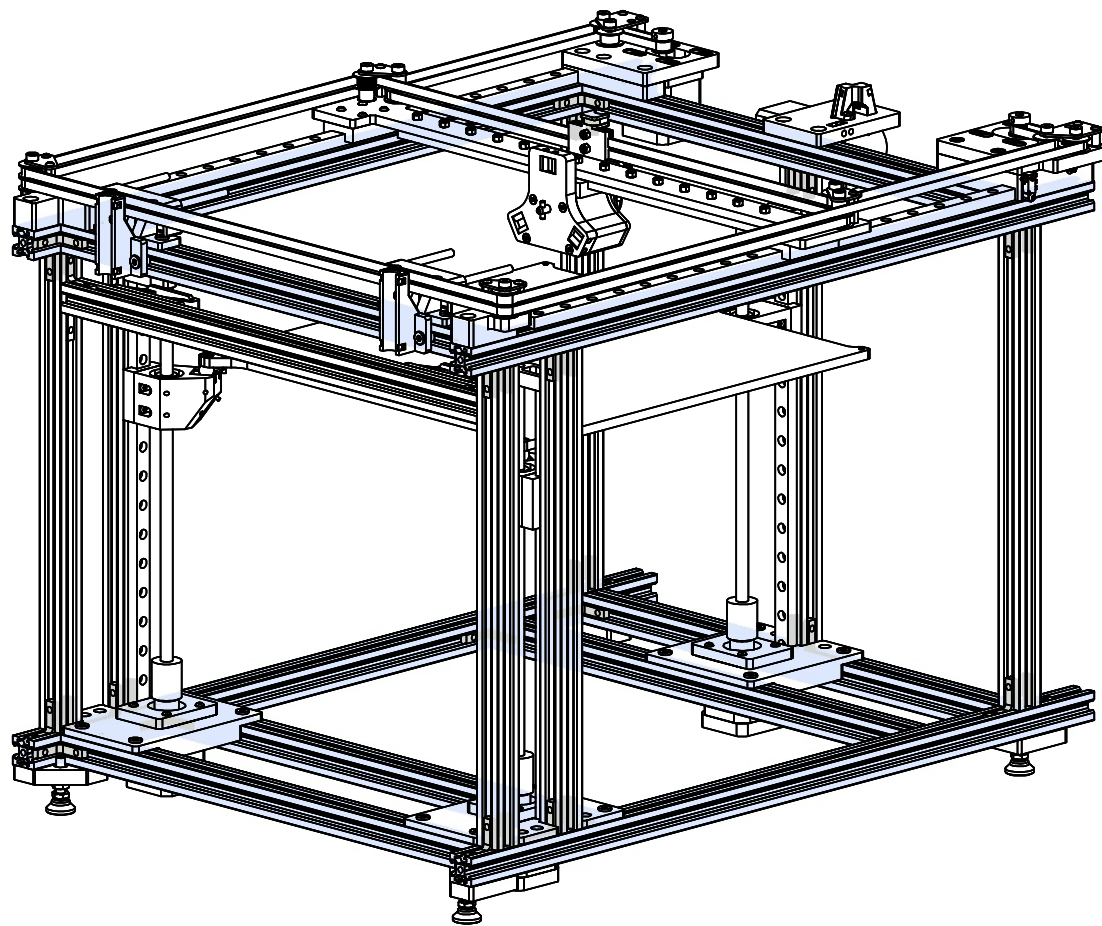


2

1

B

B



A

A

Outer Frame Assembly and Alignment



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Joshua Vasquez

last edited:
10/19/2019

SCALE: 1:5

SHEET 1 OF 11

2

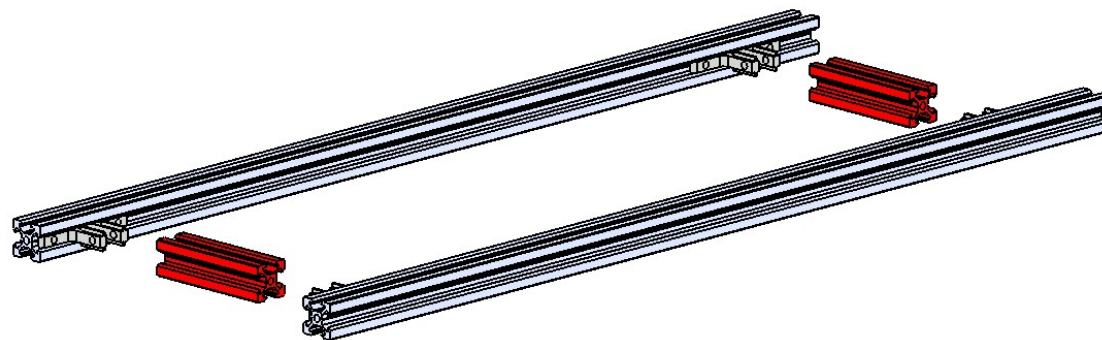
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2

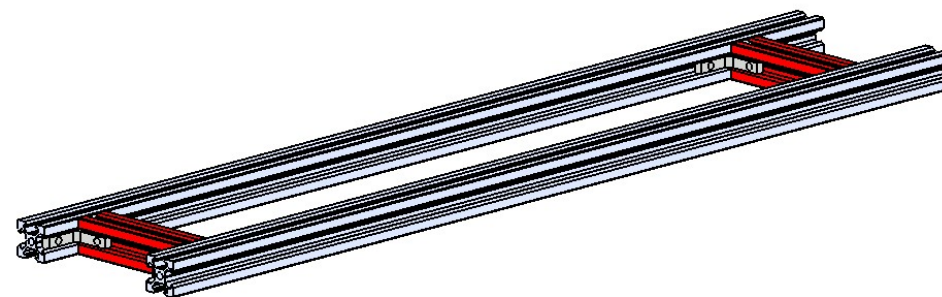
1

B

B



Exploded View



Assembled View

Assemble the 12 items together as shown without tightening down any screws. Lay the loose assembly down on a flat surface.

Exact locations of the brackets do not matter yet.

The short red extrusions are for squaring the frame and will be removed later.

A

ITEM NO.	DESCRIPTION	QTY.
1	583mm TSlot Extrusion	2
2	Inside corner bracket	8
3	75mm Temporary TSlot Extrusion for Squaring	2

Upper Frame Squaring Setup



Created by:
Joshua Vasquez

last edited:
10/19/2019

SCALE: 1:4

SHEET 2 OF 11

2

1

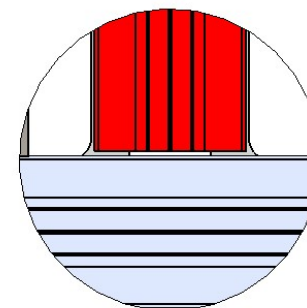
A



Overhead Tabletop View

Slide two 1-2-3 Blocks into the frame on either side and loosely clamp the entire setup together as shown above.

Notice that the red extrusions will be loose. This is intentional as they are not being used as references to square the frame. In this configuration, the frame is "square" using the 1-2-3 Blocks as a reference.



DETAIL A
SCALE 1 : 1

Upper Frame Bracket Registration



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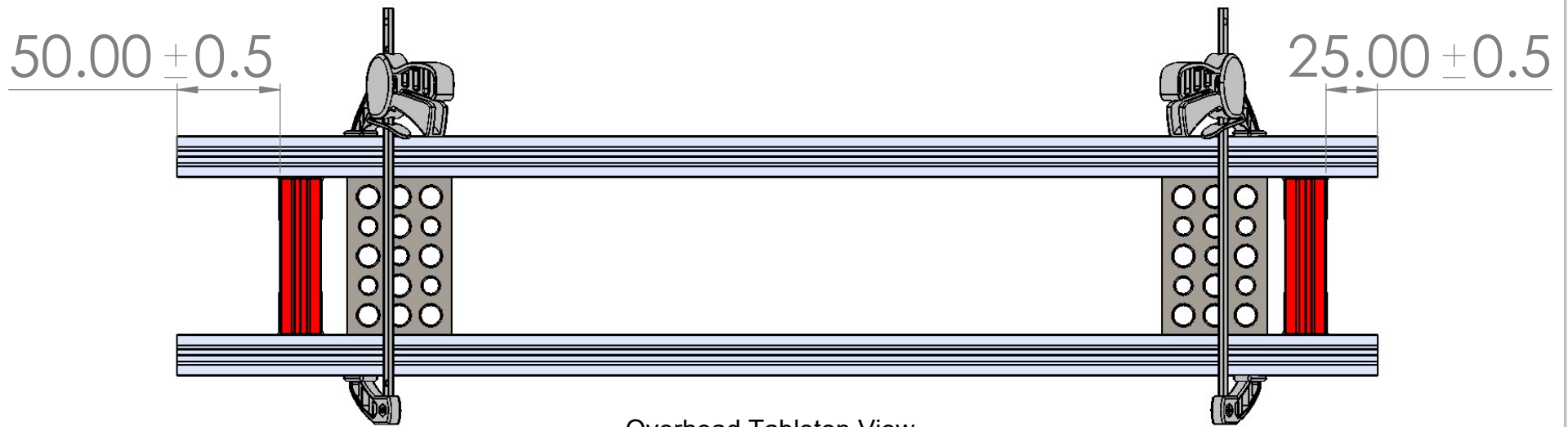
last edited:
10/19/2019

SCALE: 1:3

SHEET 3 OF 11

B

B



Overhead Tabletop View

Using Calipers as a reference, adjust the red extrusions such that they match the dimensions shown above. Note that bracing the entire assembly against a loose extrusion may make this dimension easier to measure as shown below. When they are in the proper location, fasten down all 16 screws in the inside corner brackets. This procedure will "set" the brackets in the correct location.



A

Upper Frame Bracket Fixturing

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	SCALE: 1:3	SHEET 4 OF 11

2

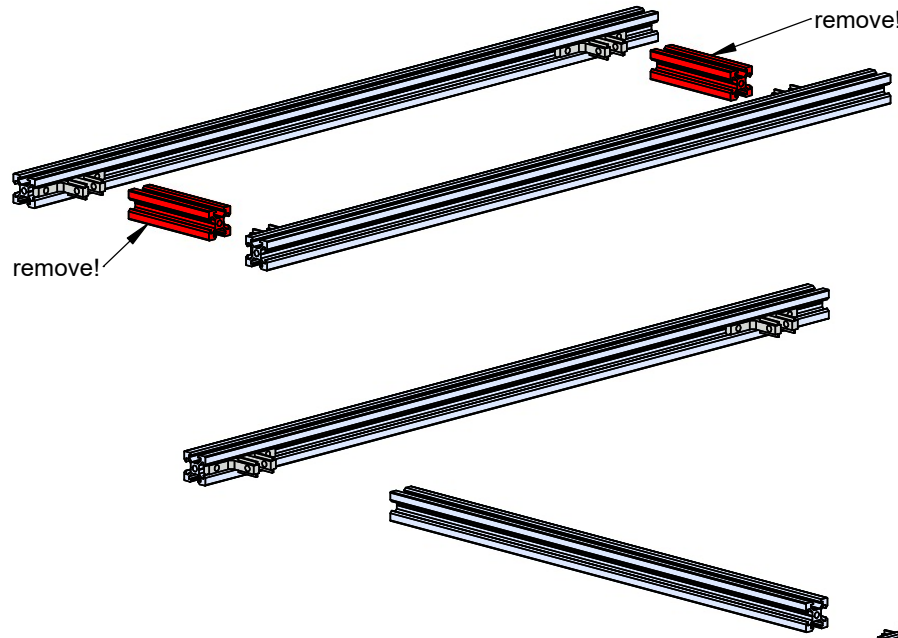
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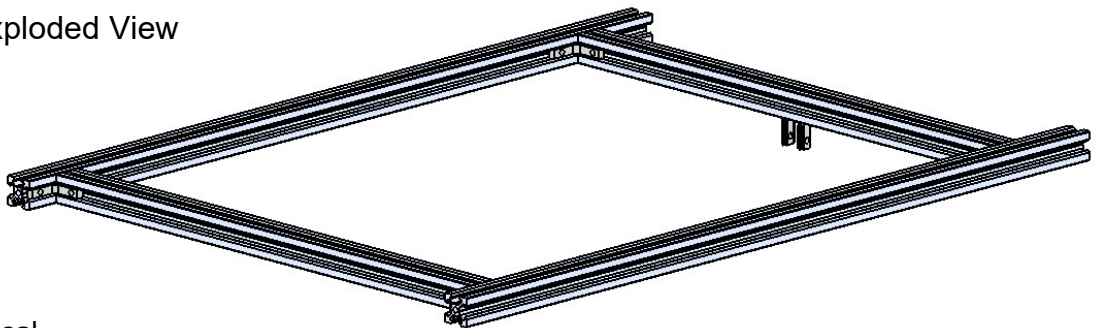
B



Remove the clamps and 1-2-3 blocks. Then loosen the 8 screws connecting the red extrusions. Leave all other screws tightened.

Install the 389mm TSlot Extrusions in place of the Red Extrusions. Tighten them down securely.

Exploded View



Assembled View

Assuming your 389mm TSlot Extrusions were cut to identical lengths, your frame should now be square!

A

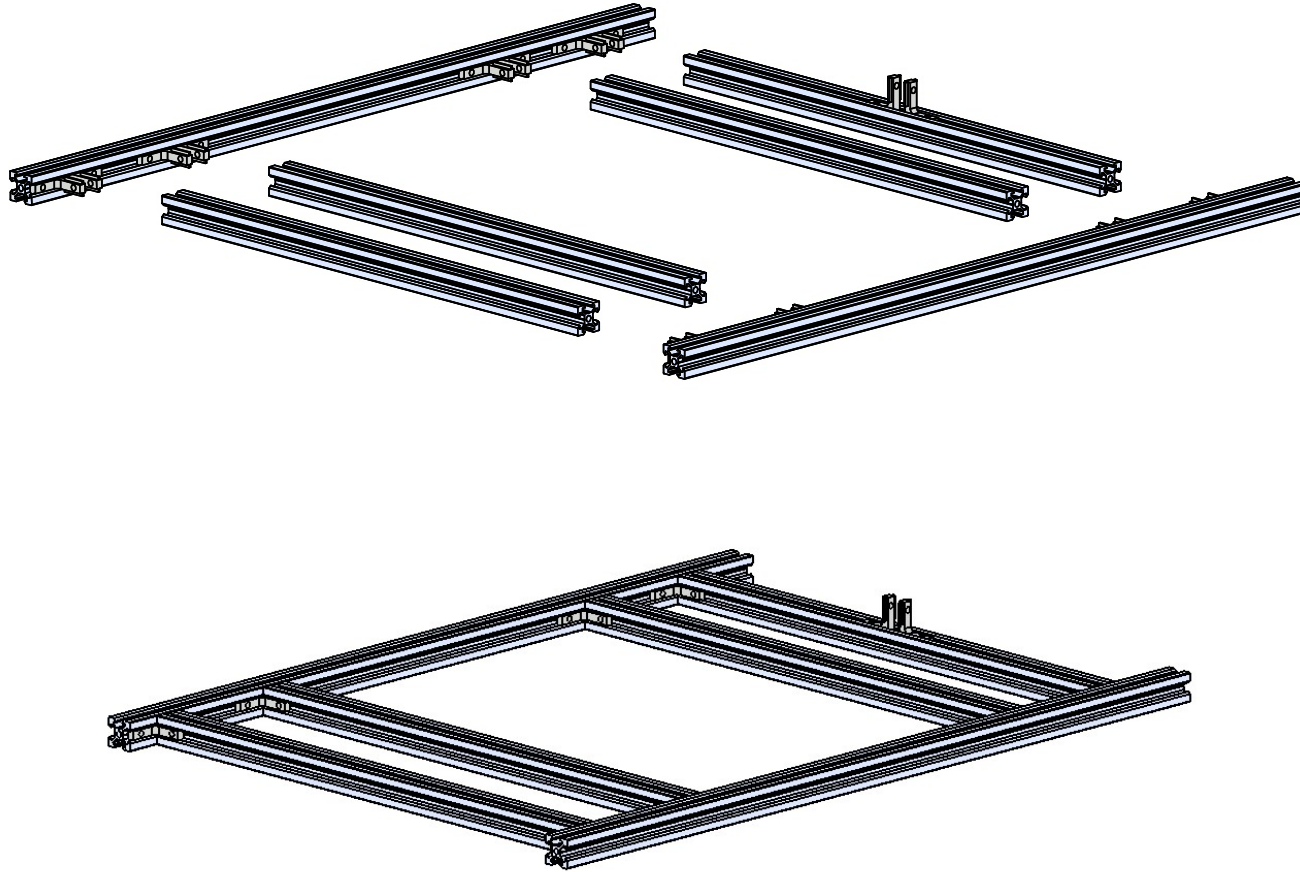
A

ITEM NO.	DESCRIPTION	QTY.
1	389mm TSlot Extrusion	2
2	583mm TSlot Extrusion with brackets installed	2

Upper Frame Assembly		
	Created by: Joshua Vasquez	last edited: 10/19/2019
	SCALE: 1:5	SHEET 5 OF 11

2

1



Like before, assemble the entire lower frame without fastening down any set screws.

ITEM NO.	DESCRIPTION	QTY.
1	389mm TSlot Extrusion	4
2	583mm TSlot Extrusion	2
3	Inside corner bracket	18

Lower Frame Loose Assembly



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Joshua Vasquez

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10/19/2019

SCALE: 1:5

SHEET 6 OF 11

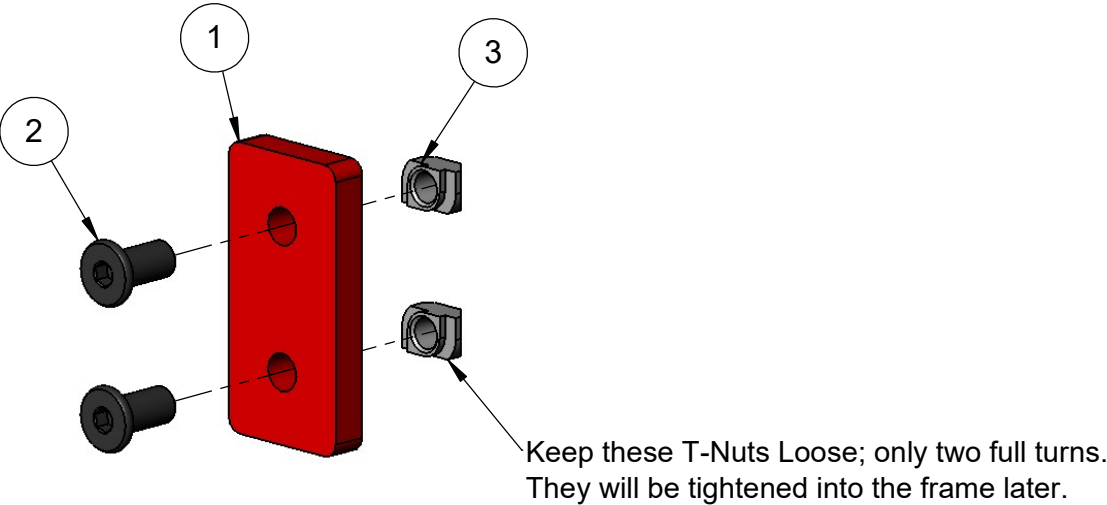
B

B

A

A

Make 8 of the following assemblies.



ITEM NO.	DESCRIPTION	QTY.
1	Outer Frame Squaring Plate	8
2	M5 x 0.8 Screw, Low Profile, 10mm	16
3	M5 Drop-In T-Nut for 20x20 Extrusion	16

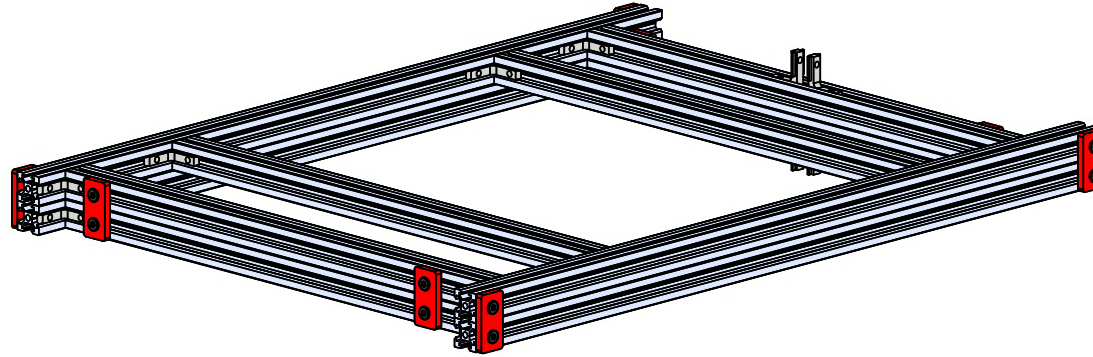
Squaring Bracket Assembly		
	Created by: Joshua Vasquez	last edited: 10/19/2019
	SCALE: 1:1	SHEET 7 OF 11

2

1

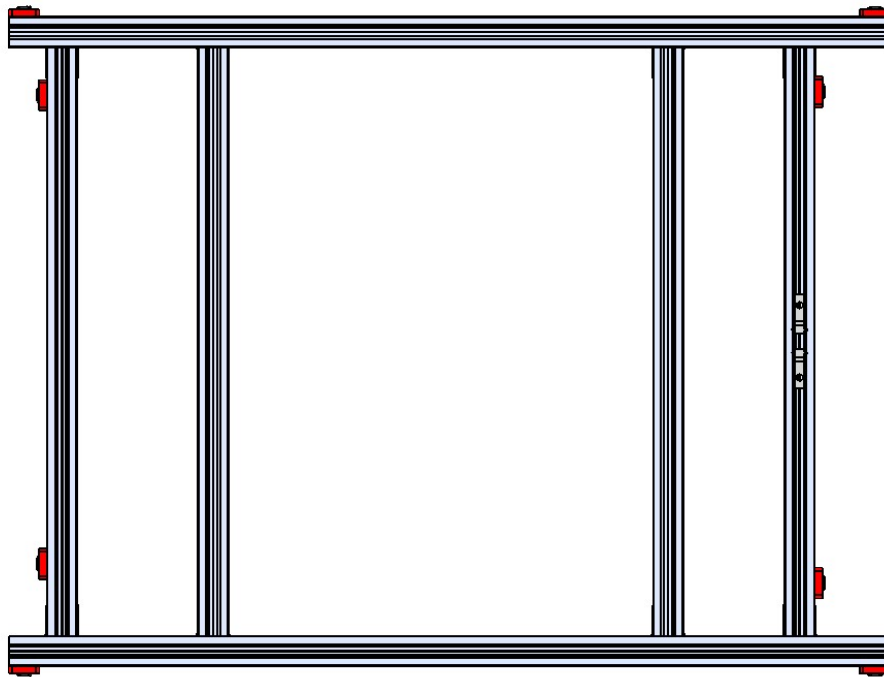
Join the prior frame with the loose frame "back-to-back" such that the dangling corner brackets do not interfere with each other. Then install the 8 plate assemblies into the corner and tighten them down such that the frame is "pulled" into the shape by the frame from the prior step.

Note: This process is made easier by dangling the frame over a table such that the corner brackets do not prevent the frame from resting flat on the table surface.



Clamp down the outer frame with the temporary red plates as shown below. This step will pull the lower frame into a configuration that matches the upper frame.

Then clamp down the setscrews in the outer frame extrusions. (The inner extrusions will be clamped down later.)



Upper/Lower Frame Registration



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SCALE: 1:5

SHEET 8 OF 11

2

1

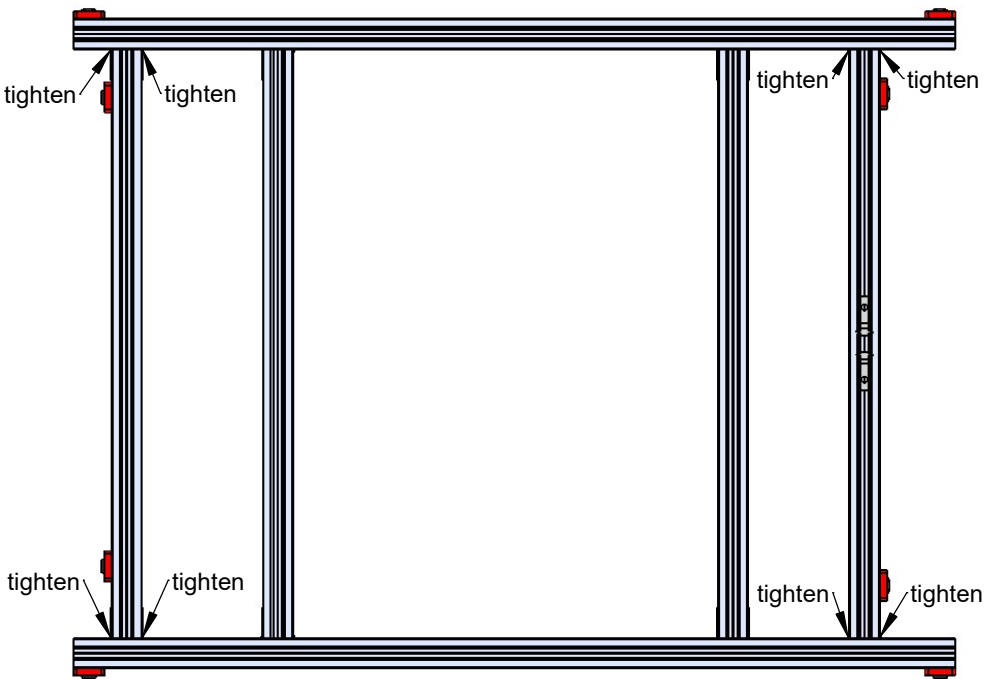
2

1

Now tighten down the setscrews in the outer frame extrusions on the frame that is still loose. (The inner extrusions will be clamped down later.)

B

B




A

A

2

1

Lower Frame Bracket Fixturing		
	Created by: Joshua Vasquez	last edited: 10/19/2019
	SCALE: 1:5	SHEET 9 OF 11

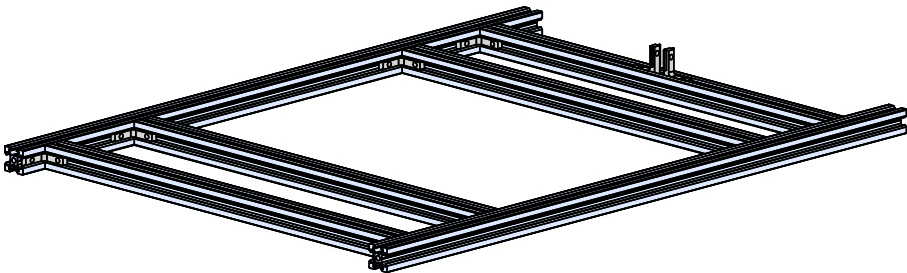
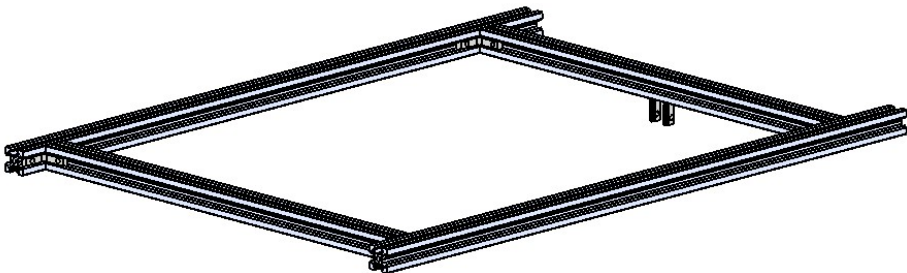
2

1

With the outer screws tightened on the lower frame, remove the temporary plates and separate the frames.

B


B



Set this one aside.

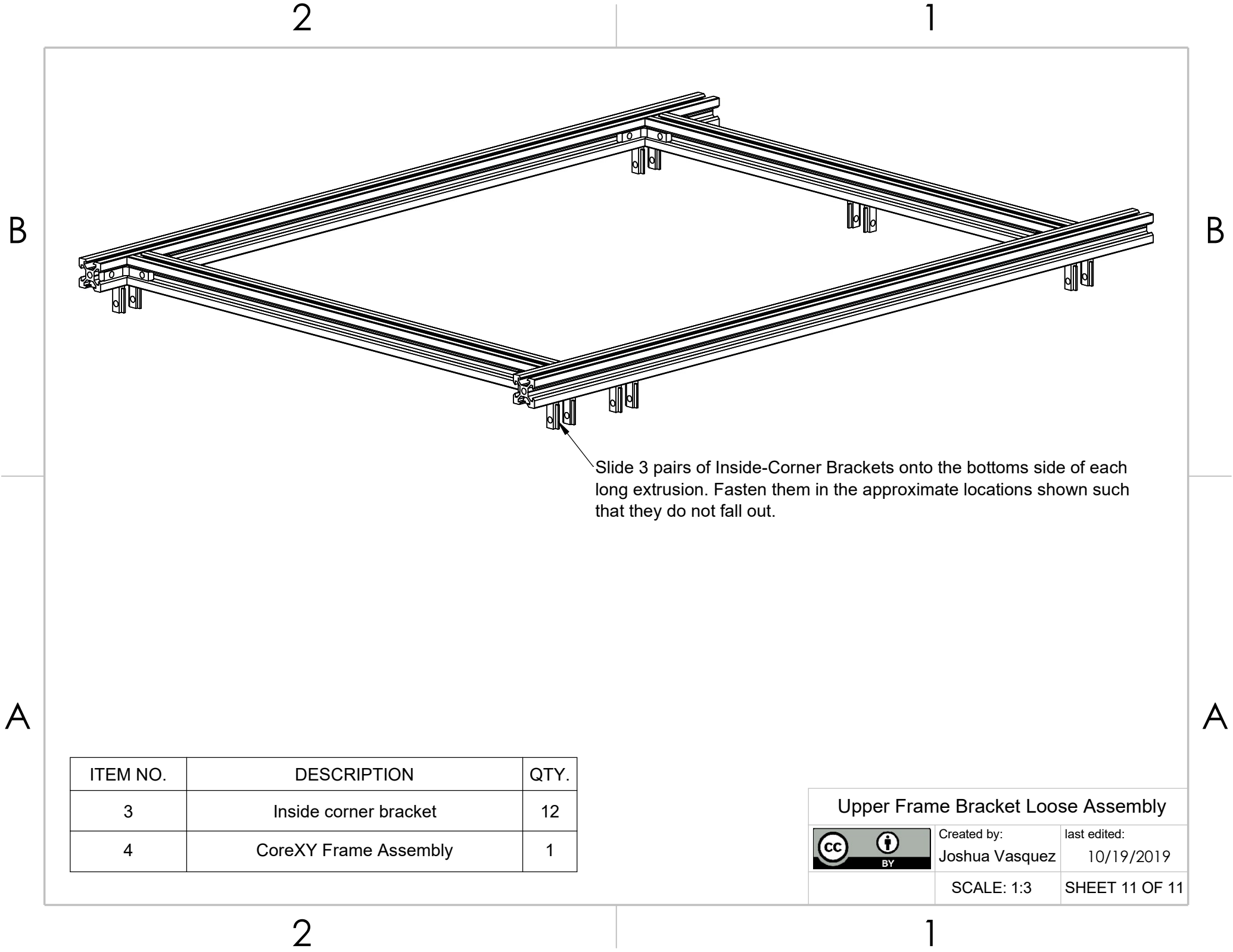
A

A


Separated Upper/Lower Frames		
	Created by: Joshua Vasquez	last edited: 10/19/2019
	SCALE: 1:6	SHEET 10 OF 11

2

1



ITEM NO.	DESCRIPTION	QTY.
3	Inside corner bracket	12
4	CoreXY Frame Assembly	1

Upper Frame Bracket Loose Assembly		
	Created by: Joshua Vasquez	last edited: 10/19/2019
	SCALE: 1:3	SHEET 11 OF 11