

XYZ Touch Probe

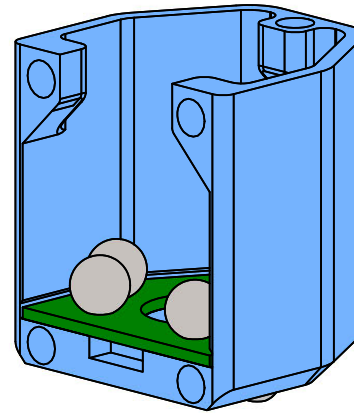
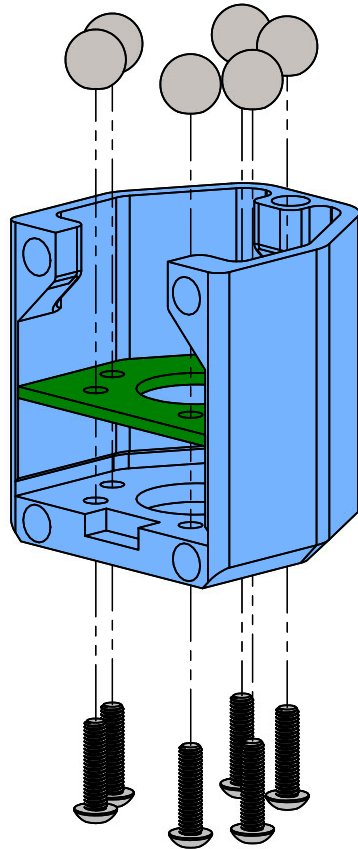


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Joshua Vasquez


last edited:
12/27/2022

SCALE: 1:5

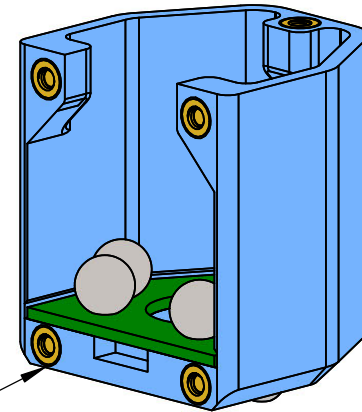
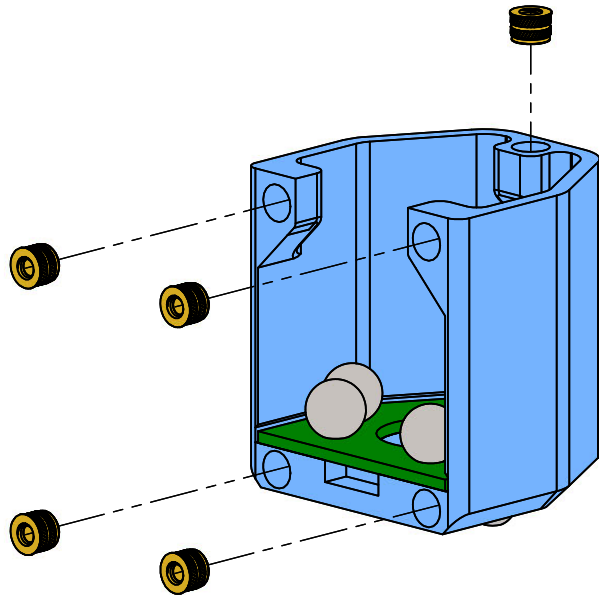
SHEET 1 OF 11



DESCRIPTION	QTY.
PCB Assembly	1
Printed Base	1
M3 Buttonhead Screw, 12mm long	6
M3 8mm Threaded Tool Balls	6


Tool Ball Installation		
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Install the following inserts using the Plate Press technique.



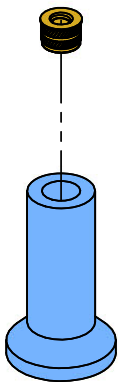
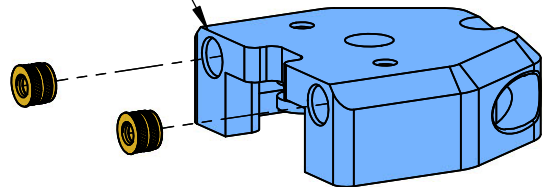
Installing inserts near thin walls of the part can cause the plastic to bulge. This can be prevented by gently pushing the sides of the part against a cool metal surface while the insert is still cooling.

DESCRIPTION	QTY.
M3 Tapered Heat Set Insert	5

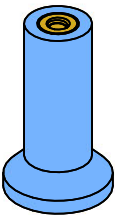
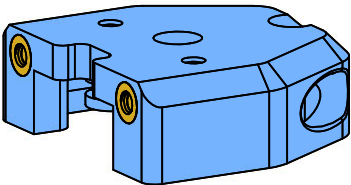
Insert Installation Pt 1		
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	SCALE: 1:5	SHEET 3 OF 11

Install the following inserts using the Plate Press technique.


Note: thin wall.



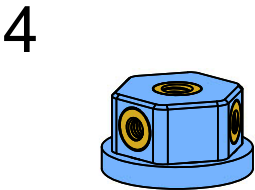
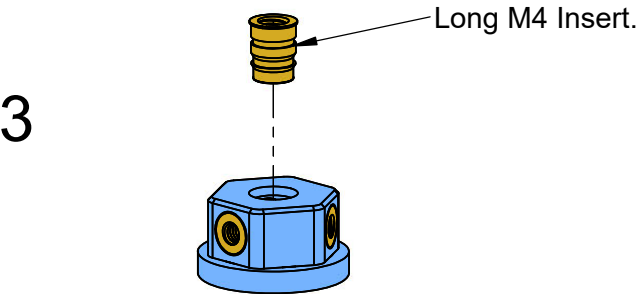
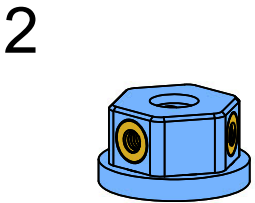
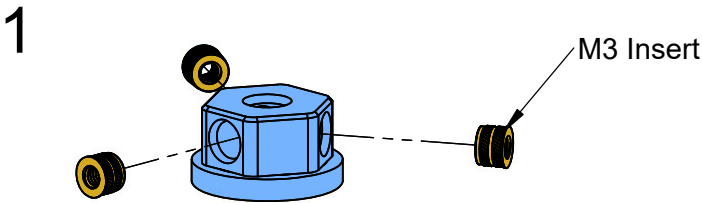
Exploded View



Assembled View

Insert Installation Pt 2		
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	SCALE: 1:5	SHEET 4 OF 11


Note: It is critical that these inserts cool against a flat metal surface or the coupling probe tip will not point straight down.

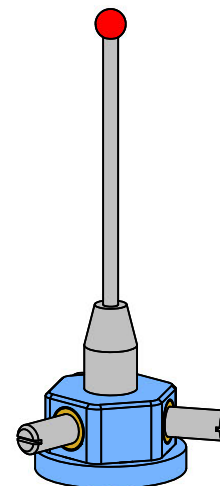
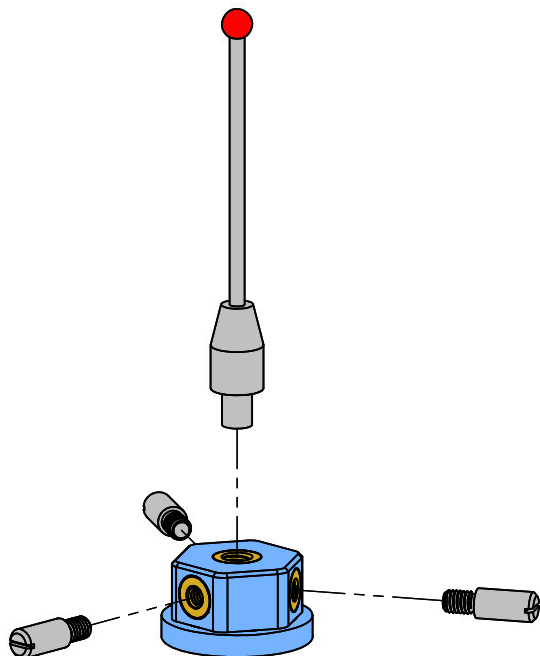


Exploded View


Assembled View

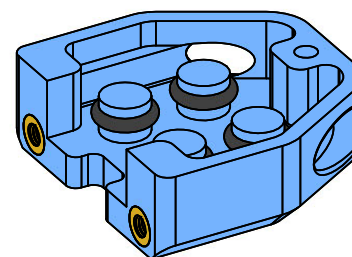
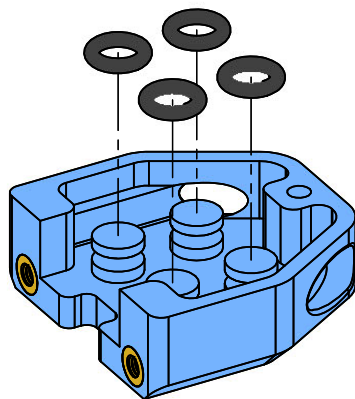
DESCRIPTION	QTY.
Printed Couplilng Junction	1
M3 Tapered Heat Set Insert	3
M4 Tapered Long Heat Set Insert	1

Insert Installation Pt 3		
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	SCALE: 1:1	SHEET 5 OF 11




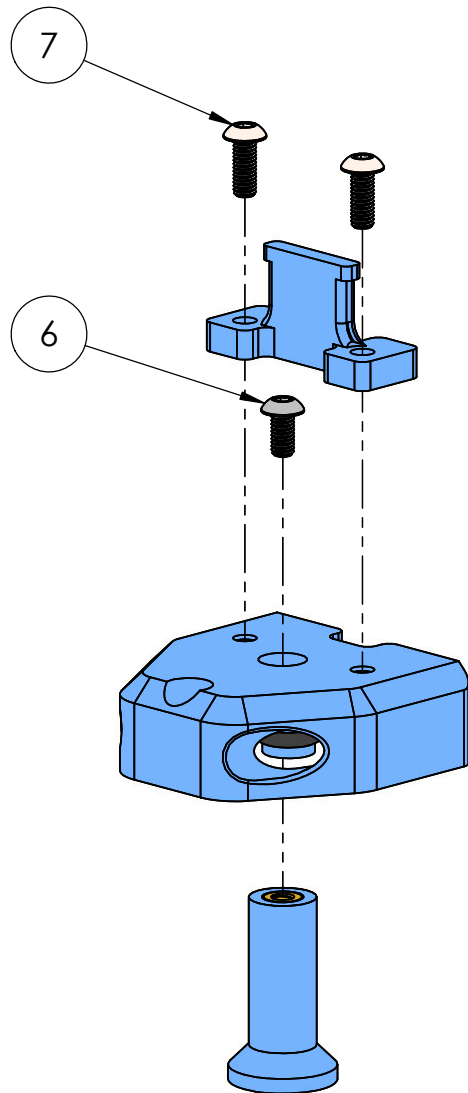
DESCRIPTION	QTY.
Coupling Junction with Inserts	1
Probe Tip	1
Headless Shoulder Screws	3

Probe Assembly		
	Created by: Joshua Vasquez	last edited: 12/27/2022
	SCALE: 1:1	SHEET 6 OF 11

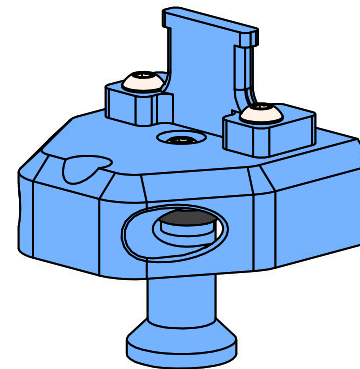



DESCRIPTION	QTY.
Lid with Inserts	1
5x9x2 O-Ring	4

ORing Installation		
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	SCALE: 1:5	SHEET 7 OF 11

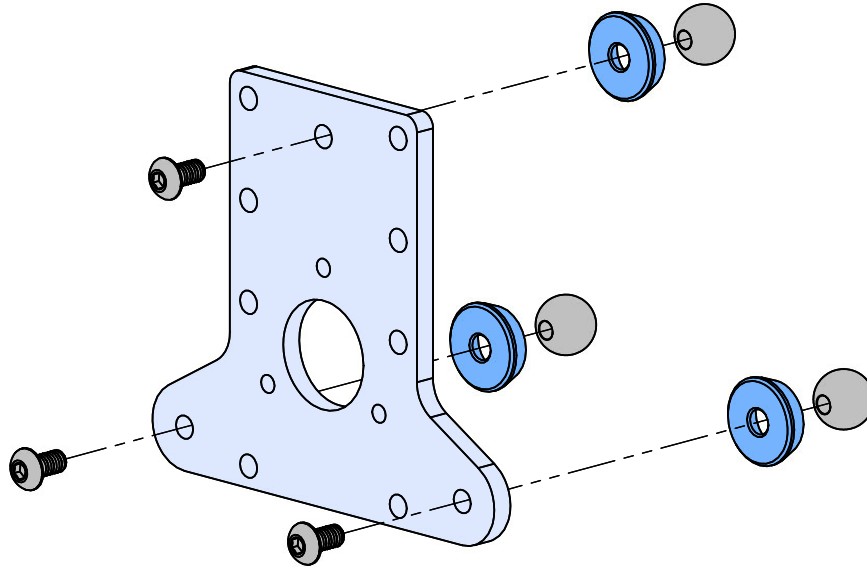


ITEM NO.	DESCRIPTION	QTY.
3	Lid with ORings	1
4	Stud Assembly	1
5	Wire Relief Tab	1
6	M3 Buttonhead Screw, 6mm long	1
7	M3 Buttonhead Screw, 8mm long	2

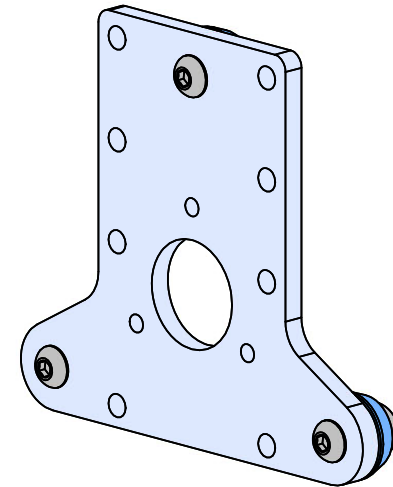


Lid Assembly		
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	SCALE: 1:5	SHEET 8 OF 11

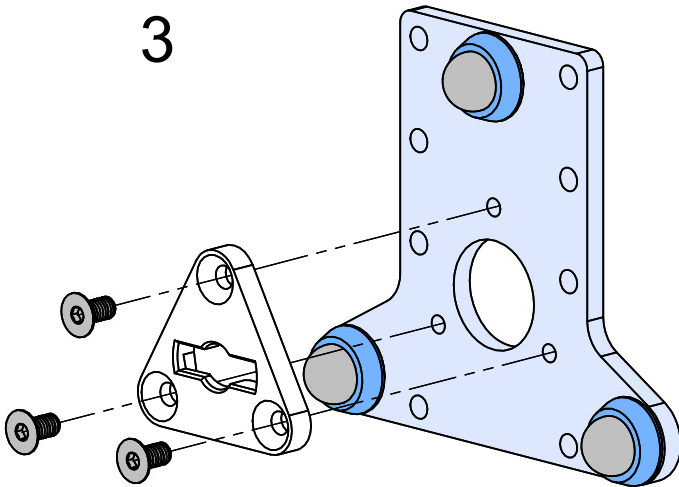
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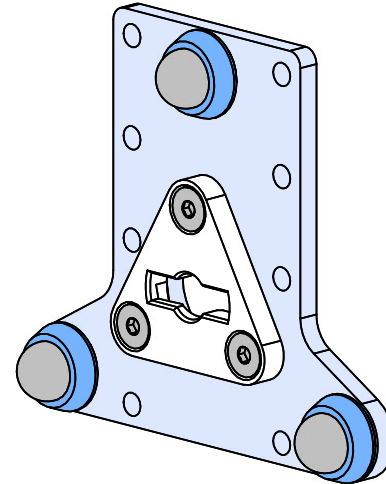
2



3



4



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

Tool Plate Assembly

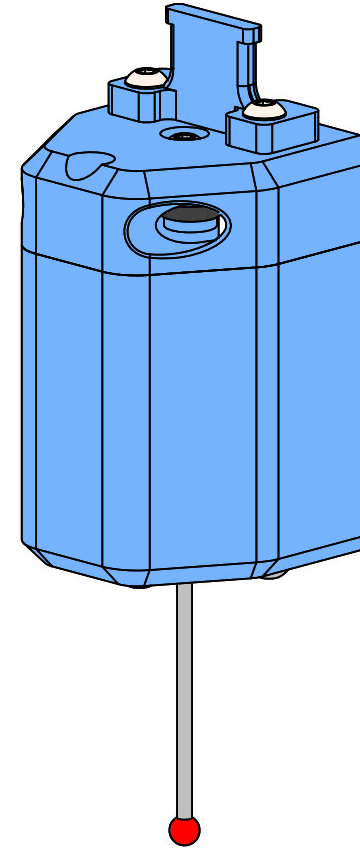
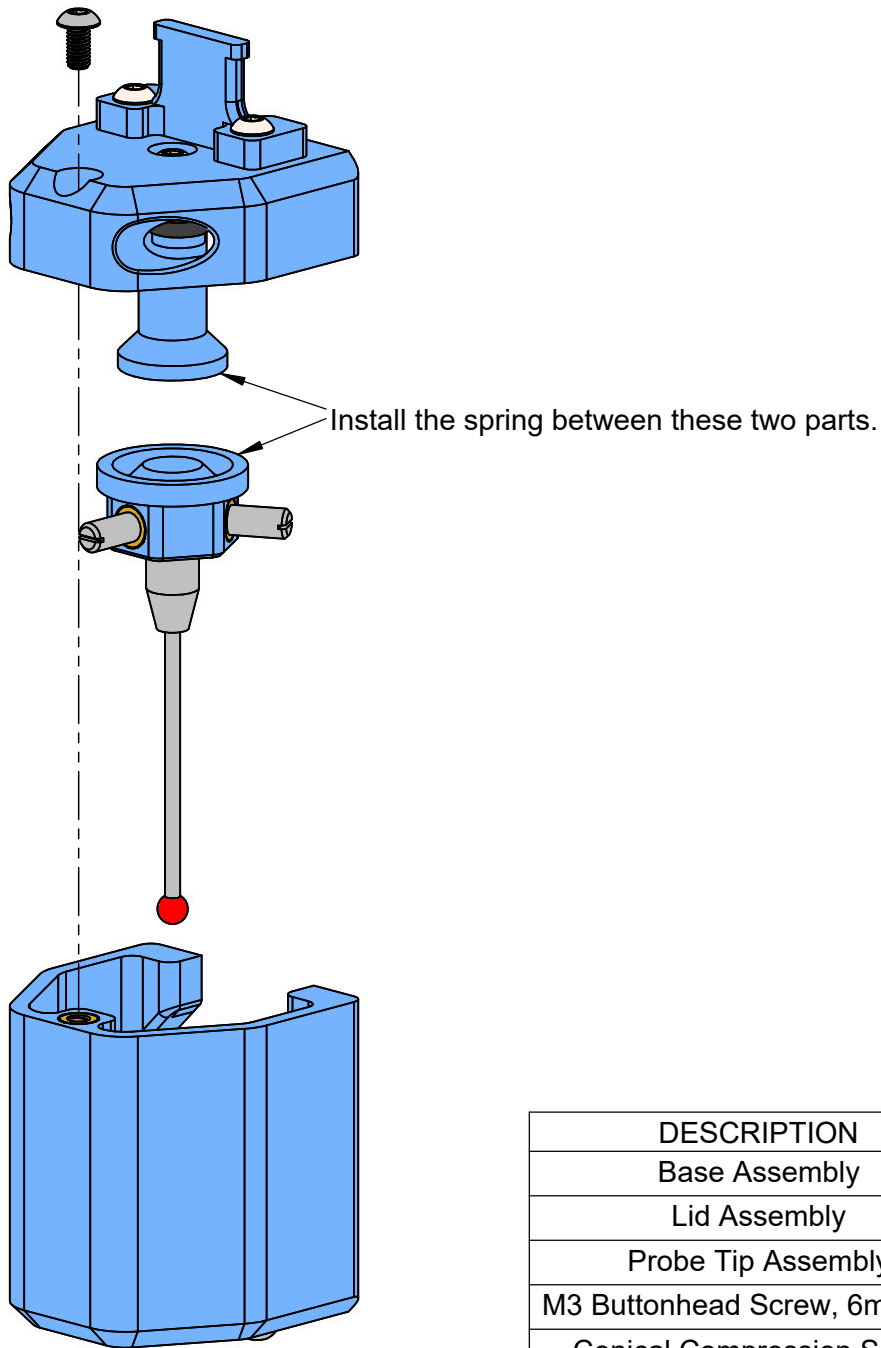


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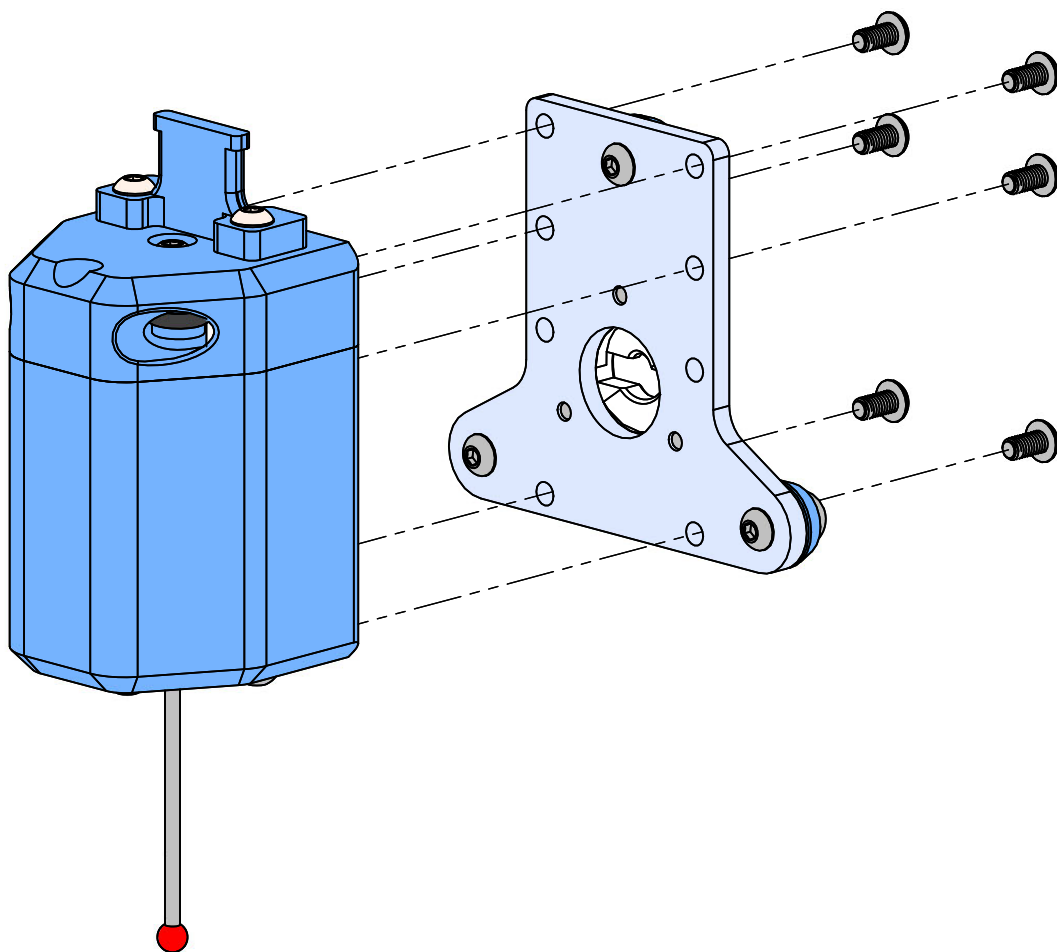
SCALE: 1:5

SHEET 9 OF 11



DESCRIPTION	QTY.
Base Assembly	1
Lid Assembly	1
Probe Tip Assembly	1
M3 Buttonhead Screw, 6mm long	1
Conical Compression Spring	1

Housing Assembly		
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	SCALE: 1:5	SHEET 10 OF 11



DESCRIPTION	QTY.
Base Tool Plate Assembly	1
Base Assembly	1
Lid Assembly	1
Probe Tip Assembly	1
M3 Buttonhead Screw, 6mm long	7

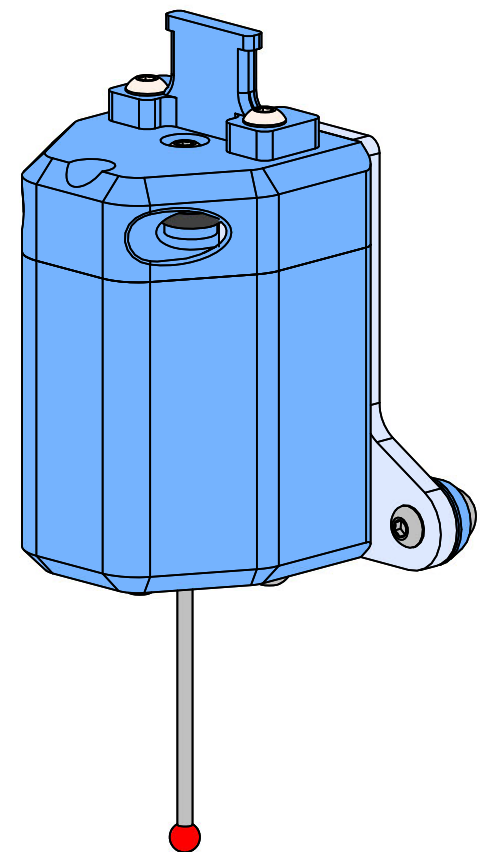



Plate Installation		
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	SCALE: 1:5	SHEET 11 OF 11