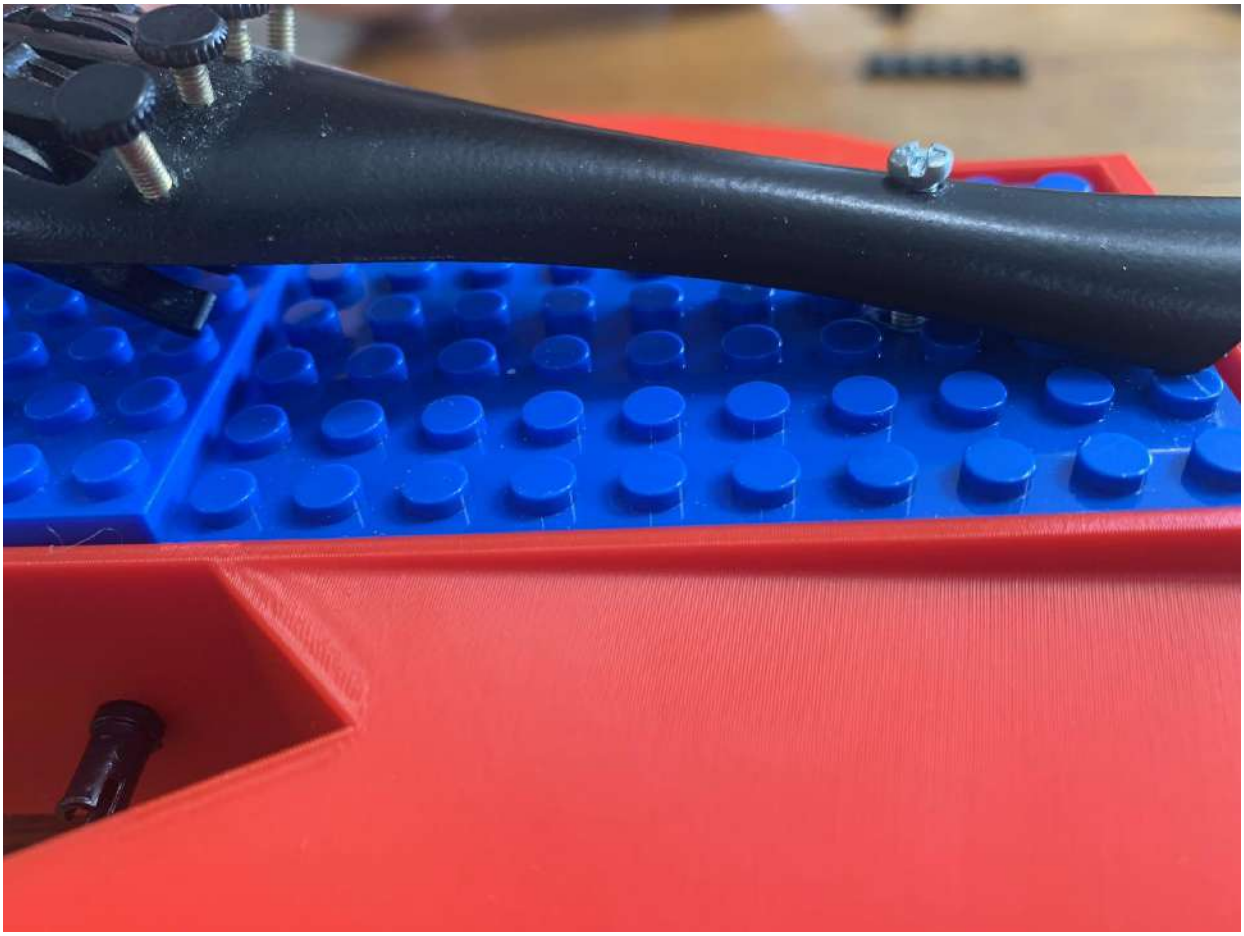




Step 6

Fire sidebox is used as exmaple, Thunder sidebox follows the same steps

Step 6c



Note:

Please leave some space in between tailpiece and top surface.

You should be able to move the tailpiece and lift it up with some angle.

Step 7

Fire sidebox is used as exmaple, Thunder sidebox follows the same steps

Step 7a

Place the chinrest to the bottome of the spine, align in the middle.
Use the small screwdriver, put one side in the hole and rotate clock-wise.
Change to another hole and do the same until it is very tight.

Once chinrest is installed, it should have some space in between the end of tailpiece, allowing tailpiece to lift up with some angle

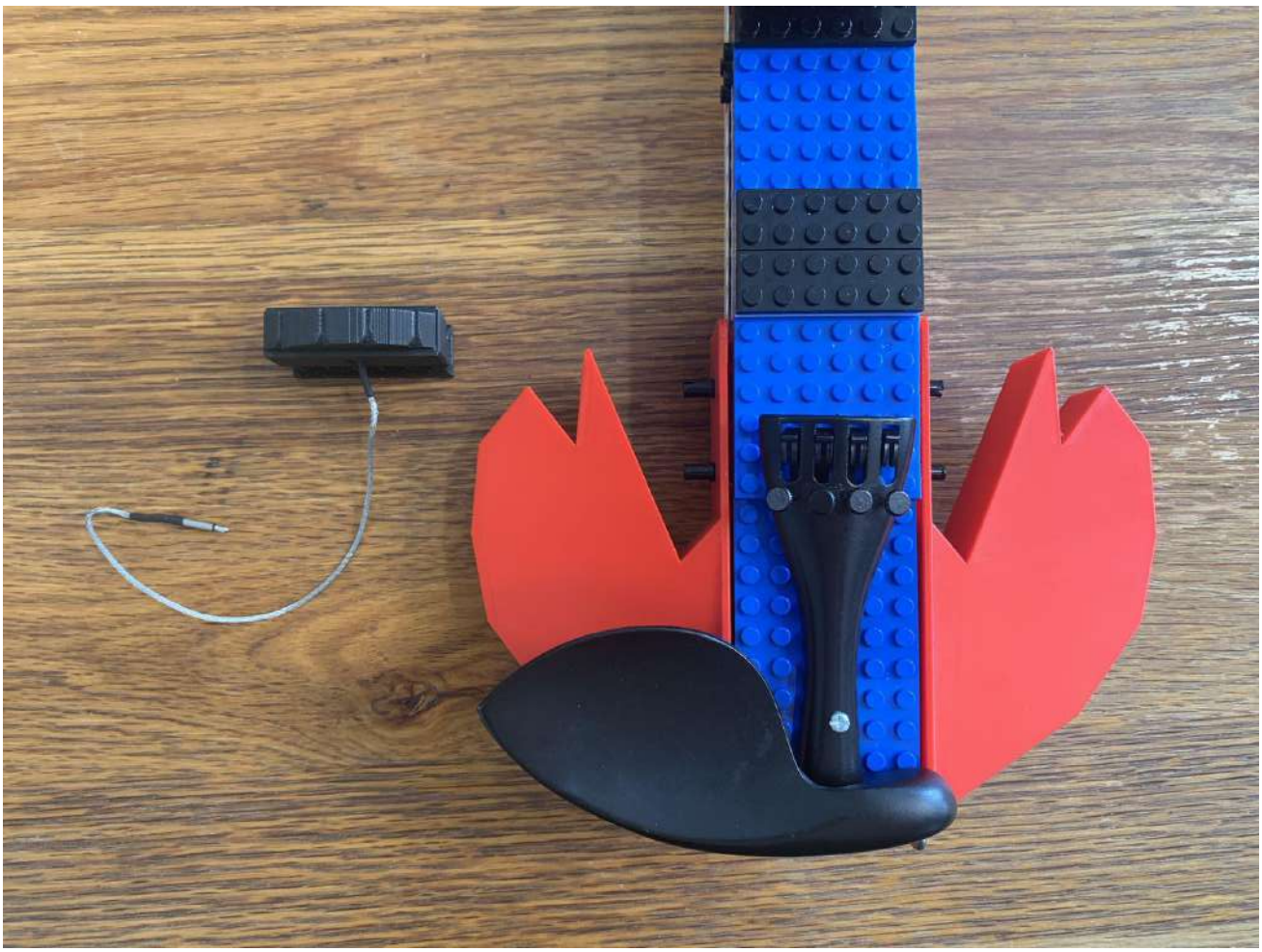
Use the following part to create the space if needed

Step 8

Fire sidebox is used as exmaple, Thunder sidebox follows the same steps

Step 8a

Install bridge and plug in sound pick jack

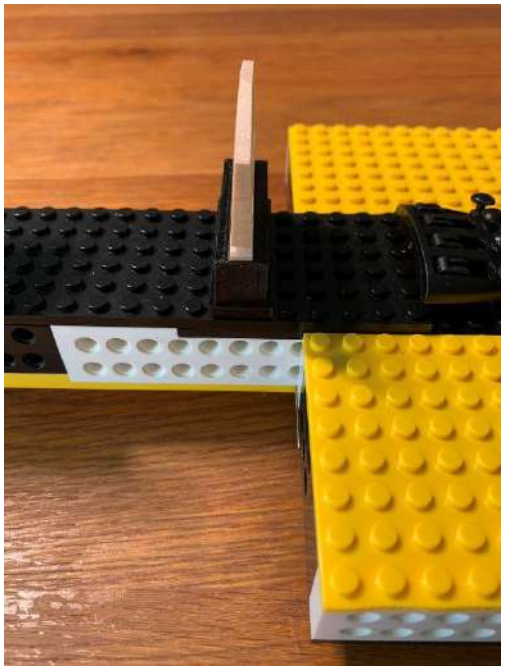


Step 8

Fire sidebox is used as exmaple, Thunder sidebox follows the same steps

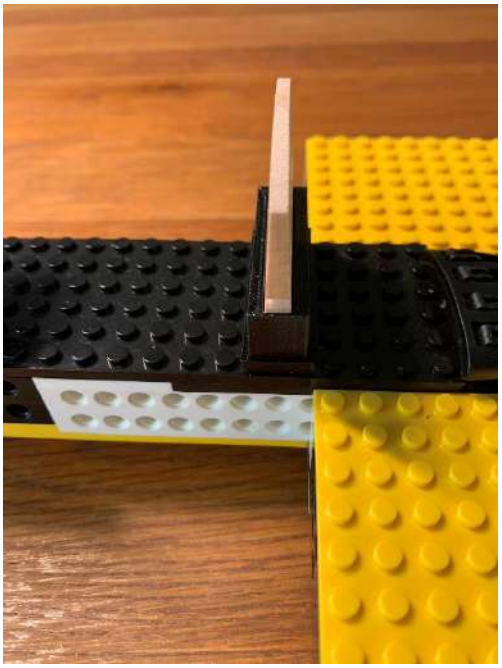
Step 8b

Postion of violin bridge varies from sizes



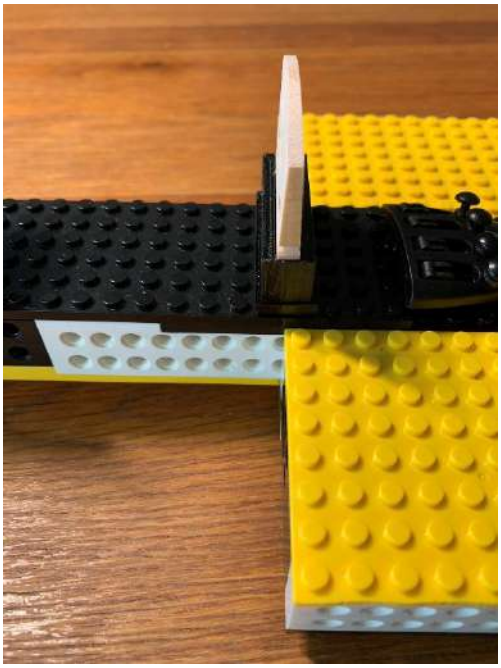
4/4 size

1 stud to the Yellow edge



3/4 size

0 stud to the Yellow edge



1/2 size

-1 stud to the Yellow edge

Step 8

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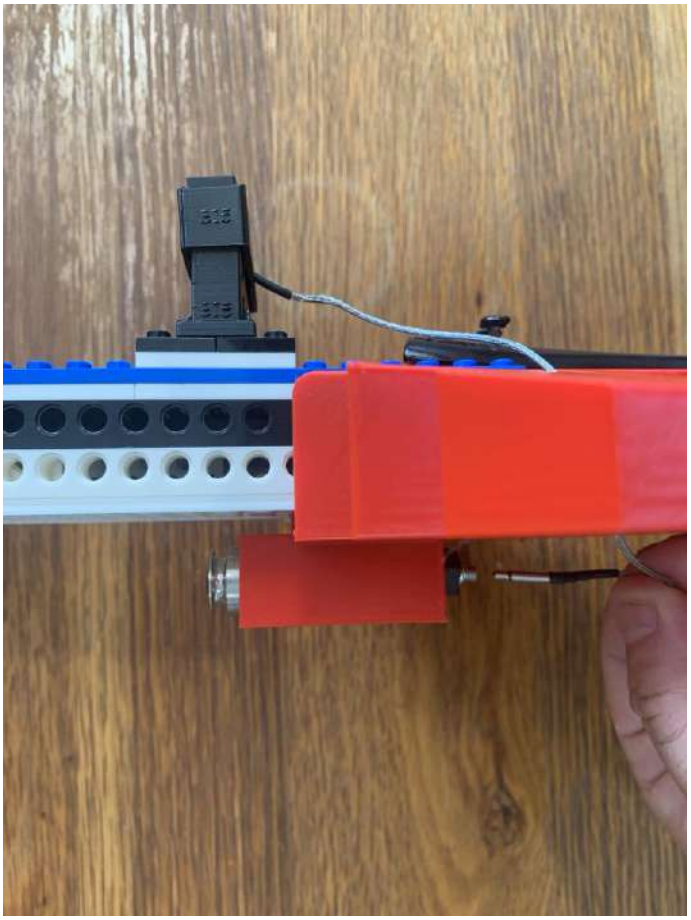
Step 8c



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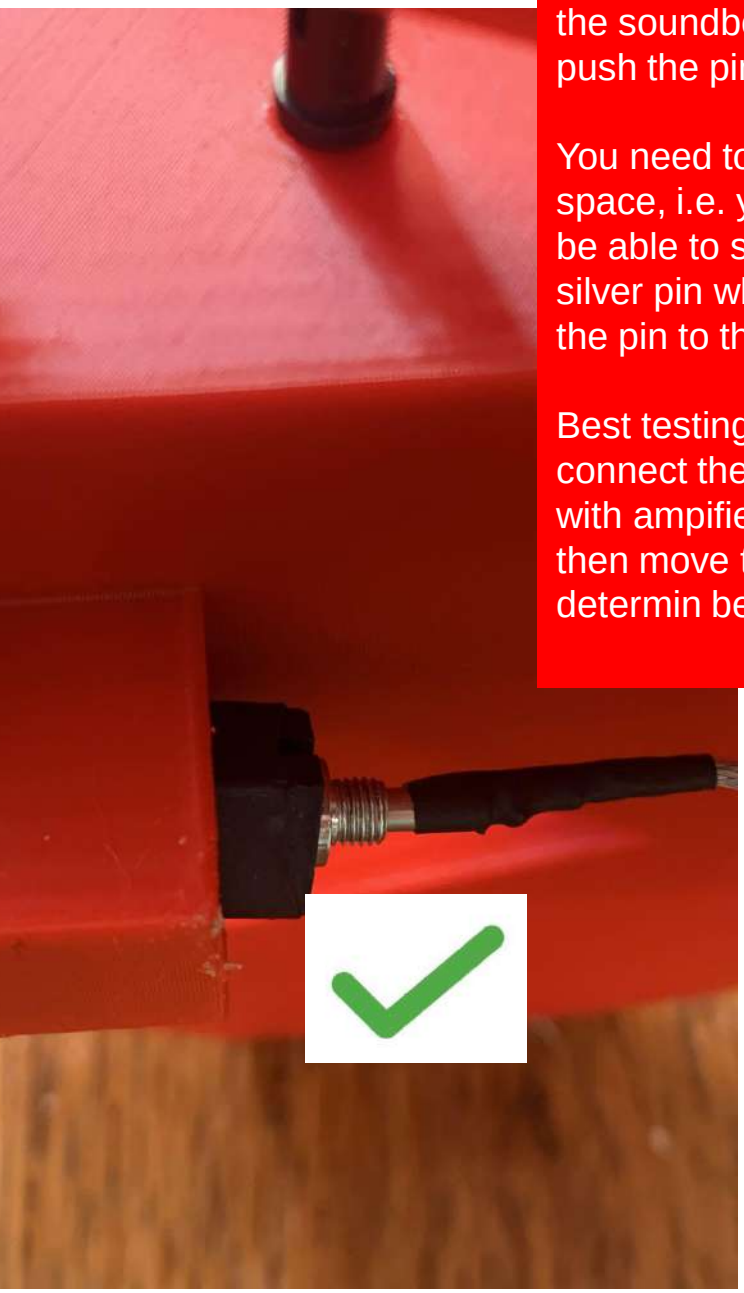
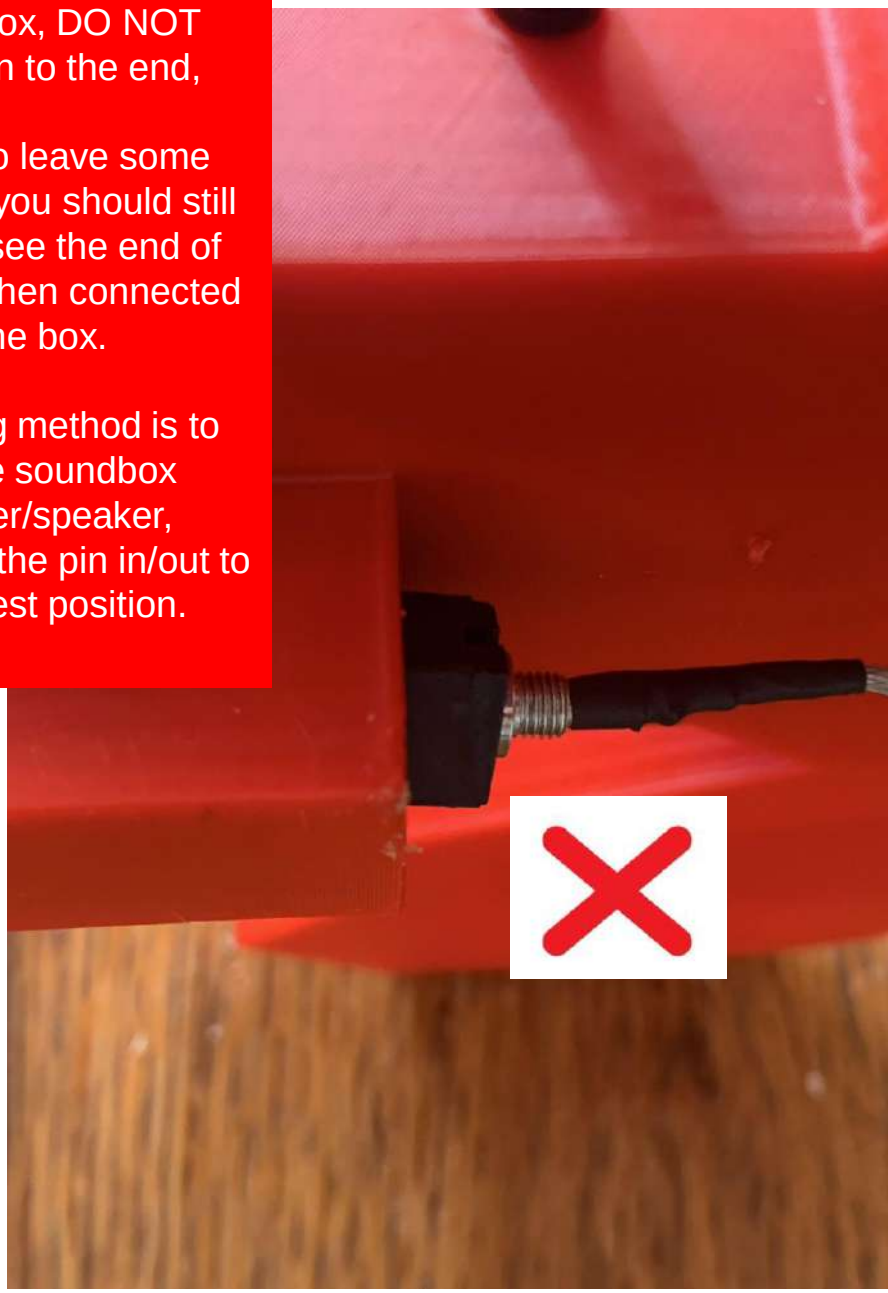
No-sound issue debug

When connecting wire to the soundbox, DO NOT push the pin to the end,

You need to leave some space, i.e. you should still be able to see the end of silver pin when connected the pin to the box.

Best testing method is to connect the soundbox with ampifier/speaker, then move the pin in/out to determin best position.





Install string and tune

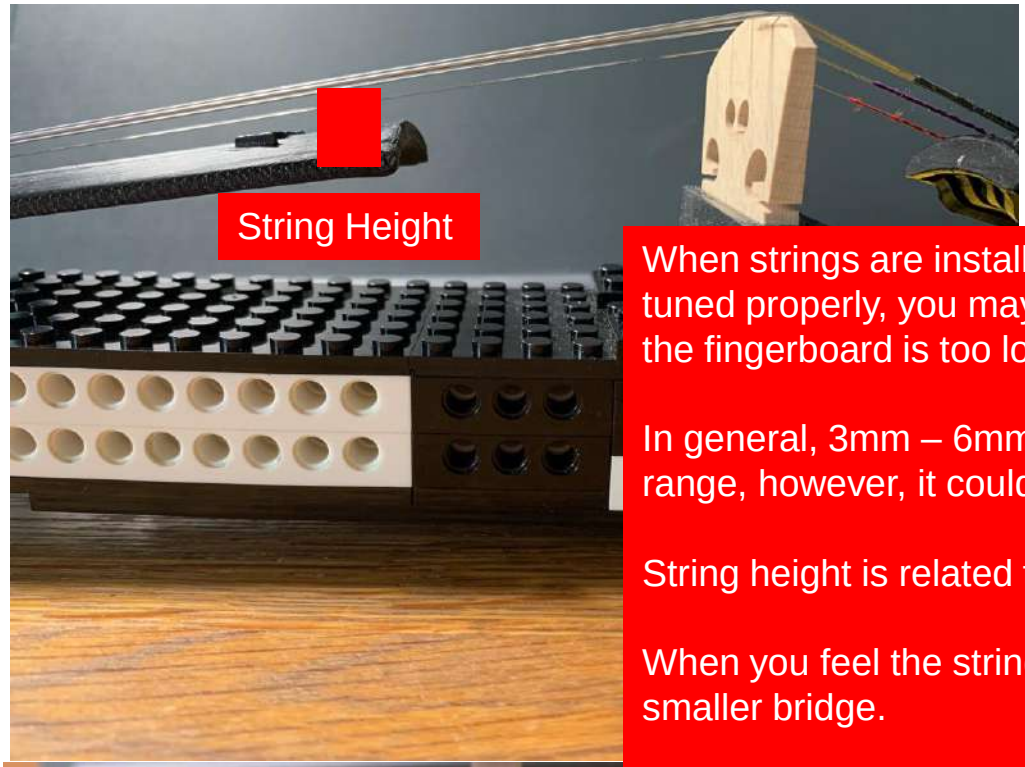
Note:

We have a video demonstration to guide you through installing strings and tuning, you can access this link directly or scan the qr code

https://funkidviolin.com/how-to-string-restring-violin-and-how-to-tune/

Attach bridge/soundbox to violin body

Note



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