

### Default Extruder Assembly



Created by:  
Joshua Vasquez

last edited:  
3/3/2020

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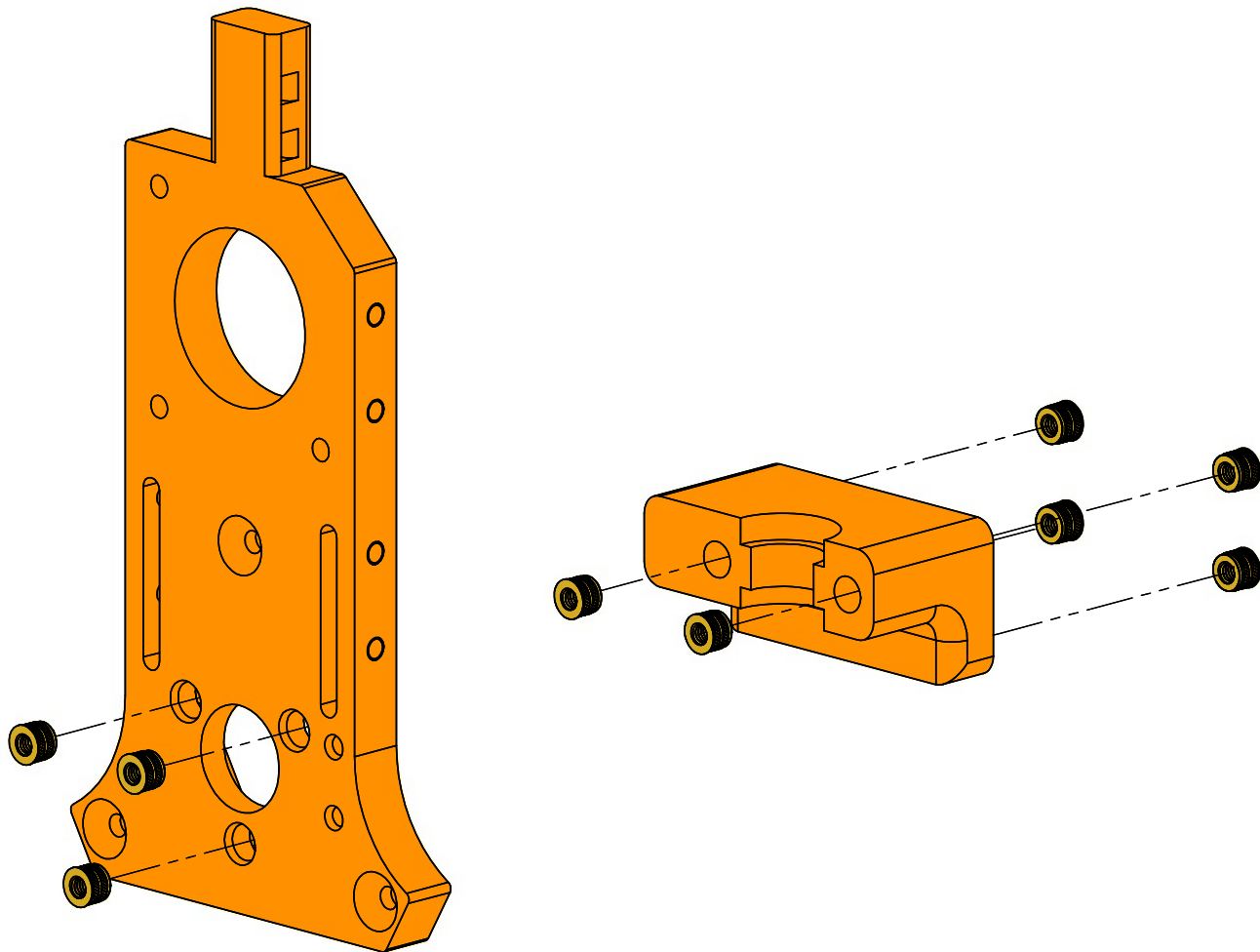
2

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Install the following inserts from the directions shown using the *plate press technique*.

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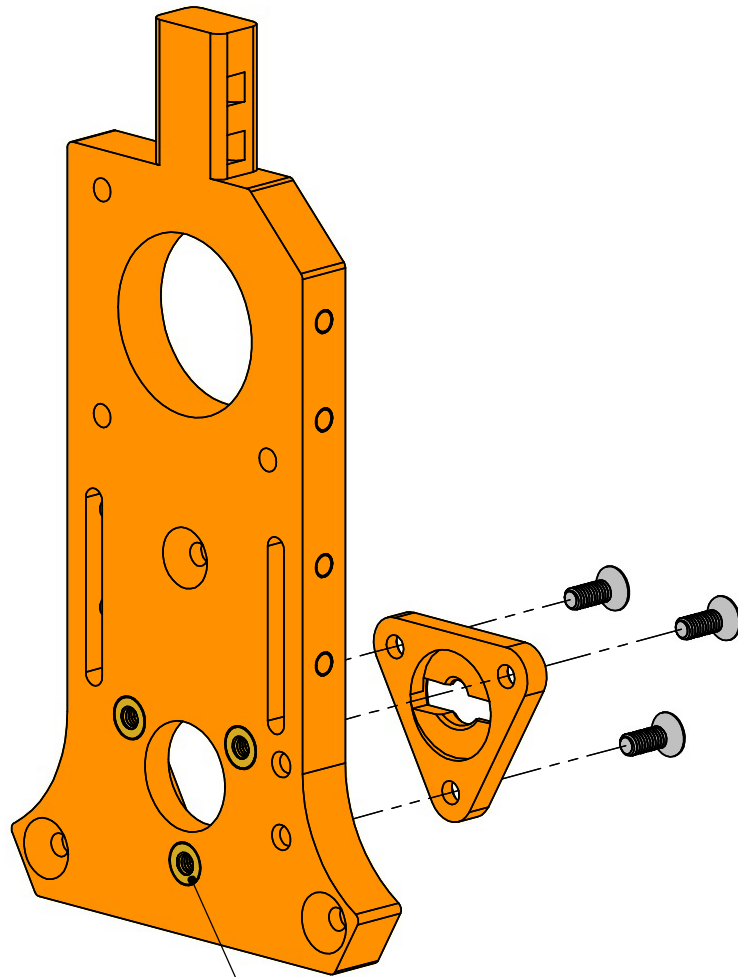
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ITEM NO.	DESCRIPTION	QTY.
2	M3 Tapered Heat Set Insert	9

Heat Set Insert Installation		
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1



These inserts may have left behind some "oozy" debris on the back. You can clear this debris by screwing a screw all the way from the other end and then removing it.

ITEM NO.	DESCRIPTION	QTY.
1	Wedge Plate	1
2	Base Tool Plate with Inserts	1
3	M3 Flathead Screw, 8mm long	3

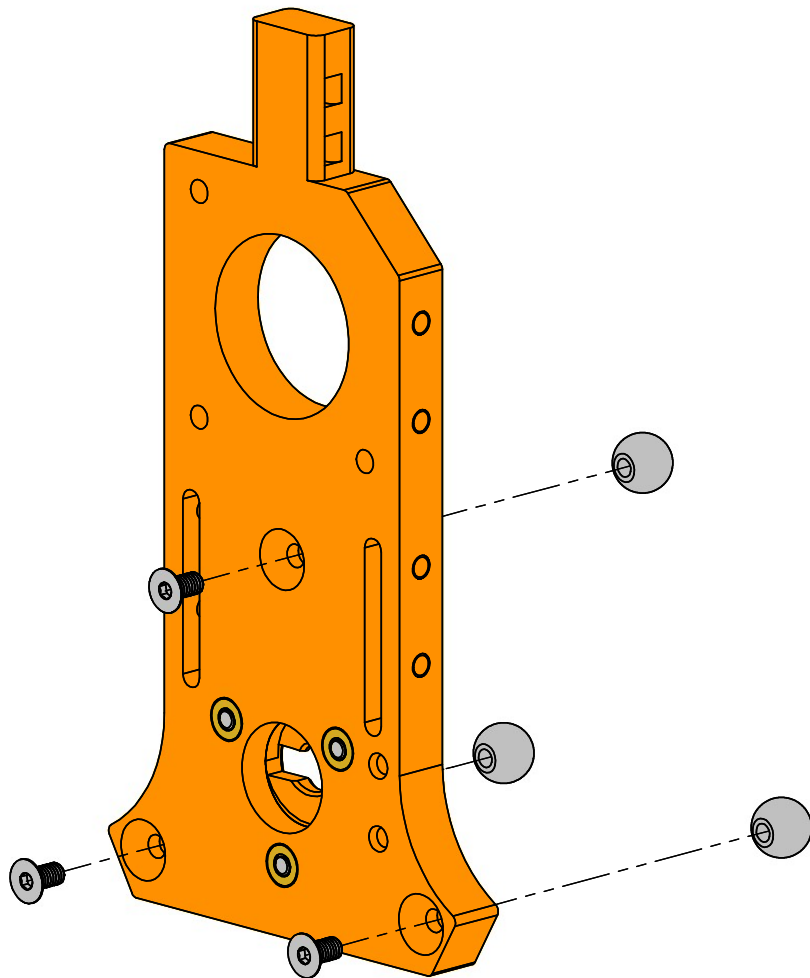
Wedge Plate Installation		
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	Joshua Vasquez	3/3/2020
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B

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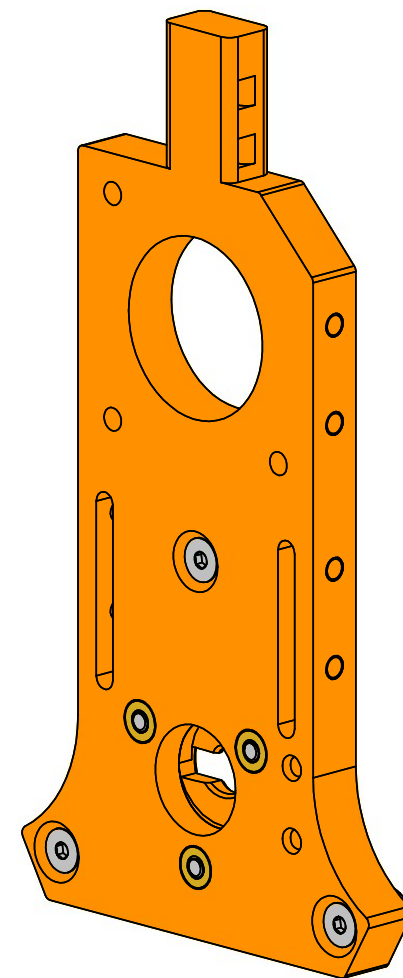
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ITEM NO.	DESCRIPTION	QTY.
4	M3 8mm Threaded Tool Balls	3
5	M3 Flathead Screw, 6mm long	3

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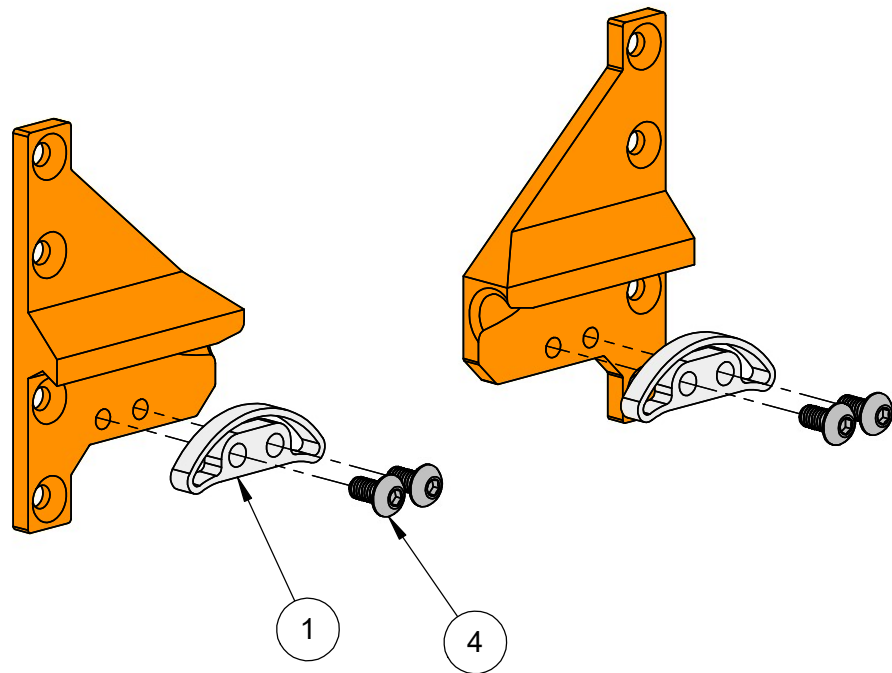


Tool Ball Installation		
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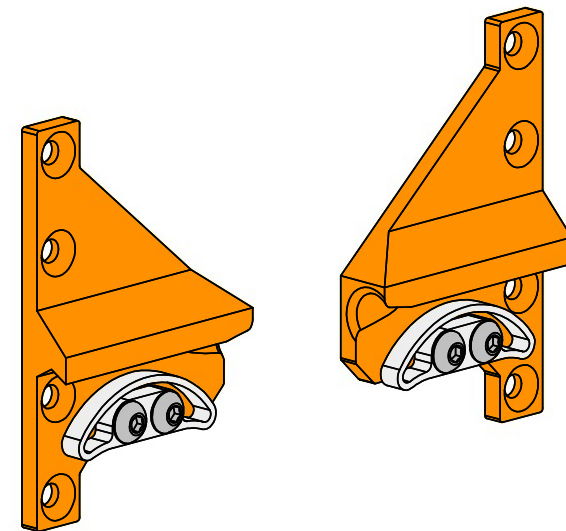
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ITEM NO.	DESCRIPTION	QTY.
1	Compression Flexure	1
2	Right Parking Wing	1
3	Left Parking Wing	1
4	M3 Buttonhead Screw, 6mm long	2

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### Parking Wing Assembly

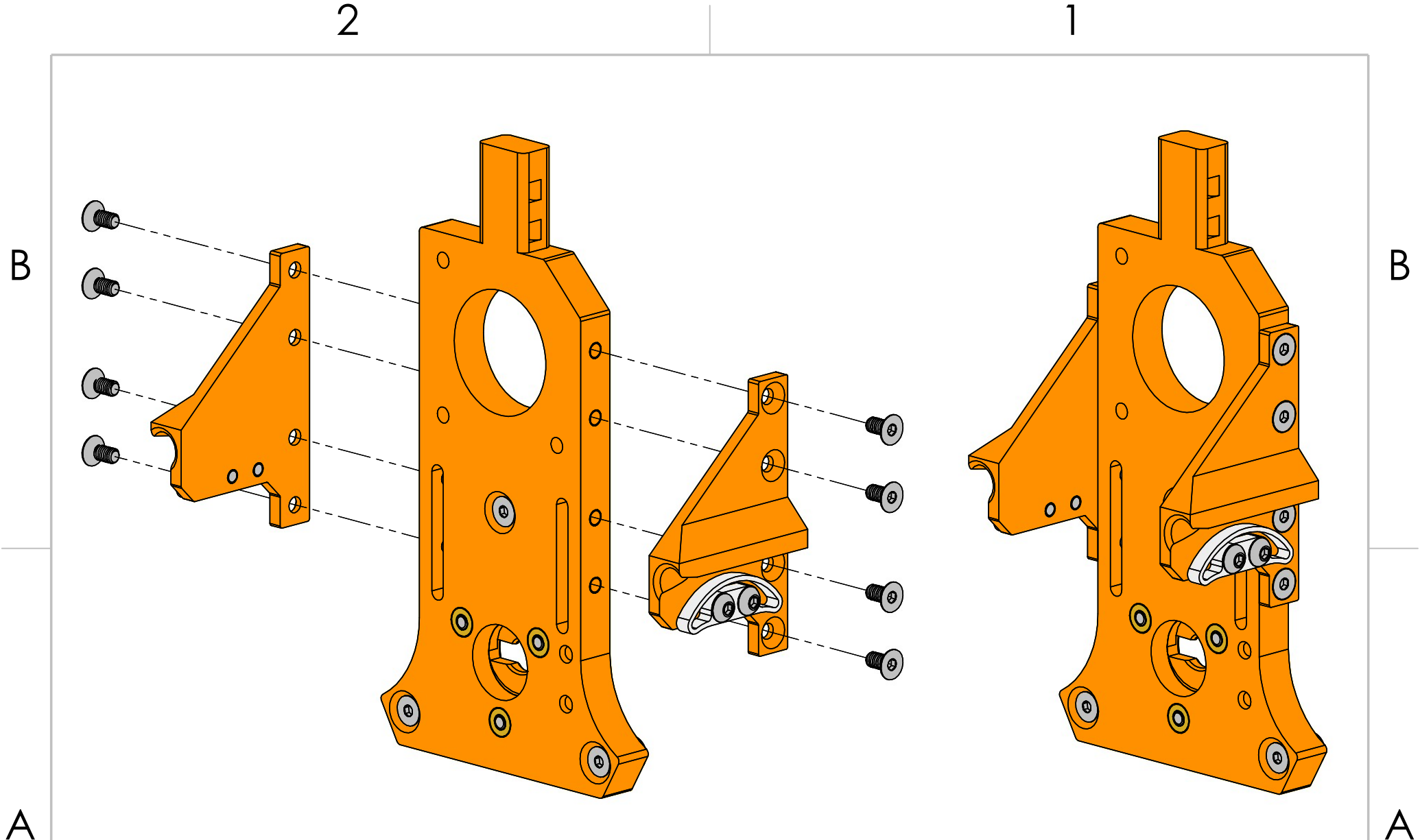


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ITEM NO.	DESCRIPTION	QTY.
1	Left Parking Wing Assembly	1
2	Right Parking Wing Assembly	1
3	Base Tool Plate Assembly	1
4	M3 Flathead Screw, 6mm len	8

Tool Plate Assembly		
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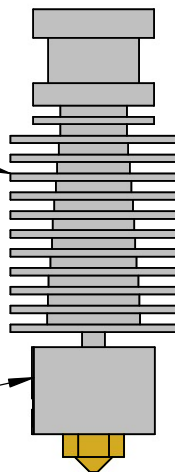
Follow the V6 or Volcano Hotend Assembly Instructions from E3D to assemble the hotend shown below.

[V6 Instructions](#)

[Volcano Instructions](#)

Do not clip on the hotend fan just yet.

Do not heat up the extruder to finish  
tightening the heat break just yet.



### Hotend Cold Assembly



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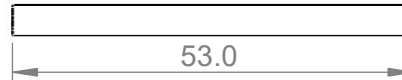
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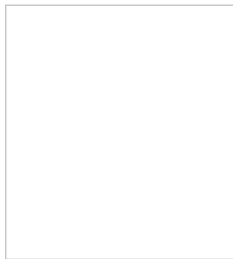
The PTFE Tube length is different depending on what hotend you will use (V6 or Volcano).

For the V6, cut ??mm of PTFE Tube.

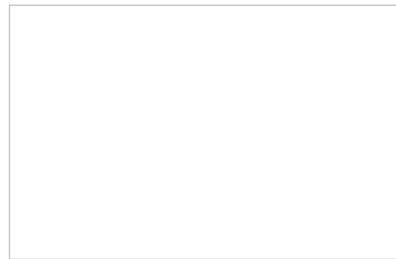
For the Volcano, cut 53mm of PTFE Tube.



In both cases, ensure that the resulting cut is clean on both ends.

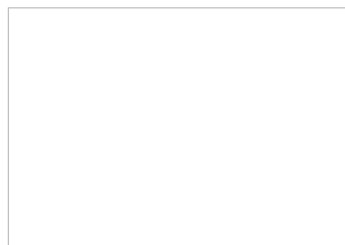
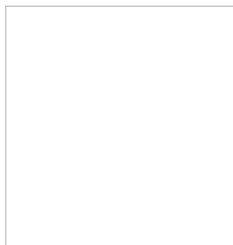


Ok!



Not Ok!

With a box cutter blade, "shape" one end of the PTFE tube into a slight cone like shown below.



Ensure that the PTFE tube is **clean** after this step, as small flake of tubing can lead to nightmarish clogging scenarios.

When finished push the tube all the way into the hotend until it stops. The "shaped" end should stick out.

### PTFE Tube Prep



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2

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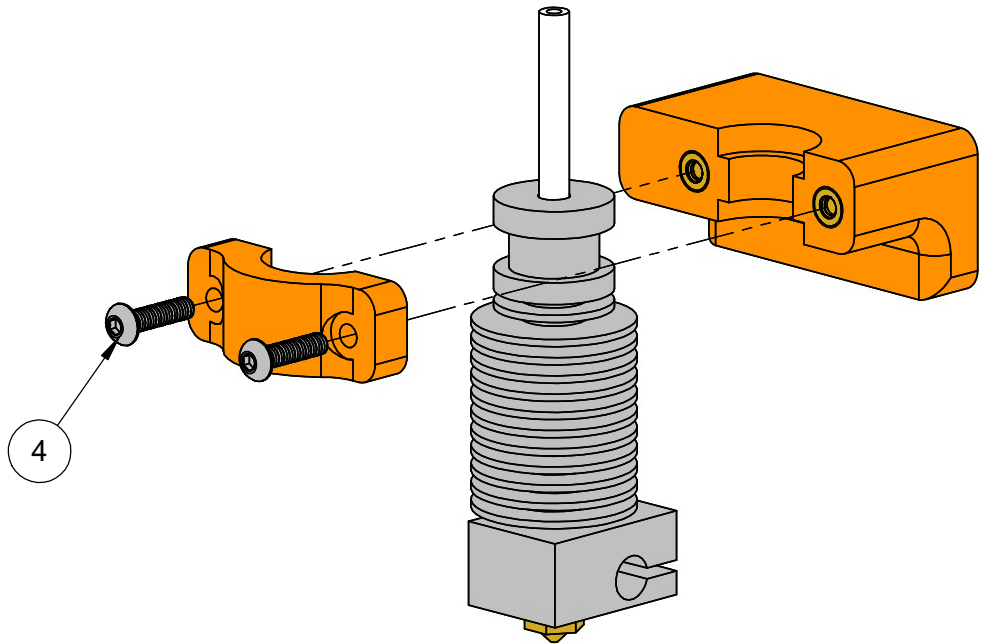


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ITEM NO.	DESCRIPTION	QTY.
1	Hotend Assembly with PTFE Tube	1
2	Groovemount Base with Inserts	1
3	Groovemount Clip	1
4	M3 Buttonhead Screw, 12mm long	2

Hotend Base Assembly



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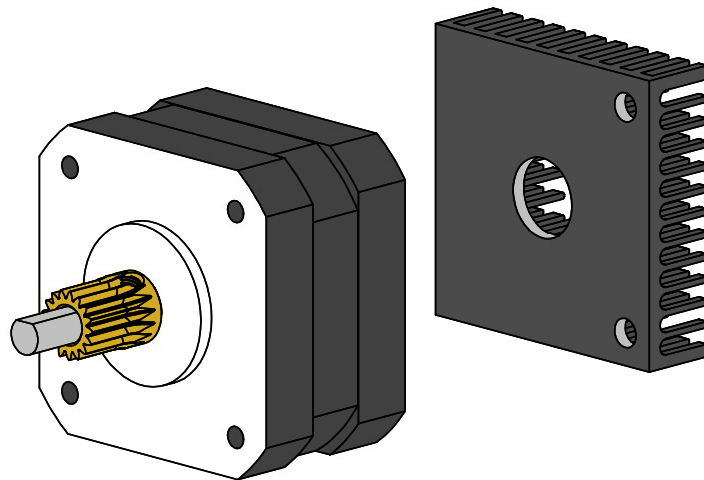
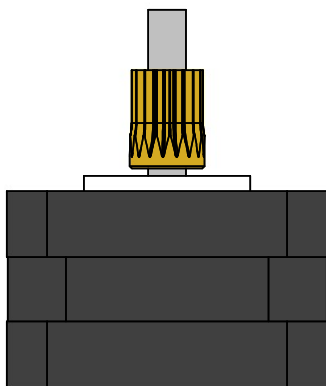
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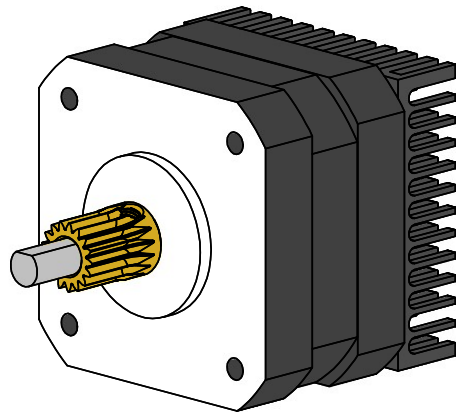
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### Pancake Motor Assembly



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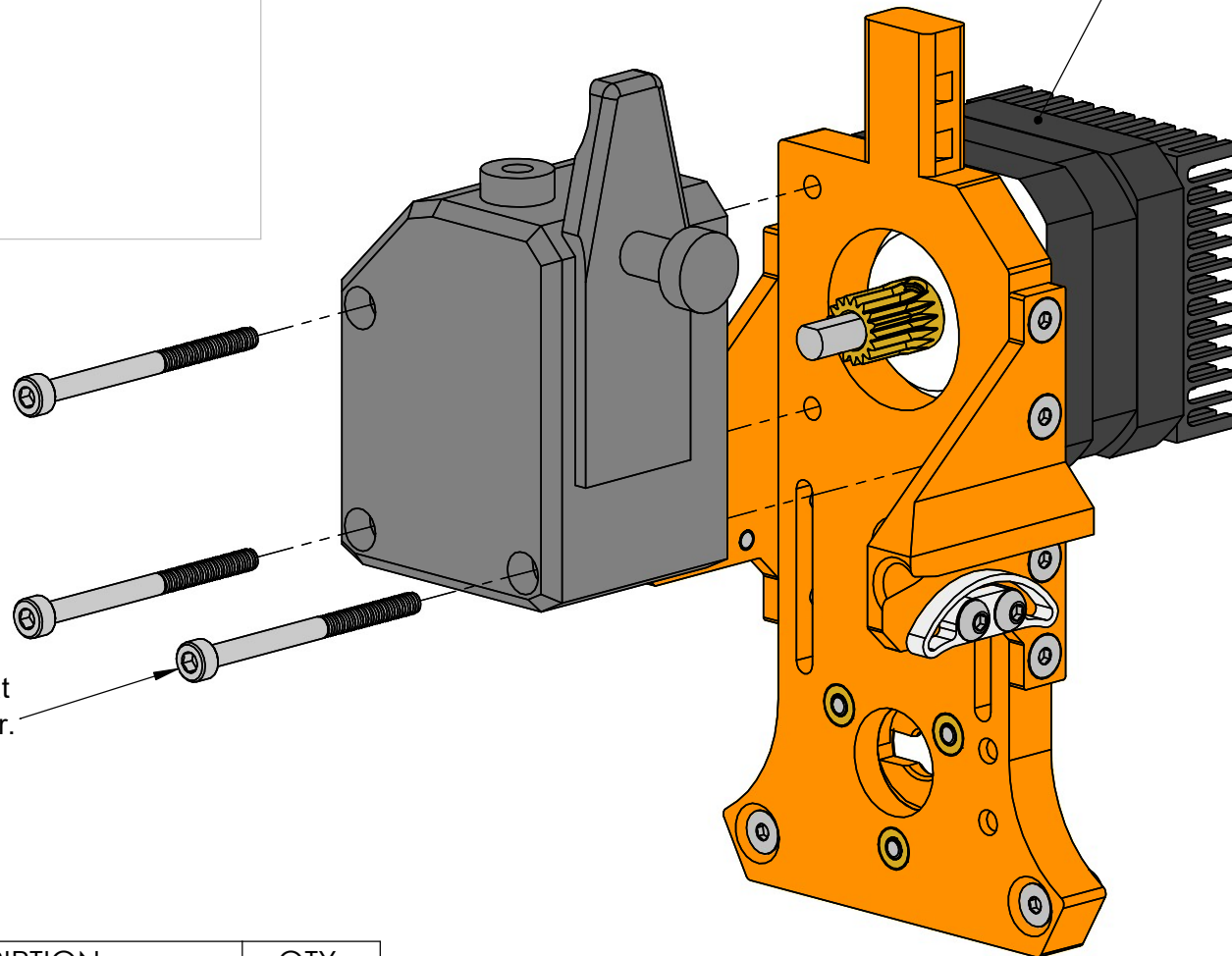
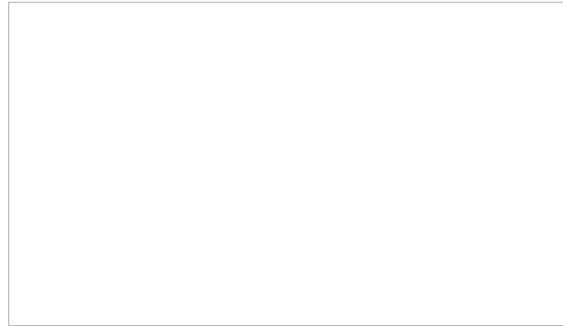
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Install the groovemount adapter into the BMG Extruder housing first.



These are 5mm longer than what came with the Bondtech extruder.

ITEM NO.	DESCRIPTION	QTY.
1	BMG Extruder Assembly with Groovemount Adapter	1
2	M3 Socket Cap Screw, 40mm long	3
3	Pancake Stepper Motor Assembly	1
4	Tool Plate Assembly	1

### Extruder Pusher Installation



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Joshua Vasquez

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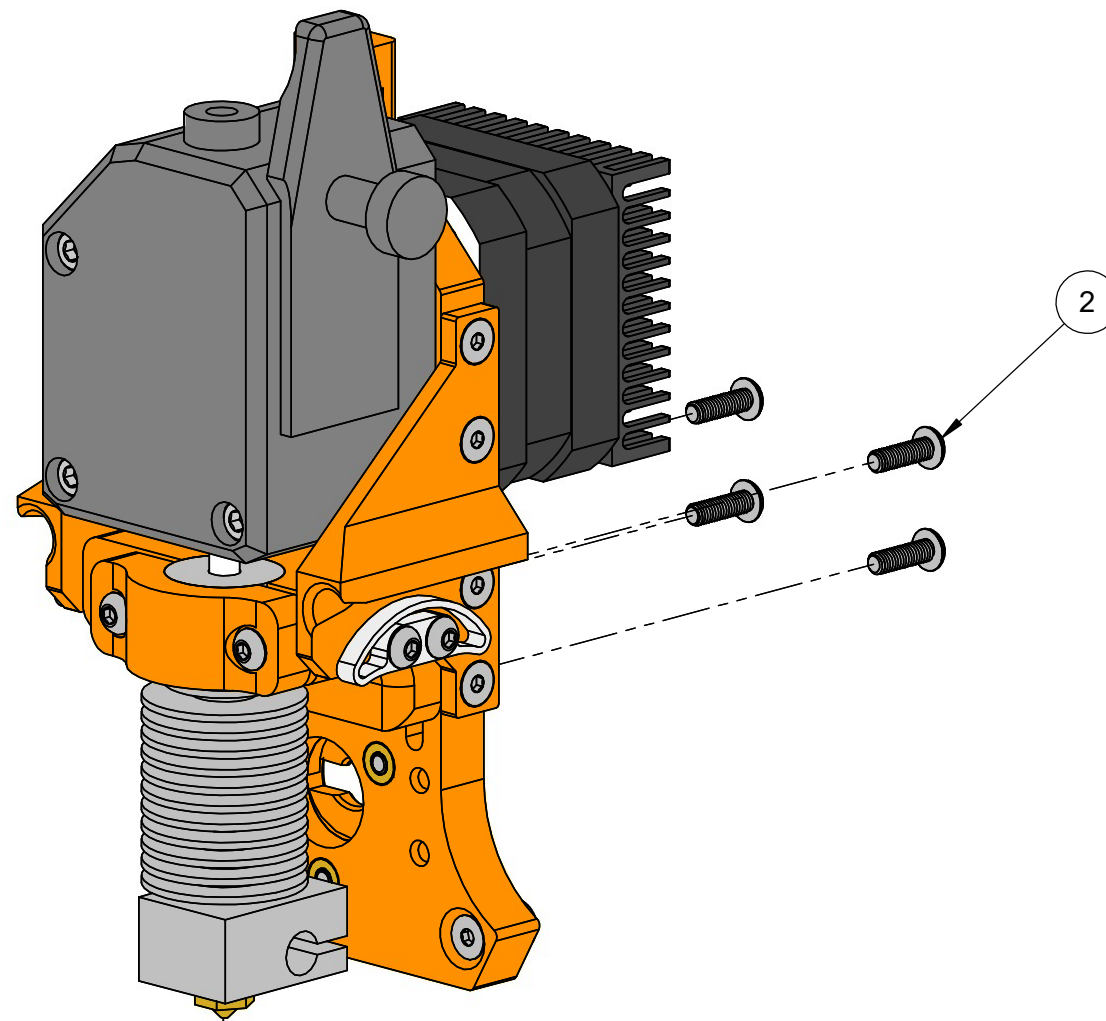
1

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Push the PTFE tube in the hotend assembly all the way into the BMG Extruder until it hard stops. Then secure the resulting position with the four screws.

ITEM NO.	DESCRIPTION	QTY.
2	M3 Buttonhead Screw, 10mm long	4

### Hotend Installation



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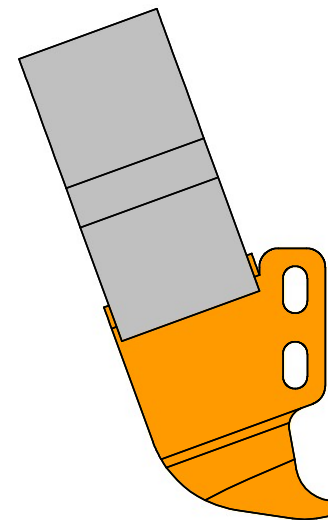
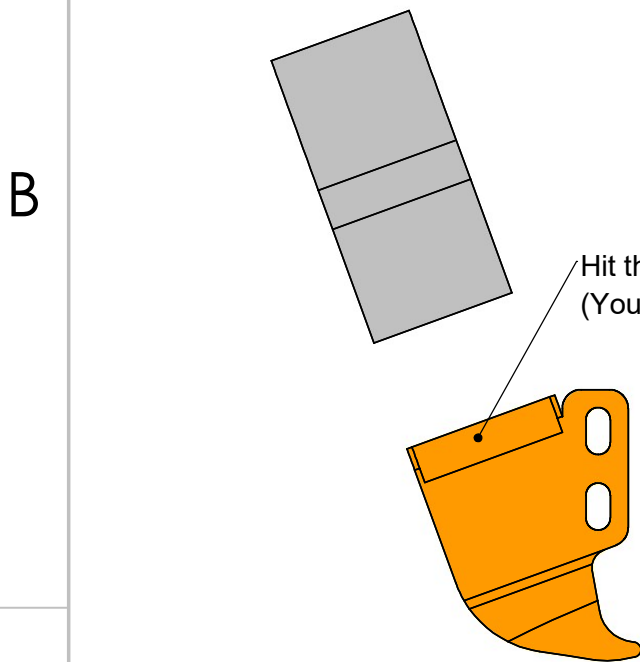
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### Fan and Shroud Assembly



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2

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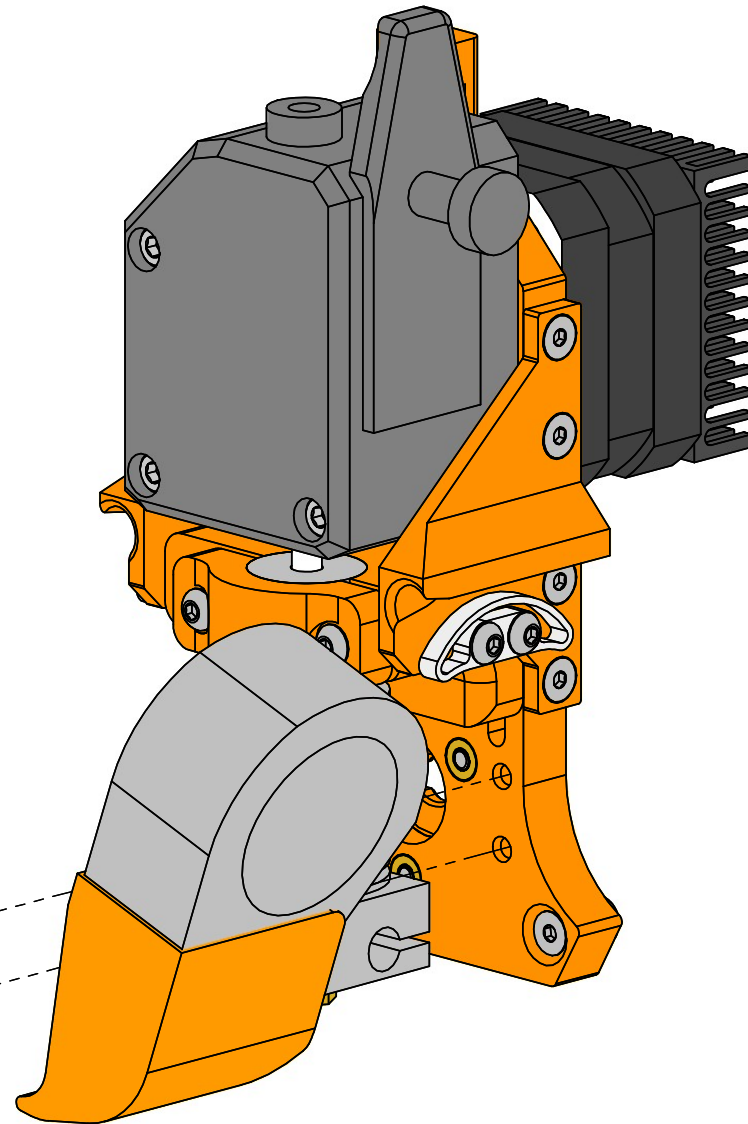
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B

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Tip: hit your hex key with a dab of  
gluestick to prevent them from falling  
off while you screw these in.



ITEM NO.	DESCRIPTION	QTY.
5	Fan with Shroud	1
6	M3 Buttonhead Screw, 6mm long	2

## Fan Installation



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2

1