

Motor Plate Assembly

Created by:
Joshua Vasquez

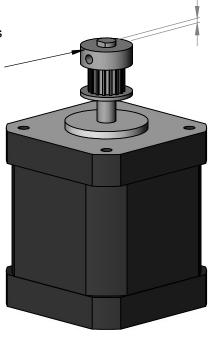
SCALE: 1:1

SHEET 1 OF 11

Make two assemblies.

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Tighten down all setscrews. If your drive pulley has multiple setscrews, ensure that at least one setscrew engages the flat surface of the shaft.



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ITEM NO.	DESCRIPTION	QTY.
1	16-T 2GT Drive Pulley for 6mm belt	1
2	Nema 17 Stepper Motor	1

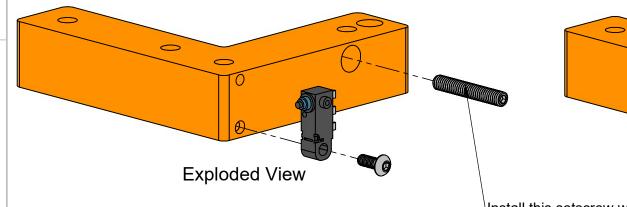
Drive Motor Assembly			
CC	<b>(</b> )	Created by: Joshua Vasquez	last edited: 1/24/2020
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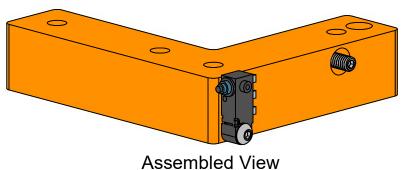
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Solder 300mm of 26AWG stranded wire to the two outer leads as shown below. Then install the crimp pins and connector housing included in the Duet kit. Note that polarity does not matter, but th wires must be connected to the outer socets of the connector.









Install this setscrew with 4-6 turns. It will be readjusted later.

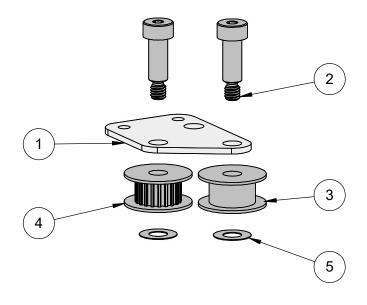
ITEM NO.	DESCRIPTION	QTY.
1	Dust-Proof Limit Switch with wiring	1
2	M3 Buttonhead Screw, 8mm long	1
3	Tall Motor Corner Plate with Insert	1
4	M4 Set Screw, 25mm long	1

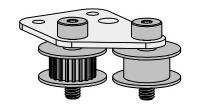
Y Limit Switch Installation			
(0)	<b>(i)</b> BY	Created by: Joshua Vasquez	last edited: 1/24/2020
		SCALE: 1:1	SHEET 3 OF 11

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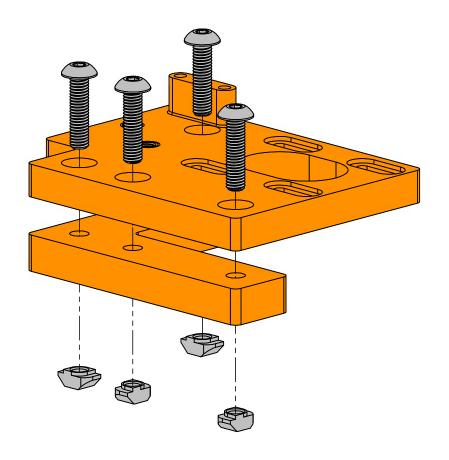


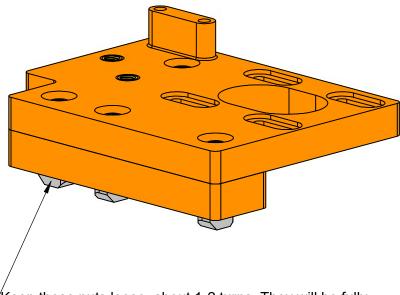


Set this assembly aside for one step.

ITEM NO.	DESCRIPTION	
1	pulley reinforcement plate for motor	1
2	M4 shoulder screw, 12mm-I, 5mm-d	2
3	20T toothless idler, 5mm bore	1
4	20T Idler pulley, 2GT, 5mm bore	1
5	M5 Shim, 0.2mm thick	2

Left Motor Pulley Assembly Created by: last edited: Joshua Vasquez 1/24/2020 SCALE: 1:1 SHEET 4 OF 11





Keep these nuts loose, about 1-2 turns. They will be fully tightened into the assembly later.

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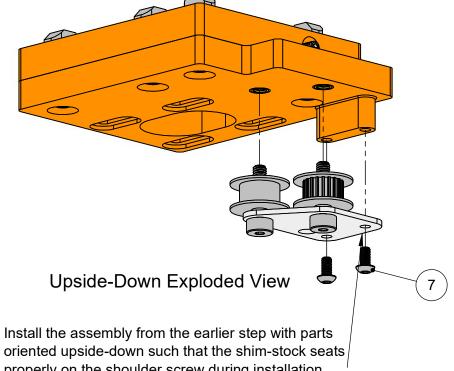
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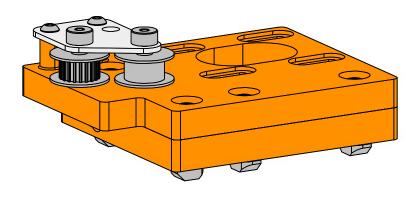
ITEM NO.	DESCRIPTION	
1	M5 Drop-In T-Nut for 20x20 Extrusion	4
2	Short Motor Corner Plate Spacer Assembly	1
3	Left Motor Plate with Inserts	1
4	M5 Buttonhead Screw, 20mm long	4
5	M4 Set Screw, 25mm long	1

	Left Motor Plate Assembly 1/3		
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		SCALE: 1:1	SHEET 5 OF 11

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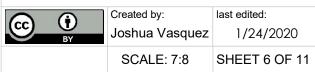


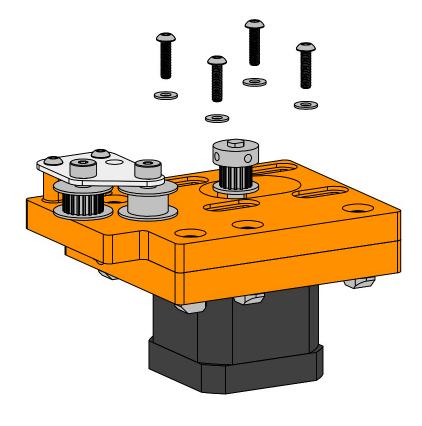


**Assembled View** 

oriented upside-down such that the shim-stock seats properly on the shoulder screw during installation.

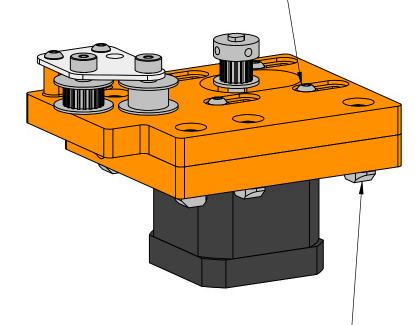
Left Motor Plate Assembly 2/3





**Exploded View** 

Do not fully-tighten the motor screws. They will be tightened later.



## Assembled View

Keep these T-Nuts loose, only two full turns; they will be tightenend into the frame later.

Left Motor Plate Assembly 3/3

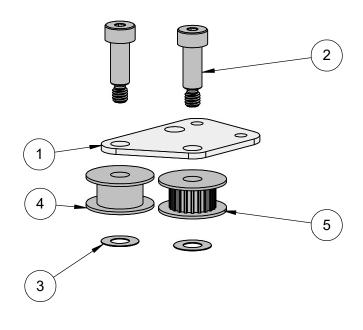
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	SCALE: 7:8	SHEET 7 OF 11

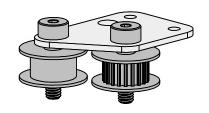
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Set this assembly aside for one step.

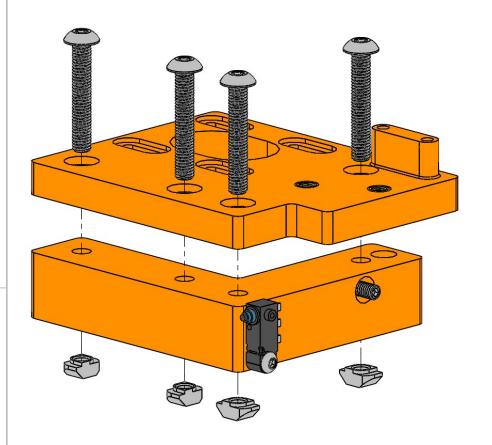
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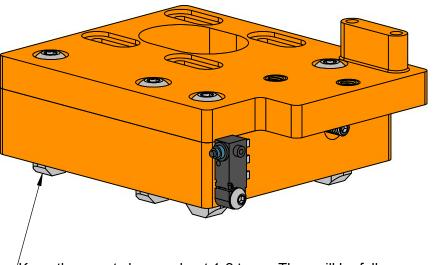
ITEM NO.	DESCRIPTION	
1	pulley reinforcement plate for motor	1
2	M4 shoulder screw, 12mm-l, 5mm-d	2
3	M5 Shim, 0.2mm thick	2
4	20T toothless idler, 5mm bore	1
5	20T Idler pulley, 2GT, 5mm bore	1

Right Motor Pulley Assembly			
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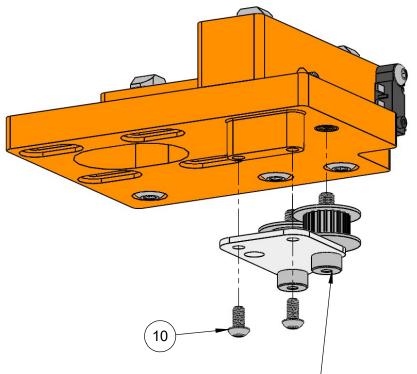
Keep these nuts loose, about 1-2 turns. They will be fully tightened into the assembly later.

ITEM NO.	DESCRIPTION	
1	Tall Motor Corner Plate Spacer Assembly	1
2	M5 Buttonhead Screw, 30mm long	4
3	M5 Drop-In T-Nut for 20x20 Extrusion	4
4	Right Motor Plate with Inserts	1

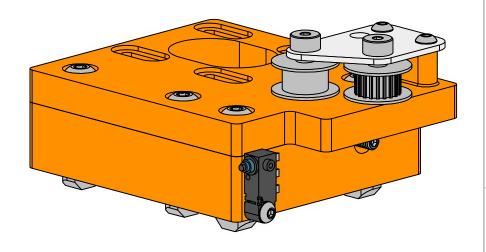
Right Motor Plate Assembly 1/3				
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		SCALE: 1:1	SHEET 9 OF 11	

## Upside-Down Exploded View

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Install the assembly from the earlier step with parts oriented upside-down such that the shimstock seats properly on the shoulder screw during installation.



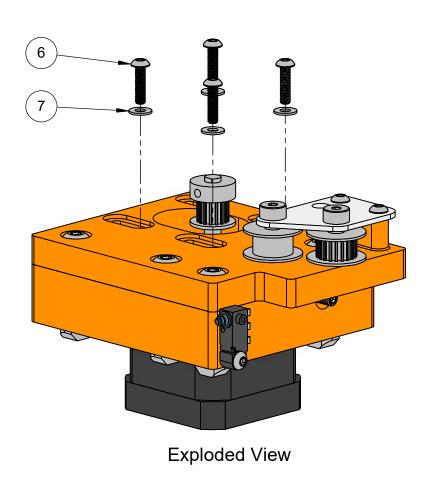
**Assembled View** 

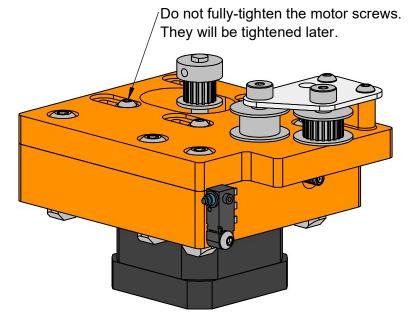
ITEM NO.	DESCRIPTION	QTY.
10	M3 Buttonhead Screw, 6mm long	2

	Right Motor Plate Assembly 2/3			
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		SCALE: 1:1	SHEET 10 OF 11	

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Assembled View

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ITEM NO.	DESCRIPTION	QTY.
6	M3 Buttonhead Screw, 12mm long	4
7	M3 Washer	4
8	Stepper with Drive Pulley	1

Right Motor Plate Assembly 3/3				
<u></u>	BY	Created by:	last edited:	
		Joshua Vasquez	1/24/2020	
		SCALE: 7:8	SHEET 11 OF 11	

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