

Machined Motor Plate Assembly Instructions

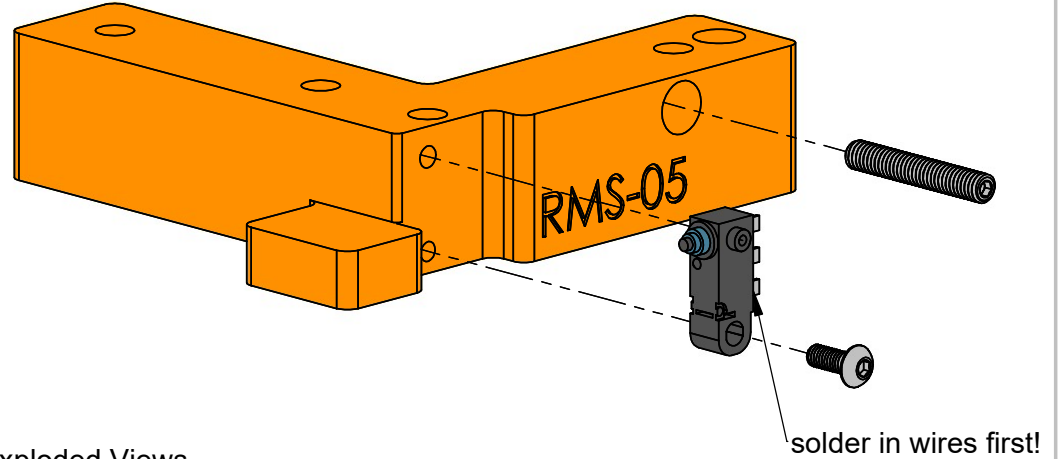
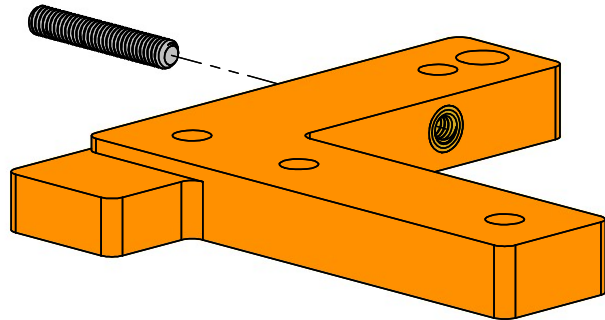


Instructions
Joshua Vasquez

last edited:
3/15/2021

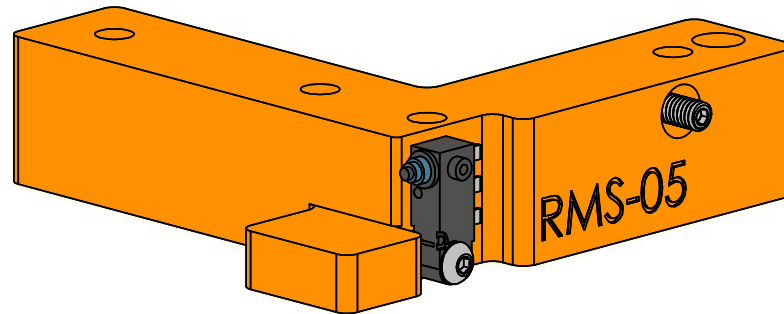
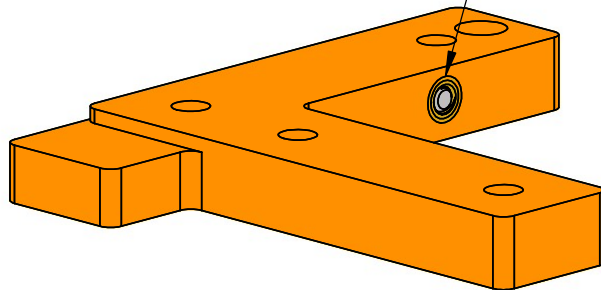
SCALE: 1:1

SHEET 1 OF 11



Exploded Views

On each set screw, just install the screw until it is flush with the inside surface. If there is residual 3D printed gunk from the heat-set installation process, you can clear it by installing the screw backwards first.



Assembled Views

ITEM NO.	DESCRIPTION	QTY.
1	Short Motor Spacer with Insert	1
2	Tall Motor Spacer with Insert	1
3	Y Axis Limit Switch with Harness	1
4	M4 Set Screw, 25mm long	2
5	M3 Buttonhead Screw, 8mm long	1

Spacer Assembly



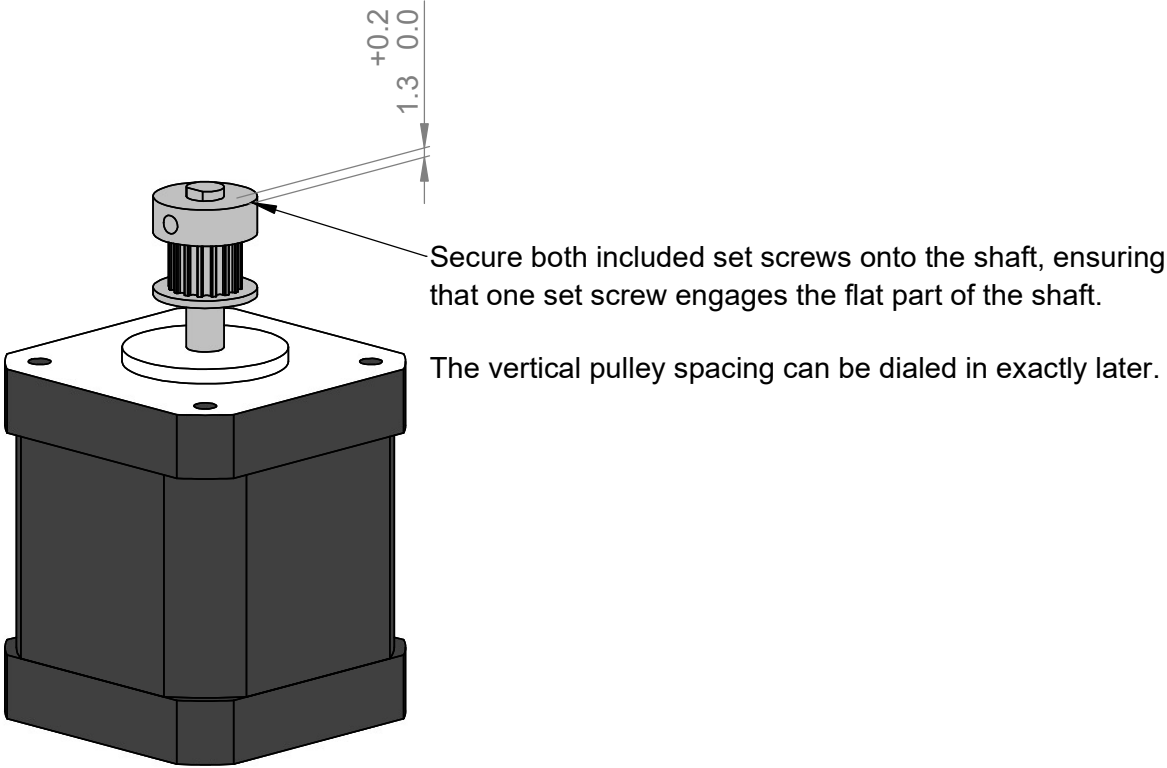
Created by:
Joshua Vasquez

last edited:
3/15/2021

SCALE: 1:1

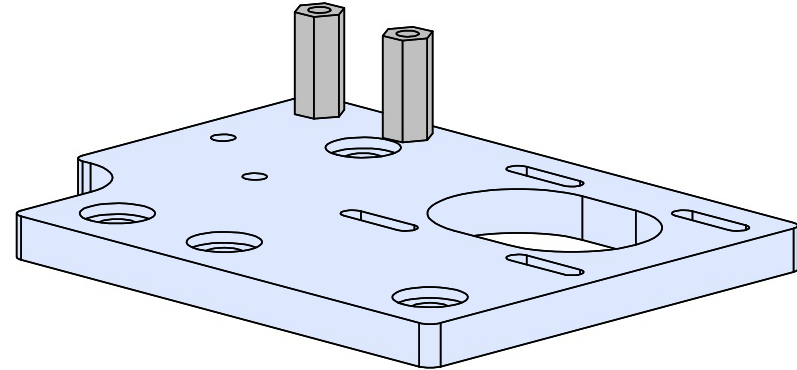
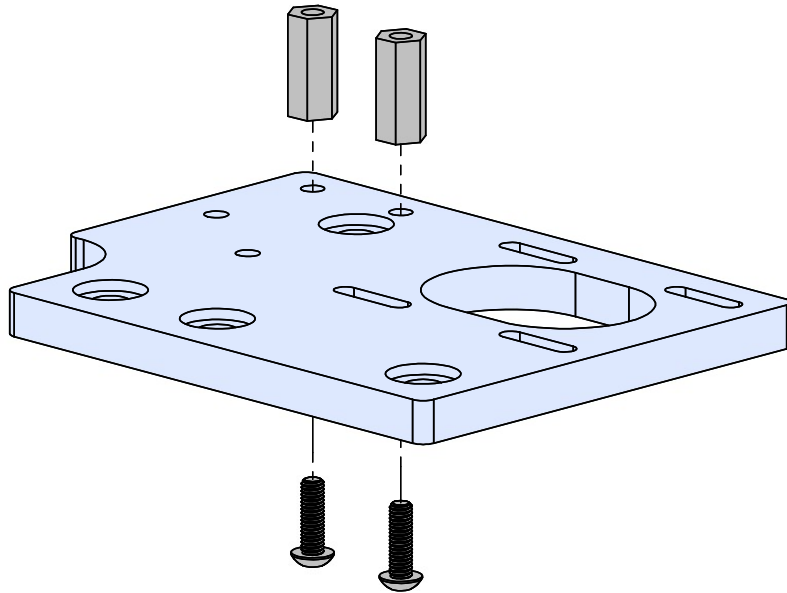
SHEET 2 OF 11

Make two identical assemblies.



ITEM NO.	DESCRIPTION	QTY.
1	16-T 2GT Drive Pulley for 6mm belt	1
2	Nema17 XY Stepper: LDO-42STH60-2004MAC or 17HM19-2004S	1

Sheet1		
	Created by: Joshua Vasquez	last edited: 3/15/2021
	SCALE: 1:1	SHEET 3 OF 11



ITEM NO.	DESCRIPTION	
1	M3 Standoff, 14mm long, 6mm wide	2
2	M3 Buttonhead Screw, 10mm long	2
3	Machined Left Motor Corner Bracket	1

Left Motor Plate Assembly 1/4

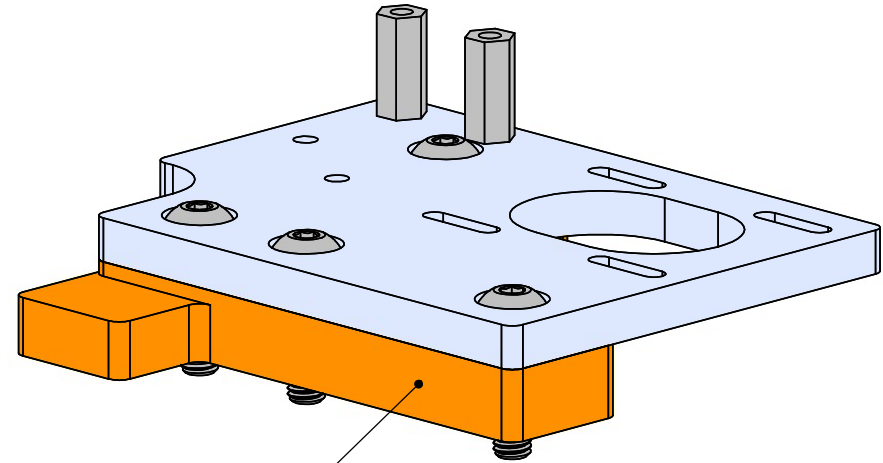
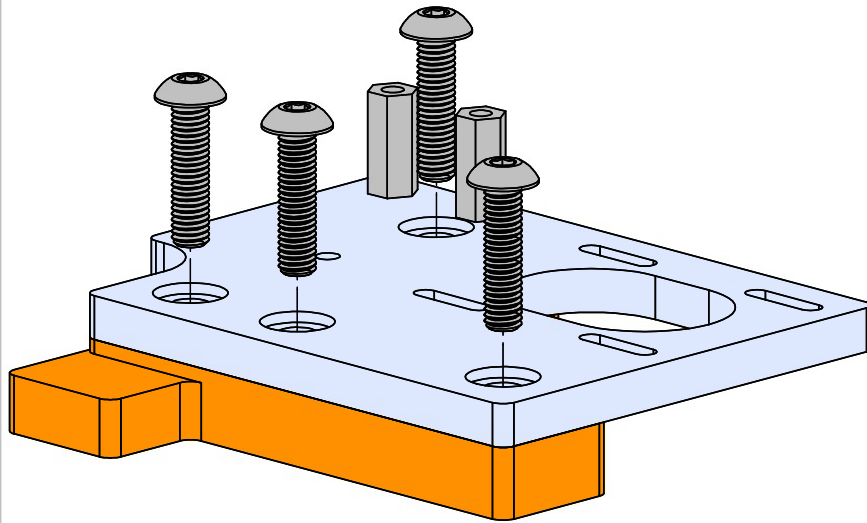


Created by:
Joshua Vasquez

last edited:
3/15/2021

SCALE: 1:1

SHEET 4 OF 11



This part will be loose until the whole assembly is mounted into the frame.

ITEM NO.	DESCRIPTION	
4	M5 Buttonhead Screw, 20mm long	4
5	Left Motor Spacer	1

Left Motor Plate Assembly 2/4



Created by:
Joshua Vasquez

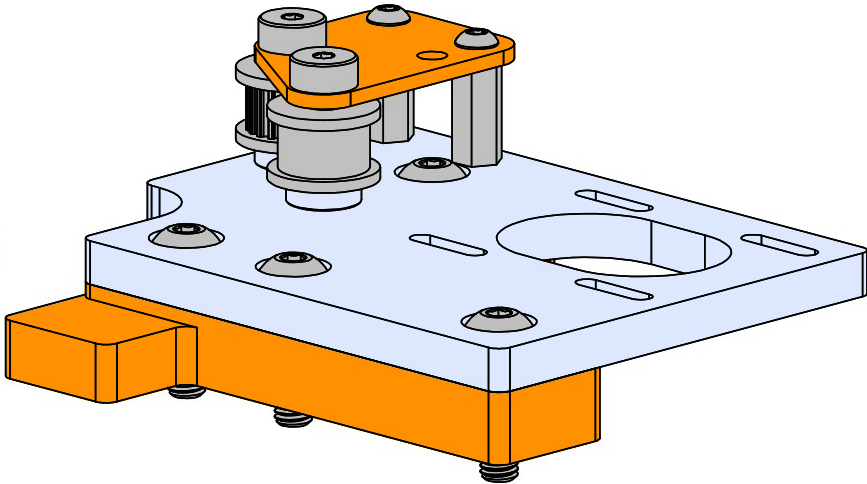
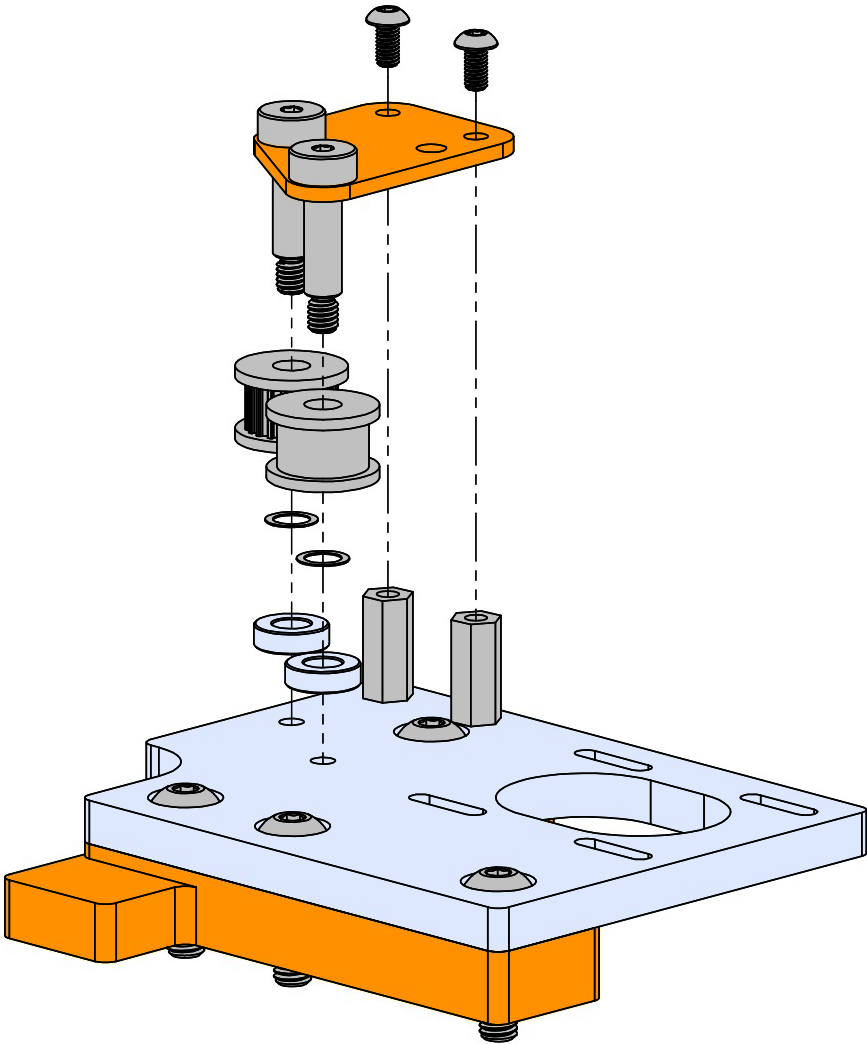
last edited:
3/15/2021

SCALE: 1:1

SHEET 5 OF 11

These pulleys can be either Gates brand or Generic 2GT, provided that they are between 8.5 and 10mm tall.

ITEM NO.	DESCRIPTION	QTY
5	OpenBuilds M5 3mm Spacer	2
6	M5 Shim, 0.2mm thick, 7mm OD	2
7	pulley reinforcement plate for motor	1
8	M4 Shoulder Screw, 16mm-l, 5mm-d	2
9	M3 Buttonhead Screw, 6mm long	2
10	20T toothless idler, 5mm bore	1
11	20T Idler pulley, 2GT, 5mm bore	1



Left Motor Plate Assembly 3/4

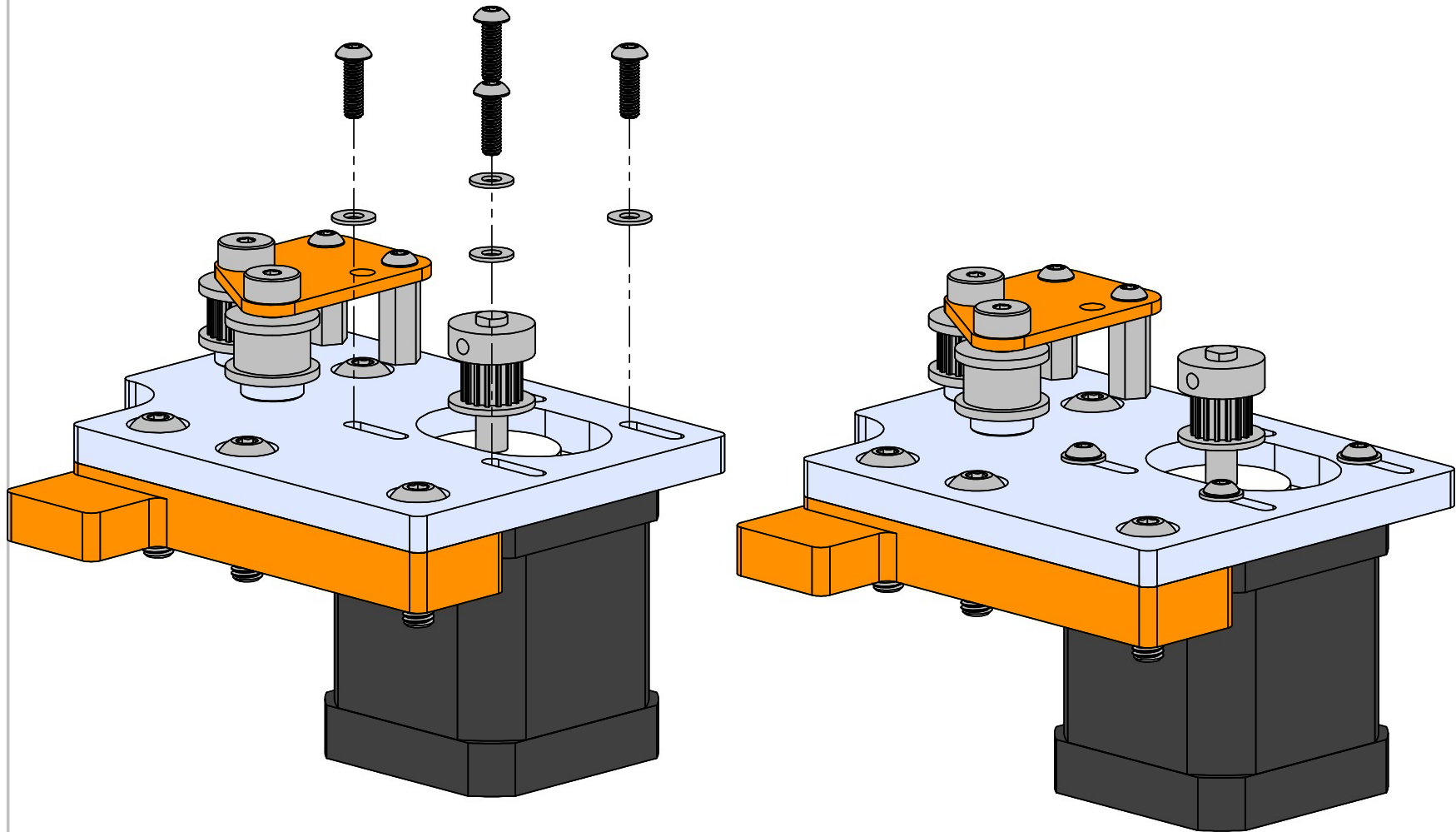


Created by:
Joshua Vasquez

last edited:
3/15/2021

SCALE: 1:1

SHEET 6 OF 11



ITEM NO.	DESCRIPTION	
2	M3 Buttonhead Screw, 10mm long	6
10	M3 Washer	4
11	Stepper Motor with Drive Pulley	1

Left Motor Plate Assembly 4/4

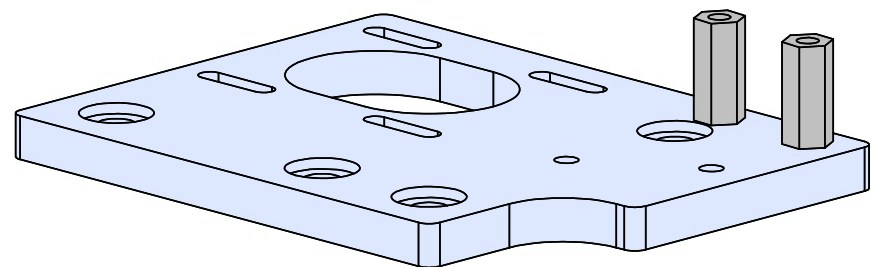
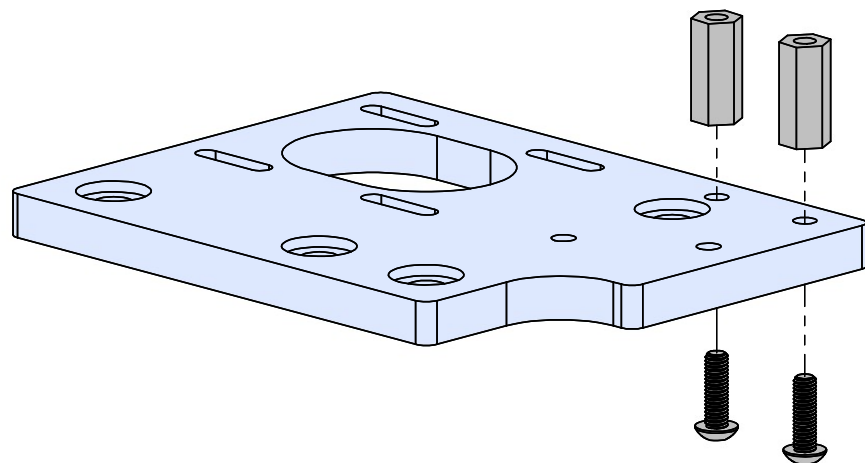


Created by:
Joshua Vasquez


last edited:
3/15/2021

SCALE: 1:1

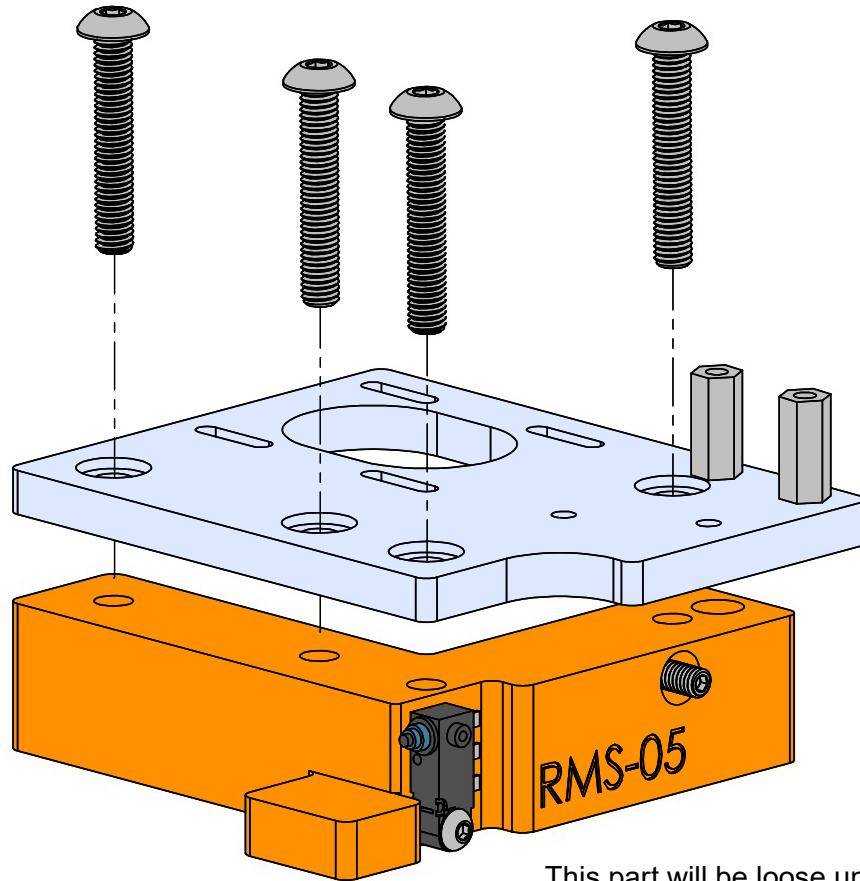
SHEET 7 OF 11



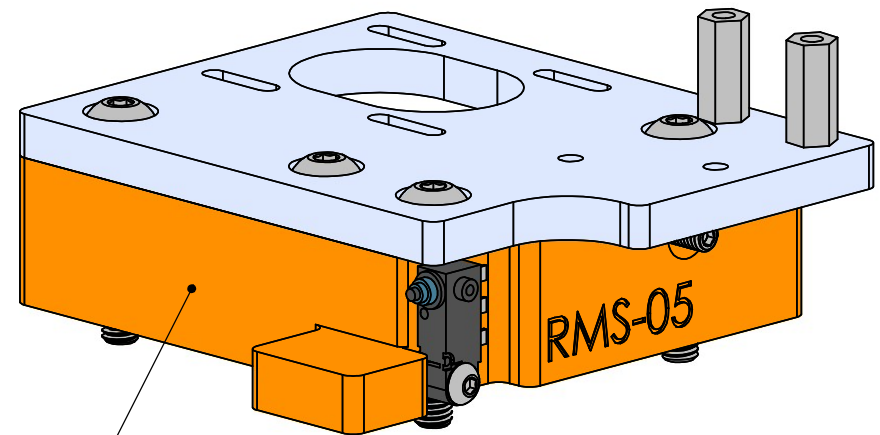
ITEM NO.	DESCRIPTION	
1	Machined Right Motor Corner Bracket	1
2	M3 Standoff, 14mm long, 6mm wide	2
3	M3 Buttonhead Screw, 10mm long	2

Right Motor Plate Assembly 1/4		
	Created by:	last edited:
	Joshua Vasquez	3/15/2021
	SCALE: 1:1	SHEET 8 OF 11

ITEM NO.	DESCRIPTION	
3	Tall Motor Corner Plate Spacer Assembly	1
4	M5 Buttonhead Screw, 30mm long	4



This part will be loose until the whole assembly is mounted into the frame.



Right Motor Plate Assembly 2/4



Created by:
Joshua Vasquez

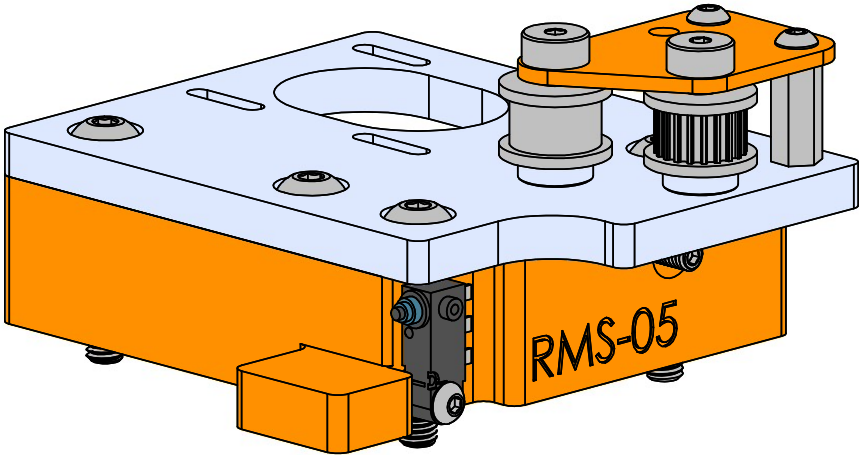
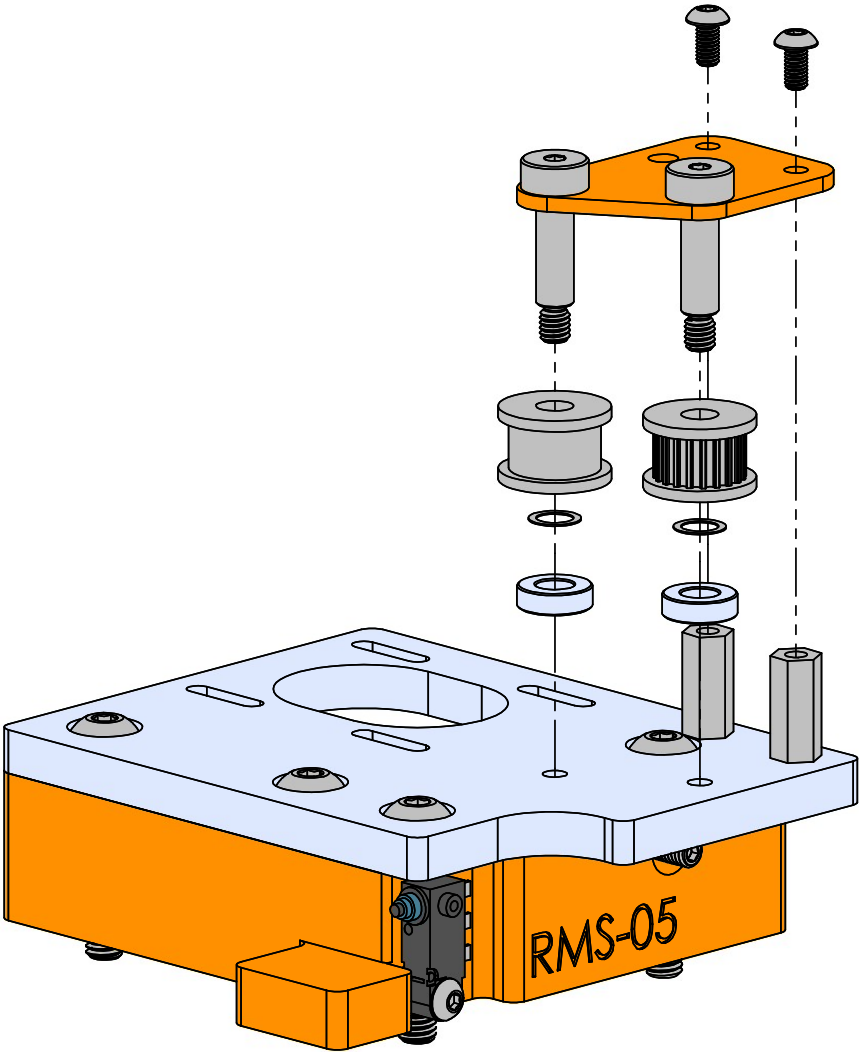
last edited:
3/15/2021


SCALE: 1:1

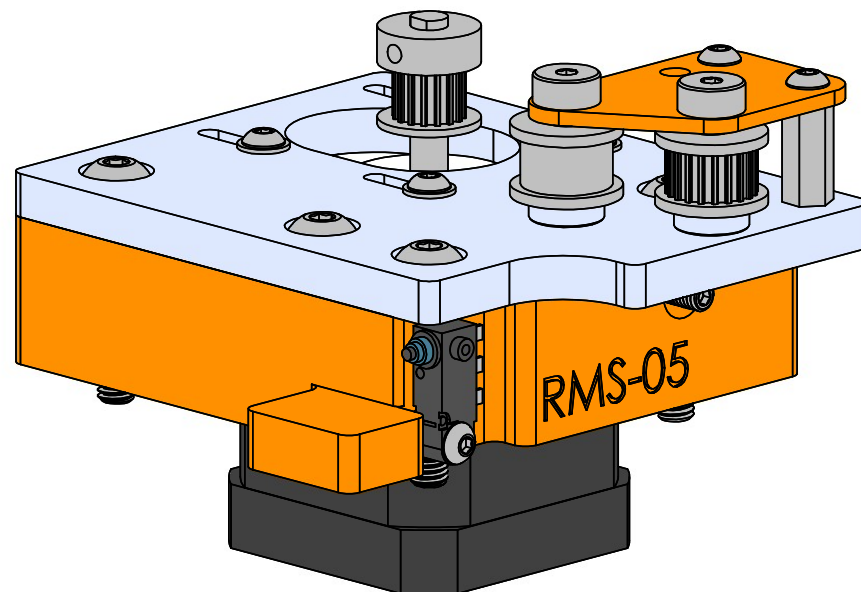
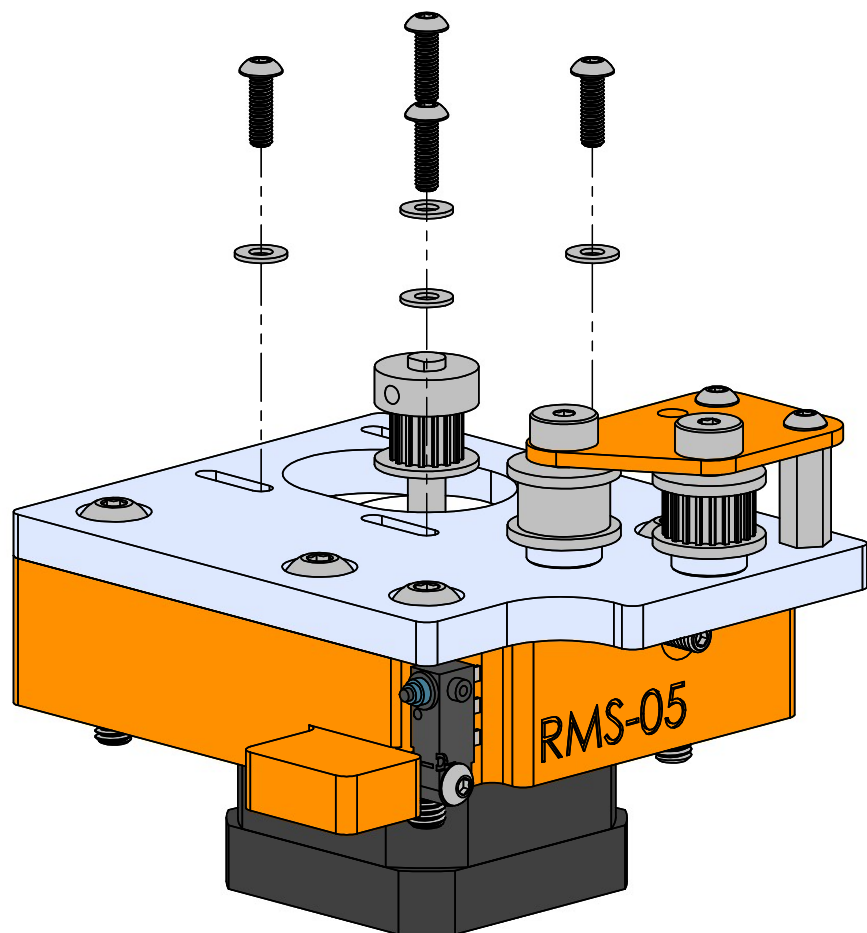
SHEET 9 OF 11

These pulleys can be either Gates brand or Generic 2GT, provided that they are between 8.5 and 10mm tall.

ITEM NO.	DESCRIPTION	
3	20T Idler pulley, 2GT, 5mm bore	1
4	20T toothless idler, 5mm bore	1
5	pulley reinforcement plate for motor	1
6	M3 Buttonhead Screw, 6mm long	2
7	M4 Shoulder Screw, 16mm-l, 5mm-d	2
8	M5 Shim, 0.2mm thick, 7mm OD	2
9	OpenBuilds M5 3mm Spacer	2



Right Motor Plate Assembly 3/4		
	Created by: Joshua Vasquez	last edited: 3/15/2021
	SCALE: 1:1	SHEET 10 OF 11



ITEM NO.	DESCRIPTION	QTY
10	M3 Buttonhead Screw, 10mm long	6
11	Stepper Motor with Drive Pulley	1
12	M3 Washer	4
13	20T Idler pulley, 2GT, 5mm bore	1
14	20T Toothless Idler pulley, 2GT, 5mm bore	1

Right Motor Plate Assembly 4/4



Created by:
Joshua Vasquez

last edited:
3/15/2021

SCALE: 1:1

SHEET 11 OF 11