

### Baby Bullet Assembly



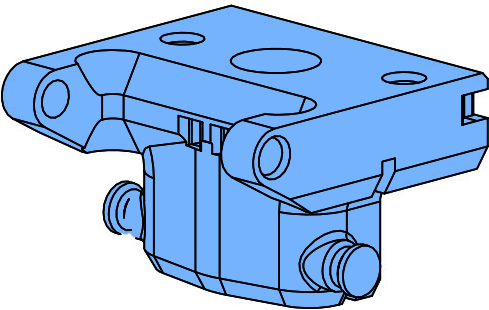
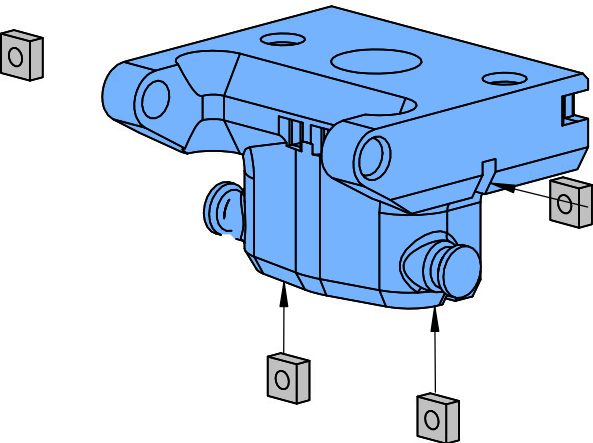
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3/26/2022


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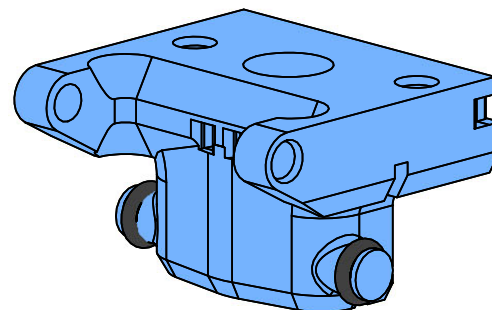
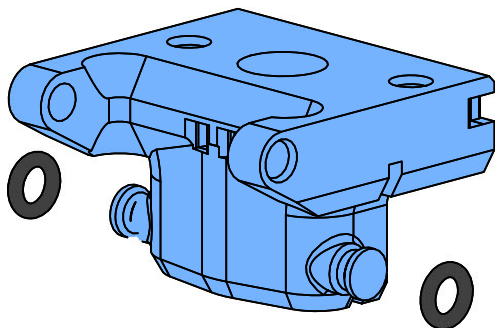
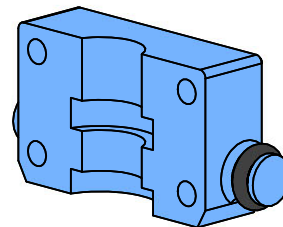
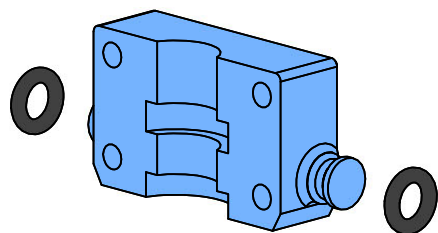
Fully press-fit all four square nuts into their respective cavities.




ITEM NO.	DESCRIPTION	QTY.
1	M3 Square Nut	4
2	Front Base Piece	1

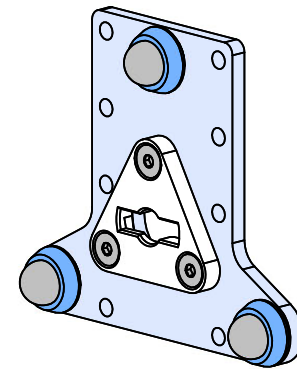
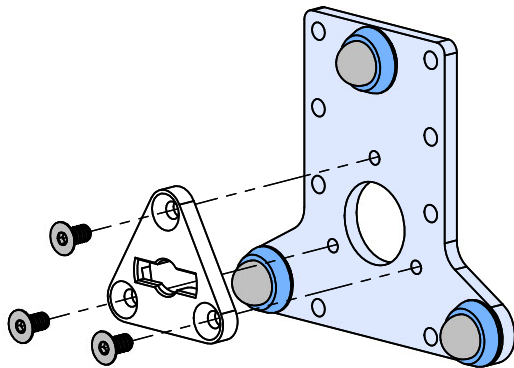
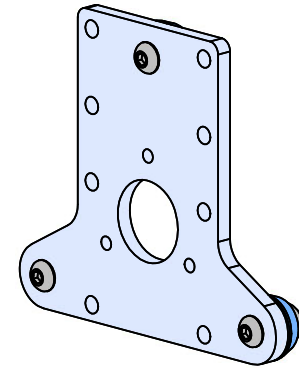
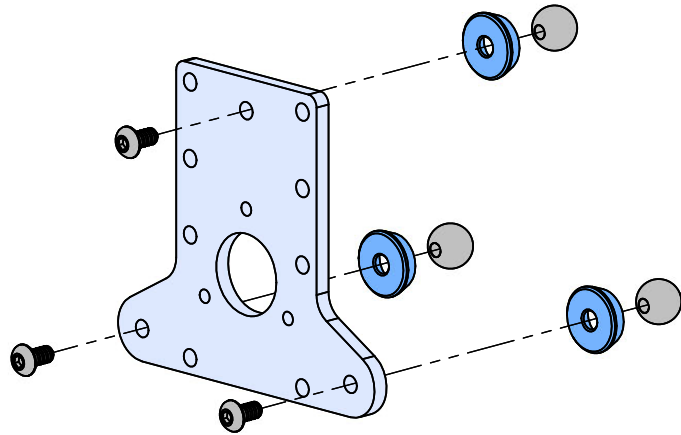
Square Nut Installation		
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ITEM NO.	DESCRIPTION	QTY.
1	Back Base Piece with Square Nuts	1
2	5x9x2 O-Ring	2




ITEM NO.	DESCRIPTION	QTY.
1	Front Base Piece with Square Nuts	1
2	5x9x2 O-Ring	2

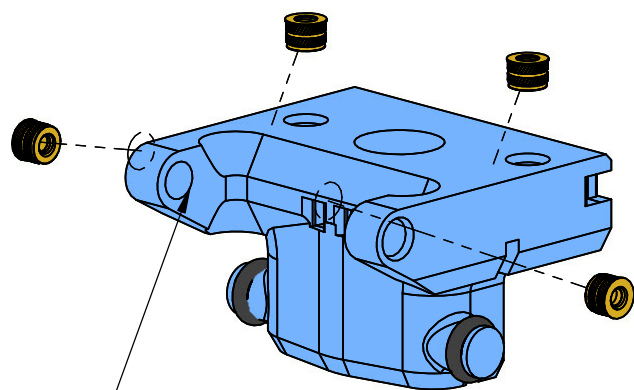
O-Ring Installation		
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ITEM NO.	DESCRIPTION	QTY.
1	M3 Buttonhead Screw, 6mm long	3
2	M3 Flathead Screw, 6mm long	3
3	M3 Threaded 8mm Tool Ball	3
4	Tool Ball Cup	3
5	Wedge Plate	1
6	Tool Plate	1

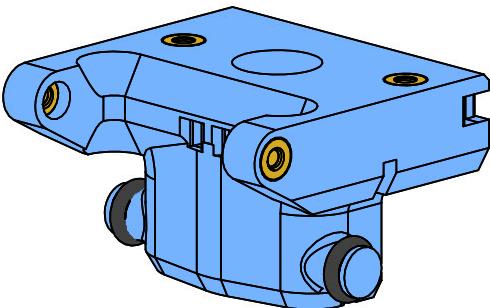
Tool Plate Assembly		
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Install the following 4 inserts with the Plate Press Technique.




Be gentle installing these front heat set inserts as they can warp this corner of the plastic.

If you see this plastic warping, you can still push it back to it's original form while the plastic is still warm.



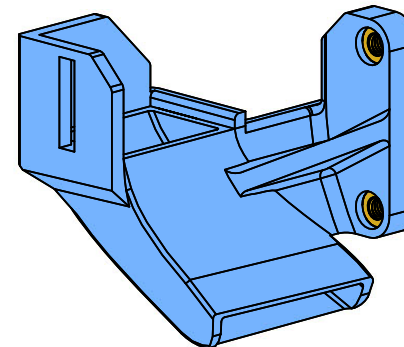
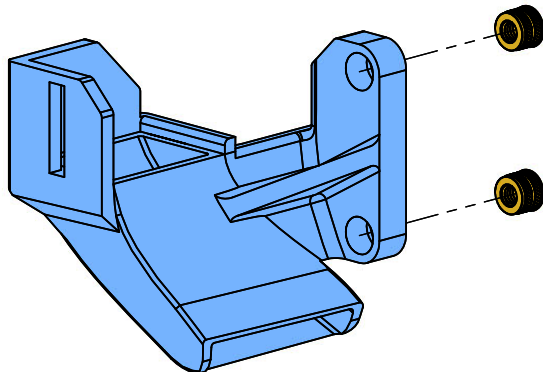
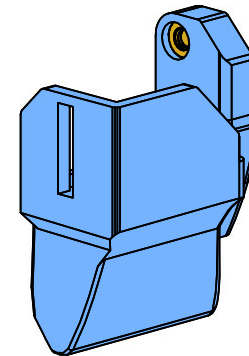
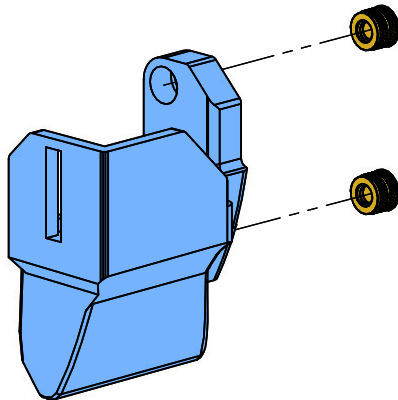
More inserts to install on the next page!

ITEM NO.	DESCRIPTION	QTY.
1	M3 Tapered Heat Set Insert	4
2	Front Base Piece Assembly	1


Heat Set Insert Installation		
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Install the following inserts in the left and right fan shrouds.

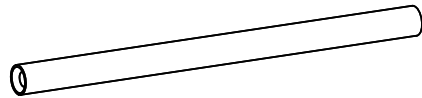
Be gentle as the heat from the installation tool can warp the flatness of the back surface of the part. If that happens, cool the part on a flat metal plate while applying gentle pressure to flatten it.



ITEM NO.	DESCRIPTION	QTY.
2	M3 Tapered Heat Set Insert	4
3	Left Fan Shroud	1
4	Right Fan Shroud	1

Heat Set Insert Installation 2		
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Use a PTFE Tube Cutter to cleanly cut the PTFE tube to the length appropriate for your hotend.



60.5 mm for E3DV6 hotends.  
45 mm for E3D Revo6 hotends.

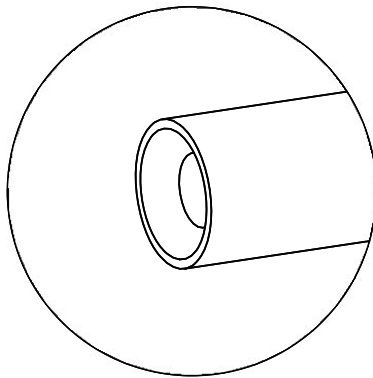


OK!



Not OK!

Ensure that the resulting cut is clean on both ends.



With a box cutter blade or chamfering tool, shape one end of the PTFE Tube.

Ensure that the PTFE Tube is clean on both ends and there is no debris anywhere in the tube or at the tips.

Warning: it is **absolutely critical** that the PTFE tube is cut cleanly and has **no debris**. Any small flakes of PTFE tube will result in horrific tool jams that are hard to debug

## E3D PTFE Assembly



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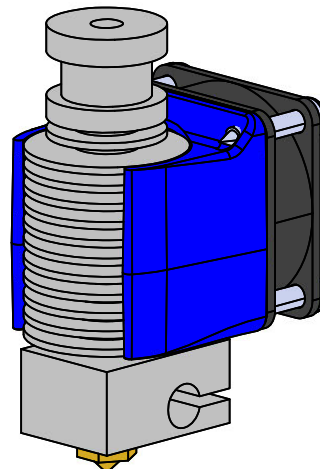
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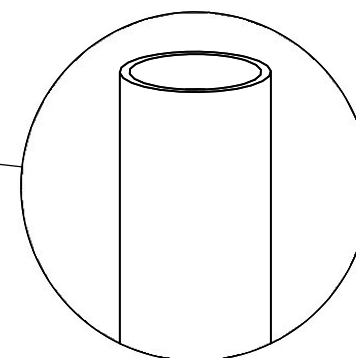
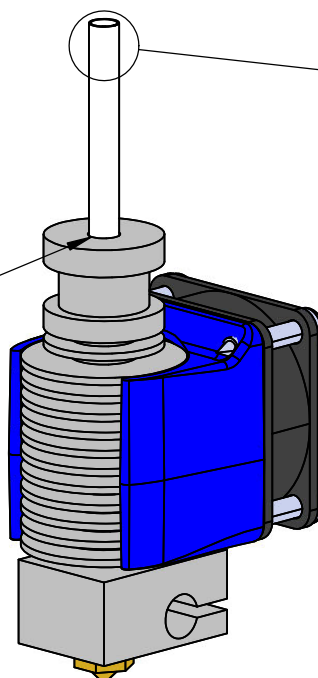
Put together an E3DV6 Assembly based on E3D's Assembly Guide.

Include the Heater and Thermistor, but not the PTFE Tube until the next step.



Install the PTFE tube such that the chamfered side sticks out. Push it down all the way until it hard-stops.

There should be a black ring here with a retainer clip. It is not modeled.



### E3D V6 Assembly



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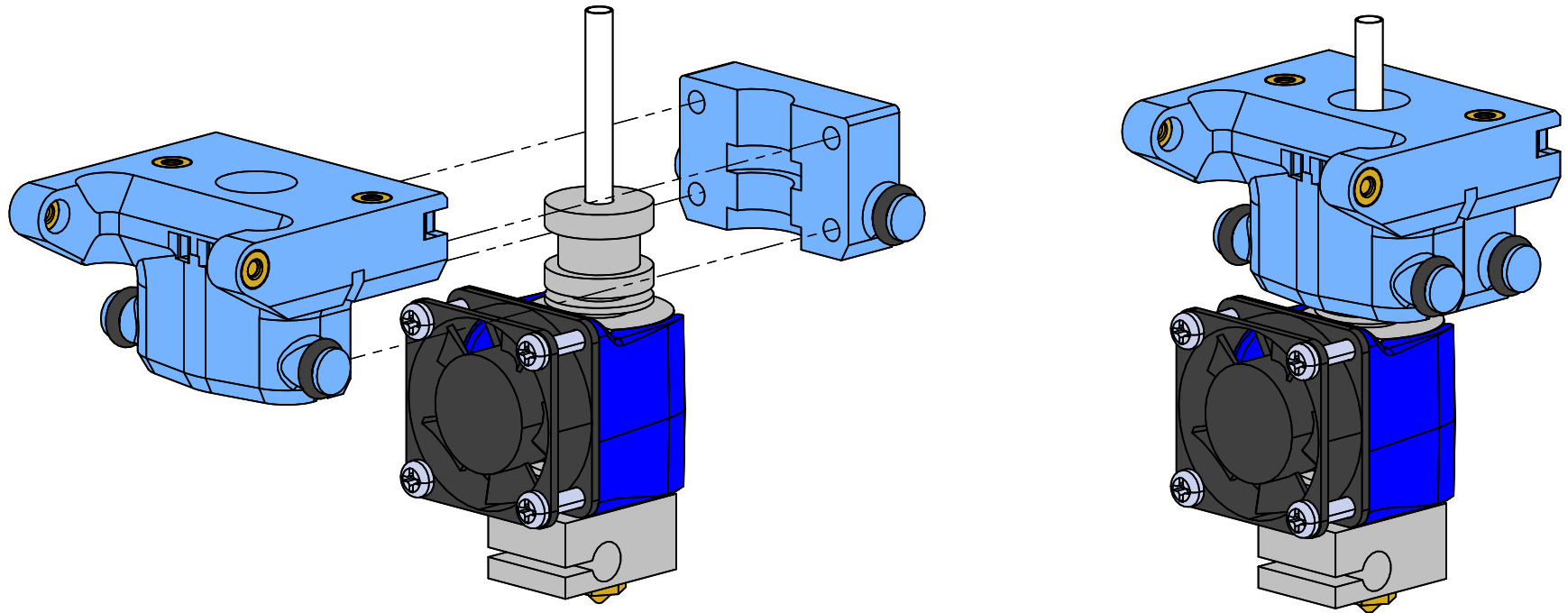
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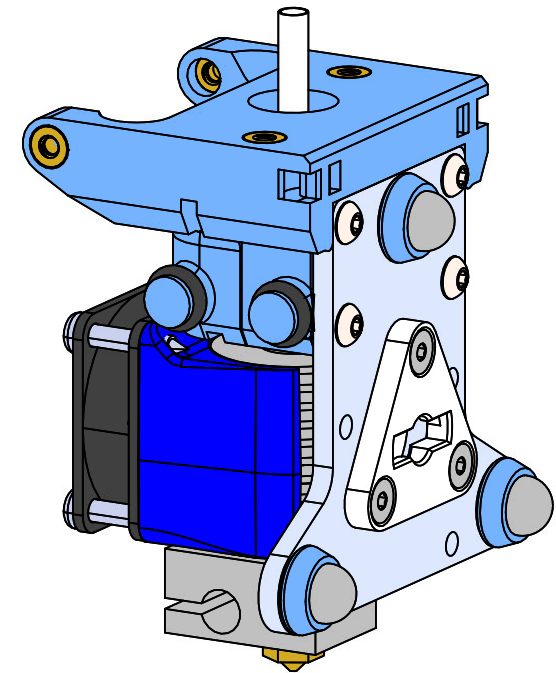
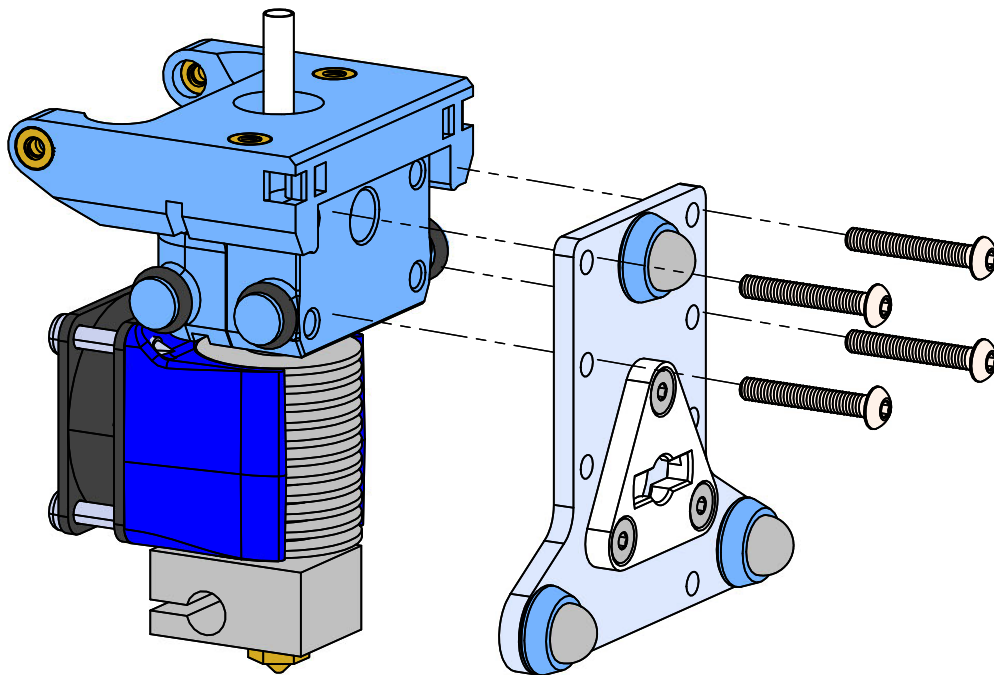


Clasp these three assemblies together. They will fit loosely until installed into the plate.




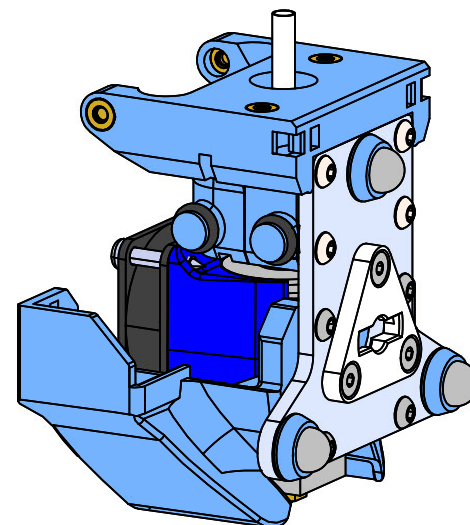
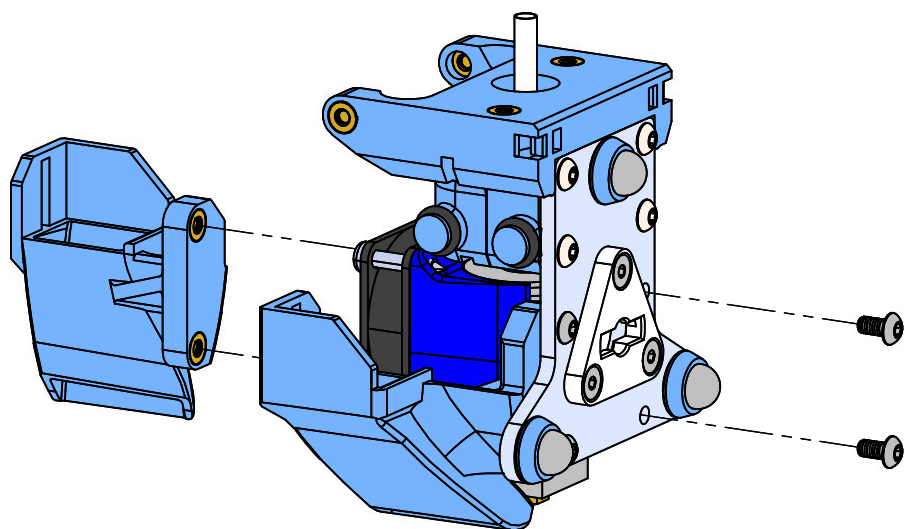
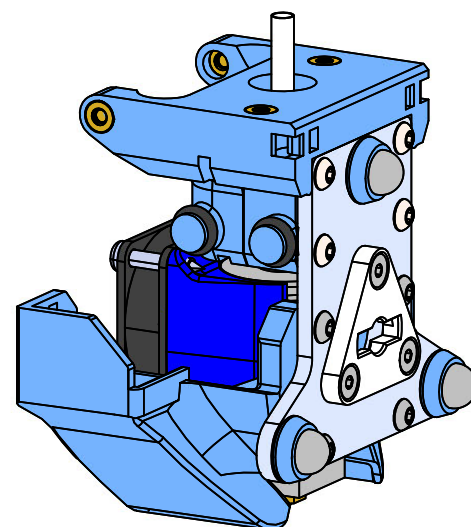
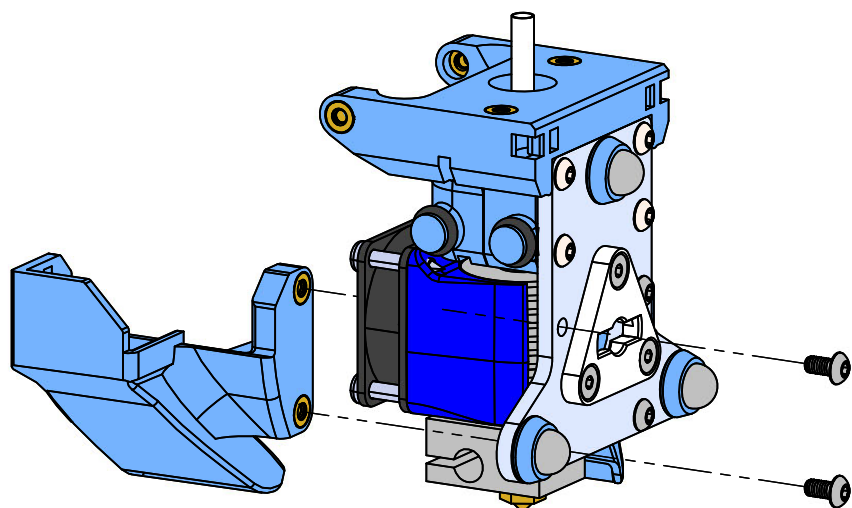
ITEM NO.	DESCRIPTION	QTY.
1	Back Base Piece Assembly	1
2	Front Base Piece Assembly	1
3	Hotend with PTFE Tube Installed	1

Hotend Base Assembly		
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	SCALE: 1:1	SHEET 9 OF 15



ITEM NO.	DESCRIPTION	
1	M3 Buttonhead Screw, 20mm long	4
2	Base Tool Plate Assembly	1

Hotend Assembly Installation		
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	SCALE: 1:1	SHEET 10 OF 15



ITEM NO.	DESCRIPTION	
1	M3 Buttonhead Screw, 6mm long	4
2	Right Fan Shroud with Inserts	1
3	Left Fan Shroud With Inserts	1

### Fan Shroud Installation

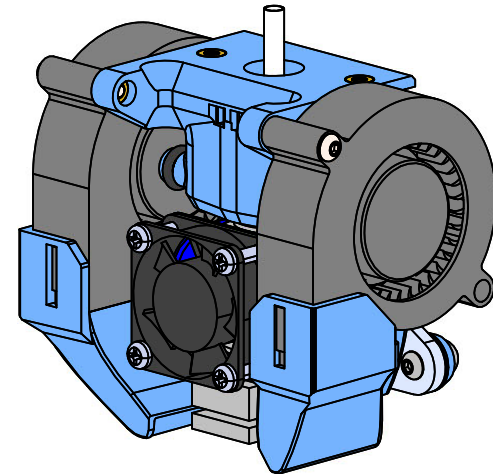
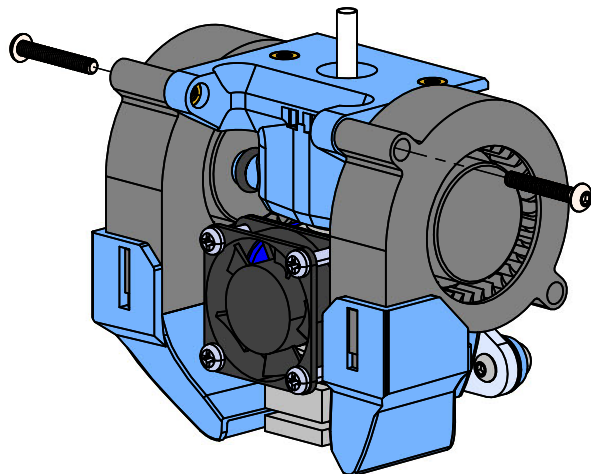
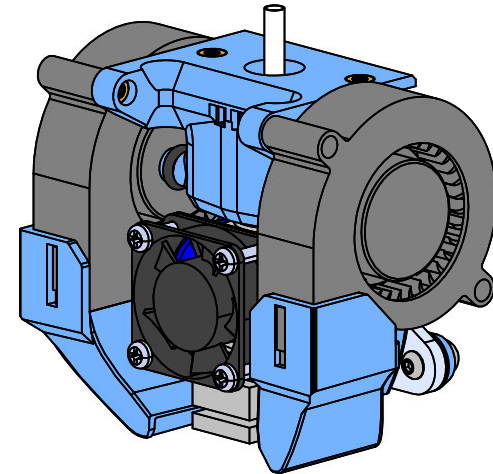
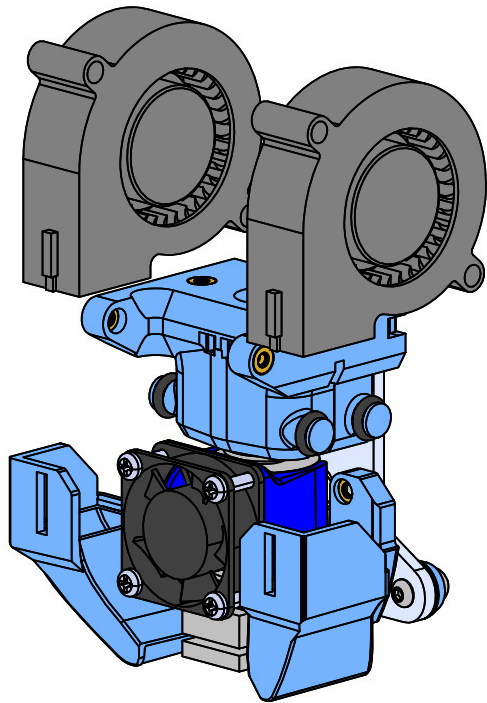


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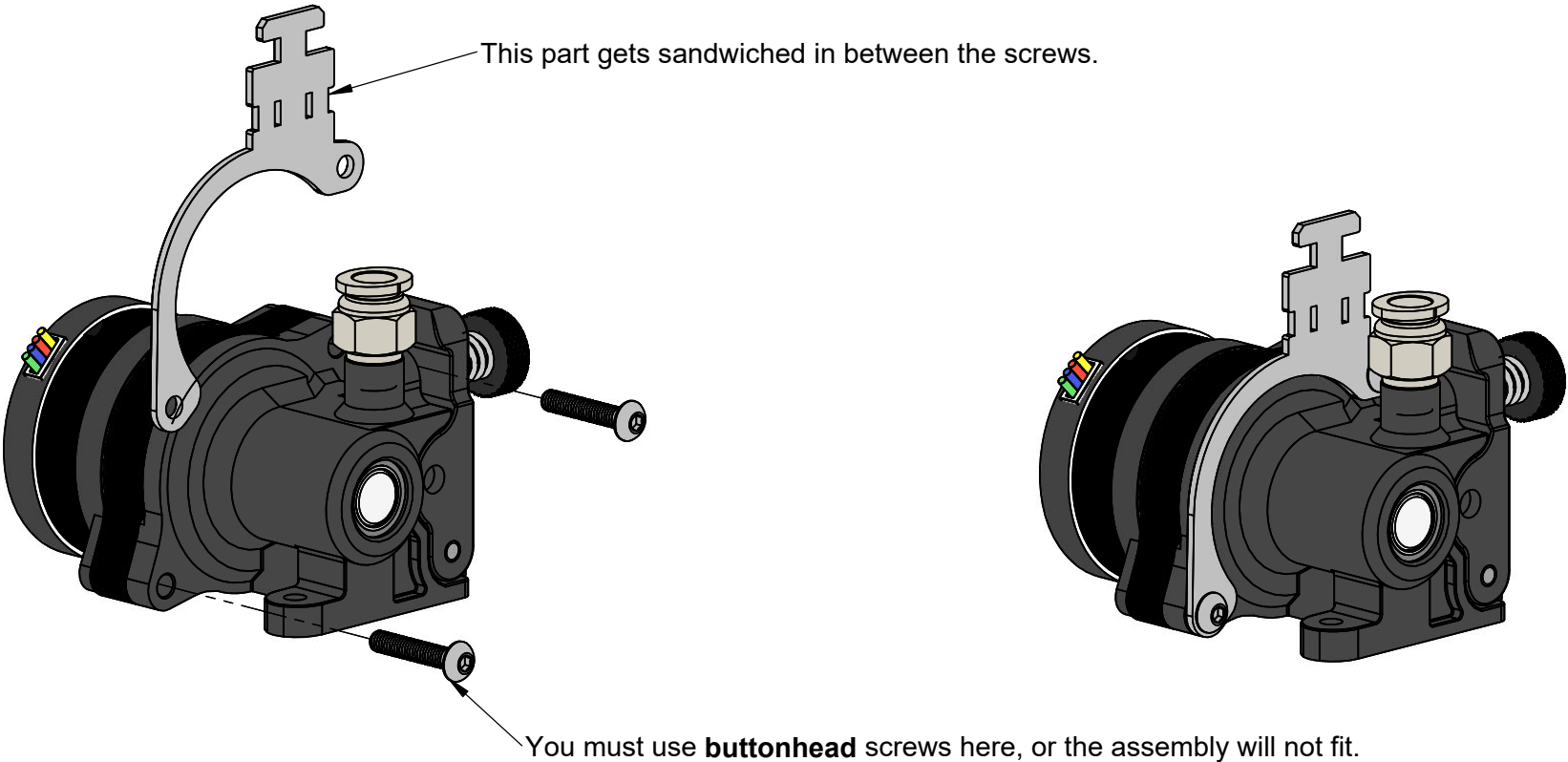
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ITEM NO.	DESCRIPTION	
1	M3 Buttonhead Screw, 20mm long	2
2	5015 Blower Fan	2
7	Hotend Assembly	1


Fan Installation		
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This is for Obiter 1.5. For Orbiter 2.0, see next page.



Note that the clearances for fitting these parts together are quite tight.

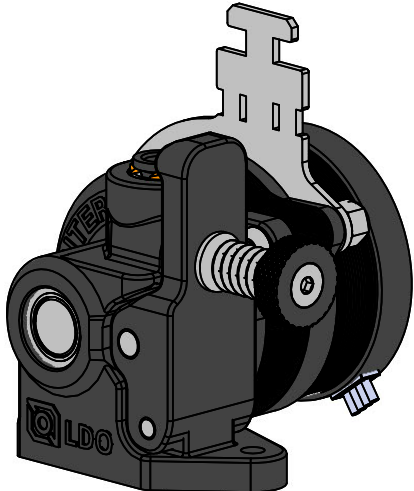
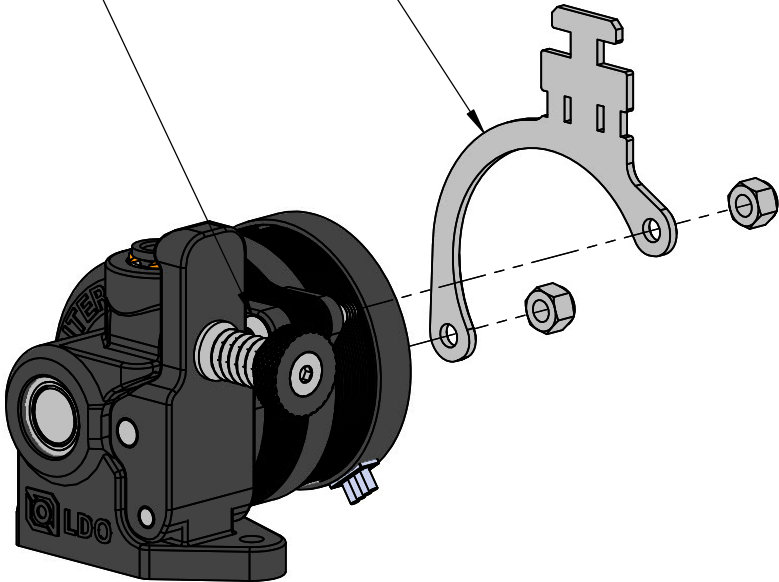
ITEM NO.	DESCRIPTION	QTY.
2	Orbiter 1.5 Assembly	1
3	Wire Harness Strain Relief	1
4	M3 Buttonhead Screw, 16mm long	2

Orbiter 1.5 Prep		
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	SCALE: 1:1	SHEET 13 OF 15


This is for Obiter 2.0. For Orbiter 1.5, see previous page.

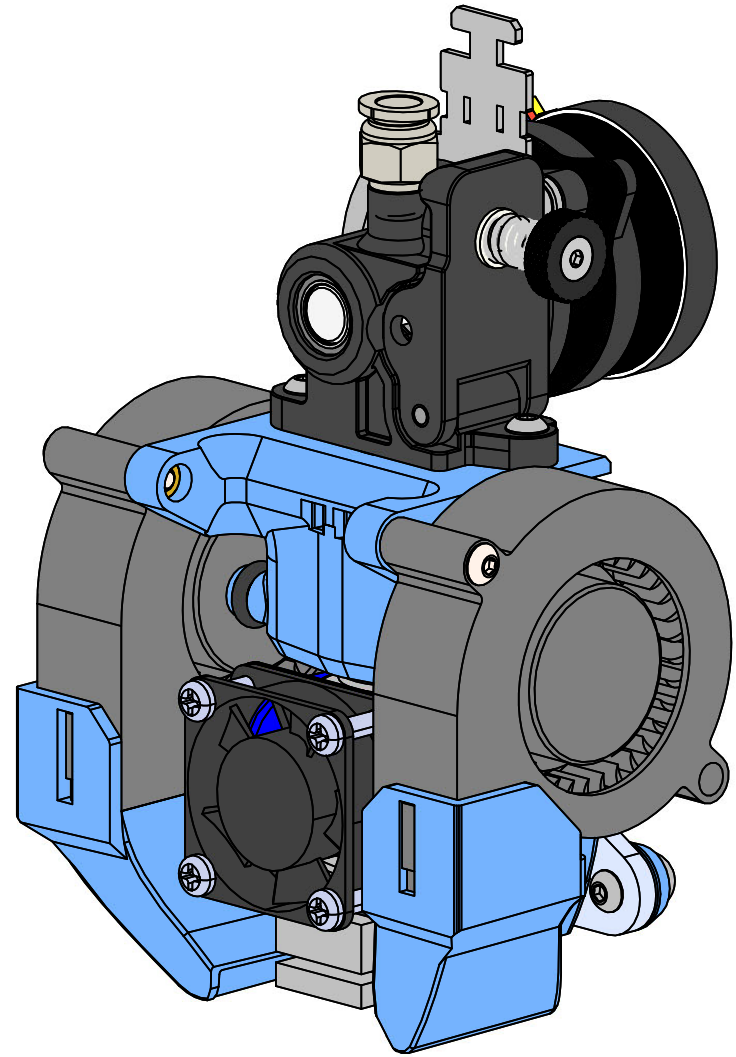
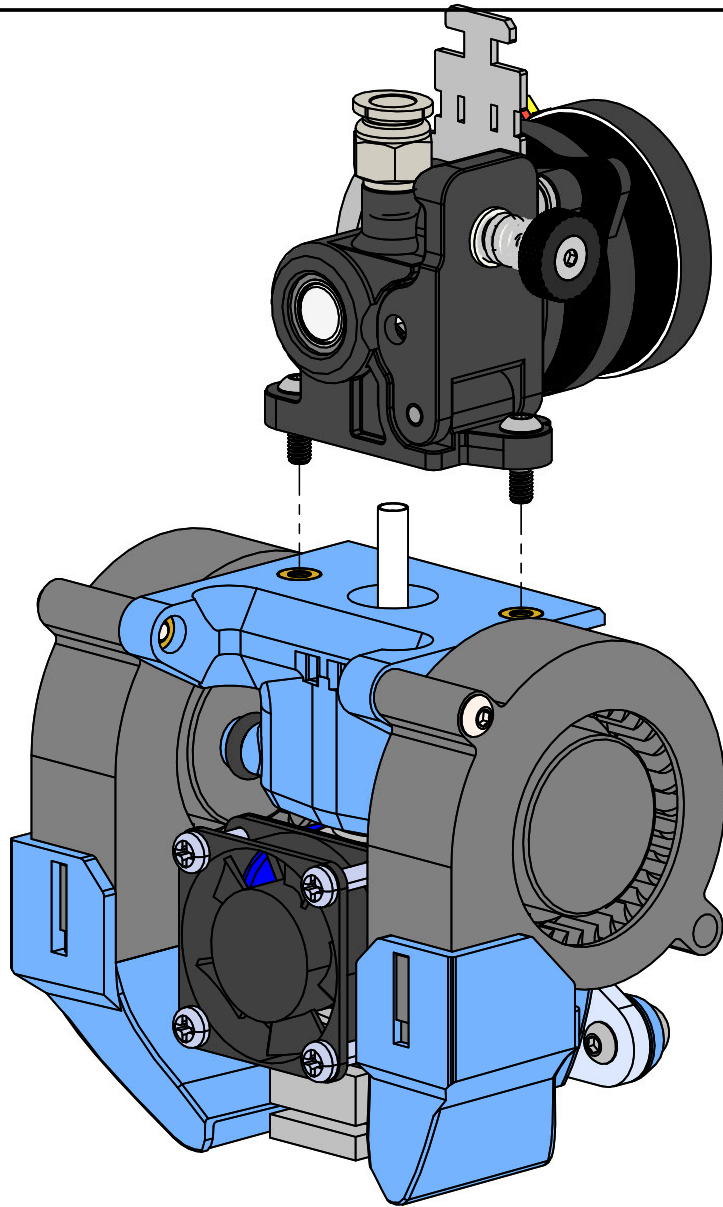
Replace the included screws with two M3, 18mm long screws.

This part is distinct from the 1.5 version and attaches behind the motor bolt holes.




ITEM NO.	DESCRIPTION	QTY.
1	Orbiter V2.0	1
2	M3 buttonhead screw, 18mm long	2
3	Wire Harness Strain Relief	1
4	M3 Locknut	2

Orbiter 2.0 Prep		
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	SCALE: 1:1	SHEET 14 OF 15



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

Orbiter Extruder Assembly		
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	SCALE: 1:1	SHEET 15 OF 15