

Camera Inspection Tool Instructions



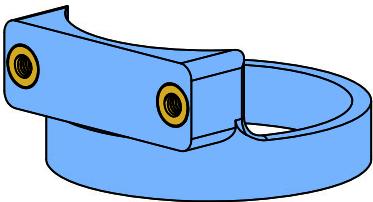
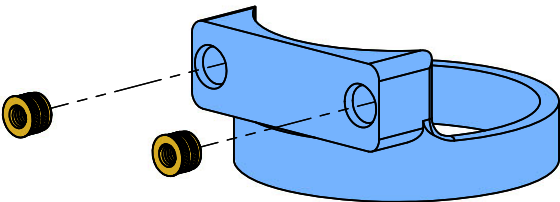
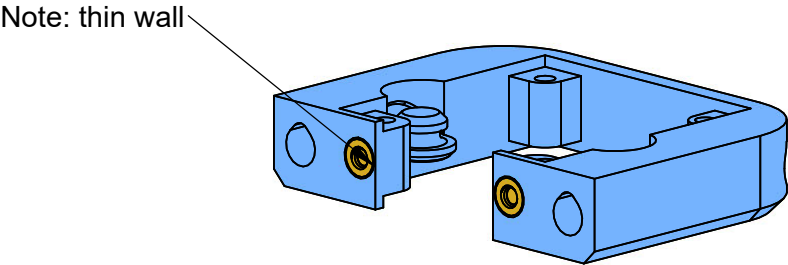
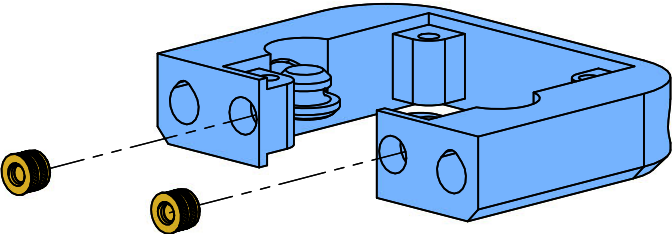
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12/27/2022

SCALE: 1:1


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Install the inserts into the parts below using the Plate Press technique.
Note: it is critical that the inserts be flush with the surface itthey were installed into, or the camera or ring light may result at a slightly off-angle.

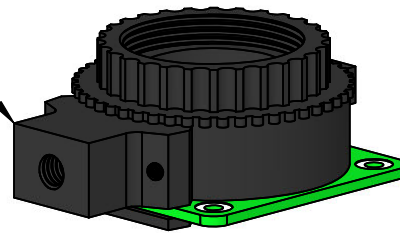


DESCRIPTION	QTY.
Printed Lower Base	1
M3 Tapered Heat Set Insert	2

DESCRIPTION	QTY.
Printed LED Mount	1
M3 Tapered Heat Set Insert	2

Parts with Inserts		
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Remove the 1/4-20 screw mount by
unscrewing the two bottom screws.



IMX4777 Prep

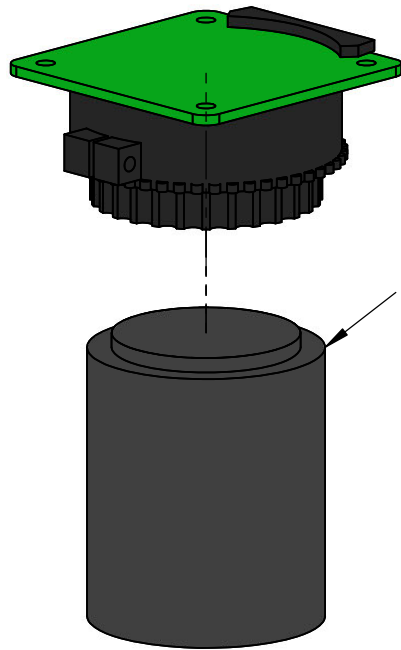


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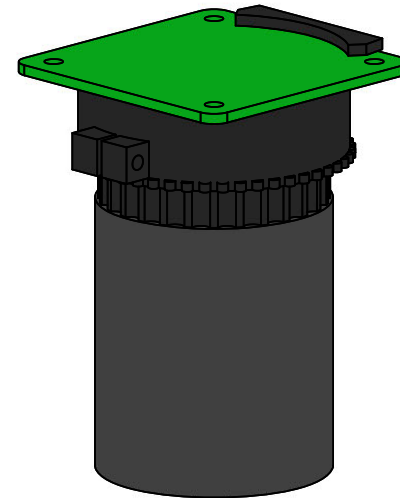
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Install your lens of choice onto the camera before the following steps.



Lens Installation

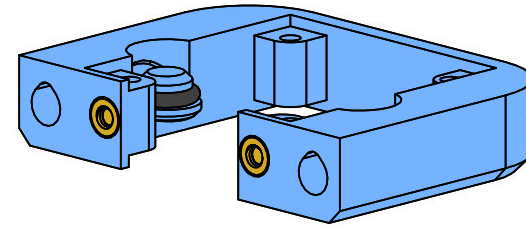
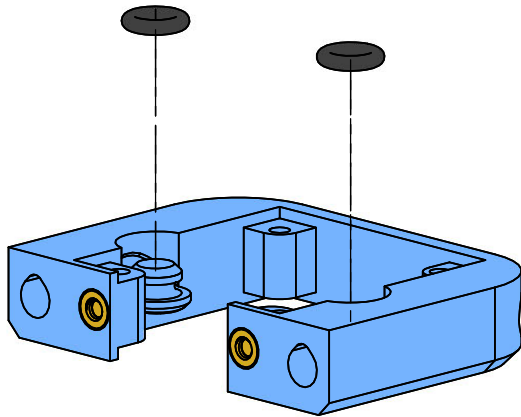


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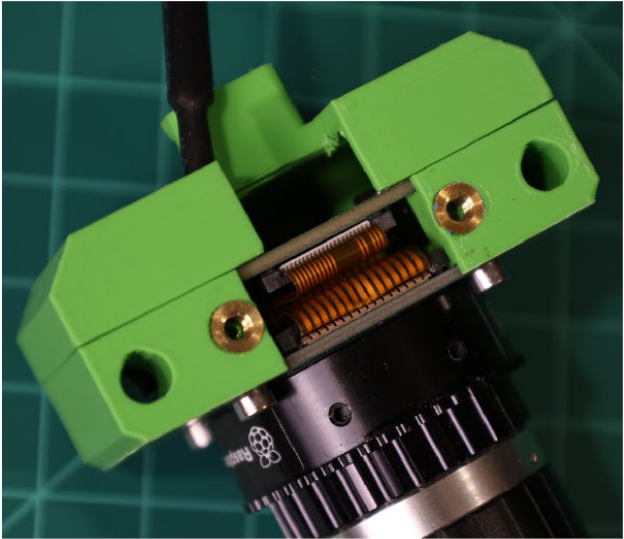
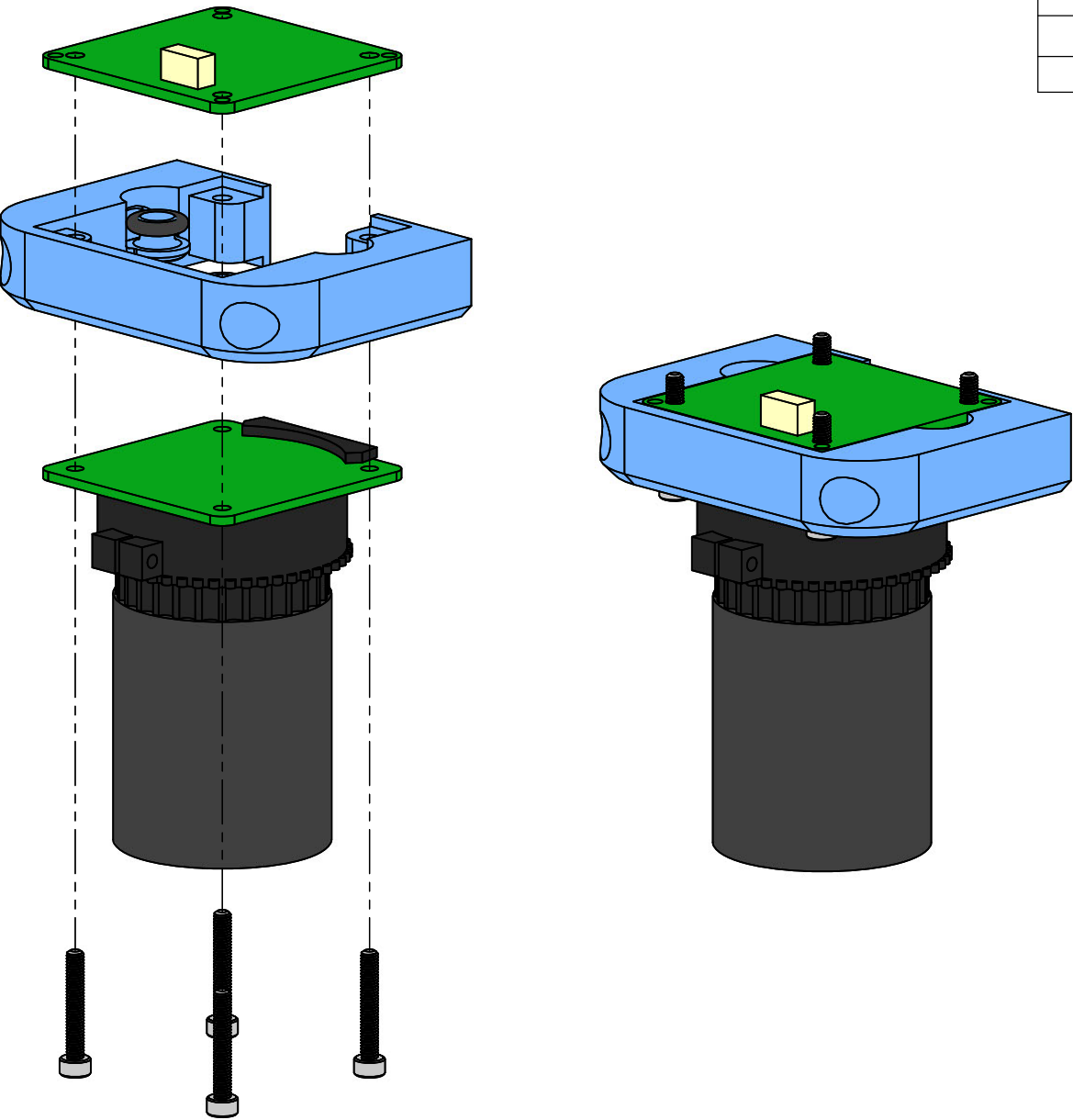


DESCRIPTION	QTY.
Printed Lower Base	1
M3 Tapered Heat Set Insert	2
5x9x2 O-Ring	2


ORing Installation		
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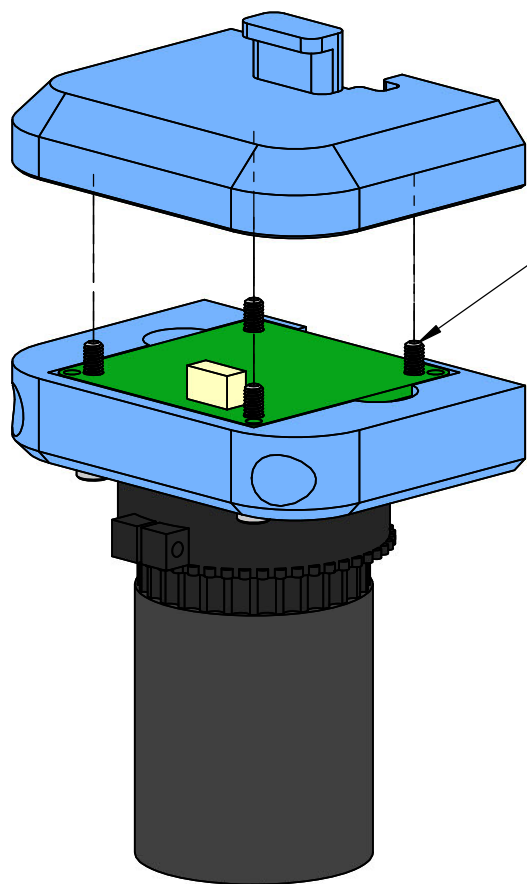
First connect the Flat-Flex Cable to both PCBs according to the Arducam assembly instructions. Then sandwich the assembly together as shown below.

DESCRIPTION	QTY.
Arducam RPi HQ UVC Adapter Board	1
M2.5 Socket Cap Screw	4
Printed Base Assembly	1
Sensor with Lens	1

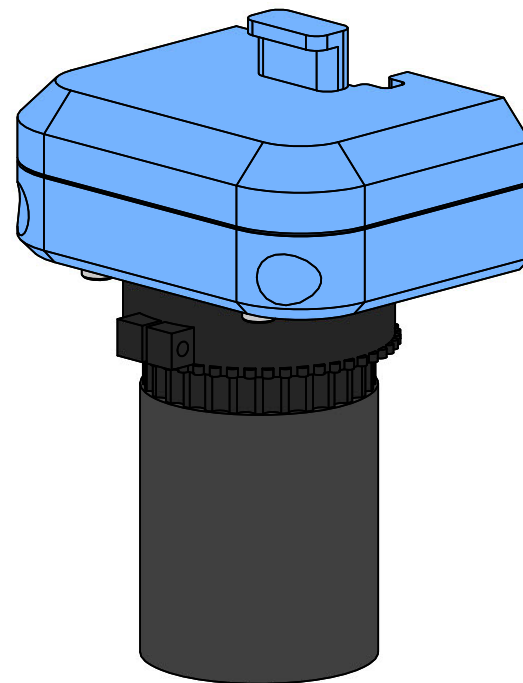


To manage the Flat-Flex cable, you will need to tuck it in such that it is "sandwiched" in between the two PCBs as shown here.


PCB Sandwich Assembly		
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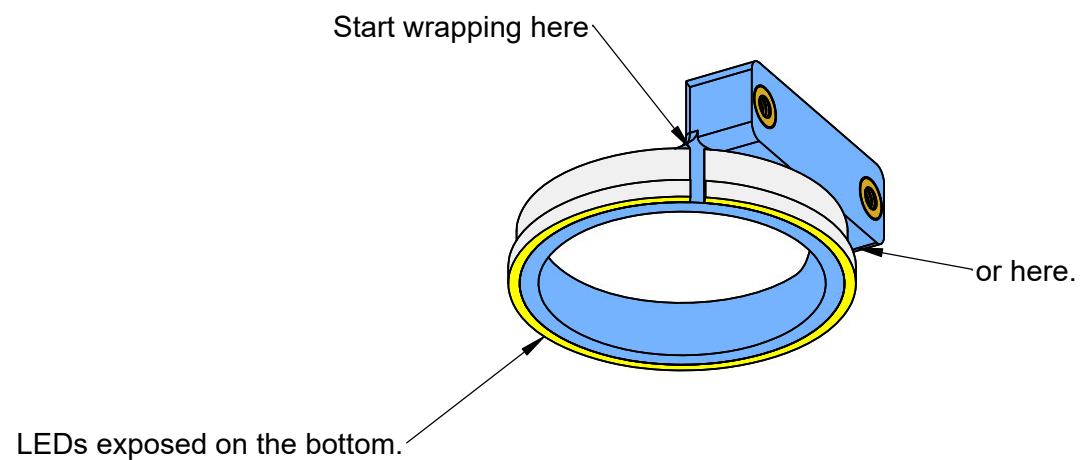
Thread these screws directly into the plastic in the Lid above.




DESCRIPTION	QTY.
Printed Lid	1

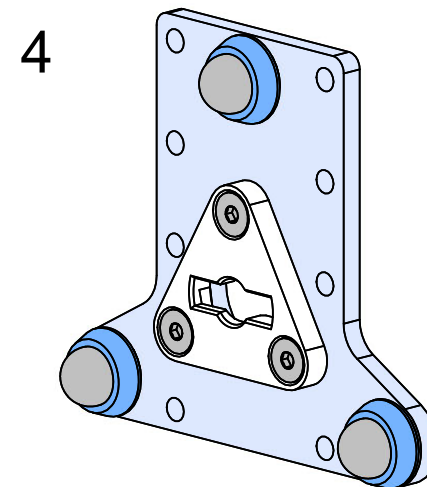
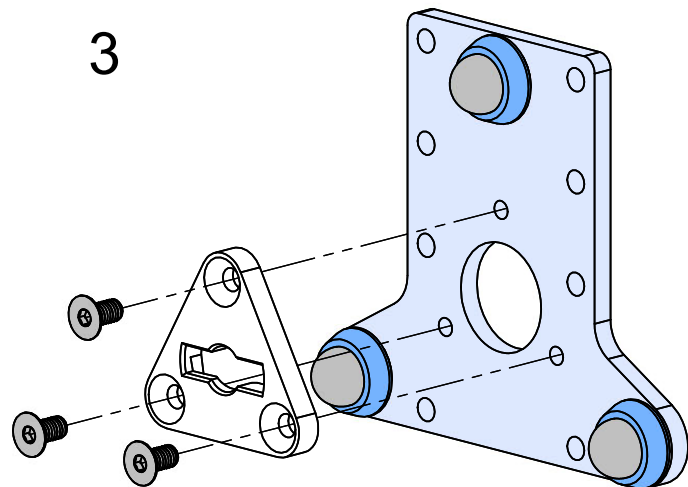
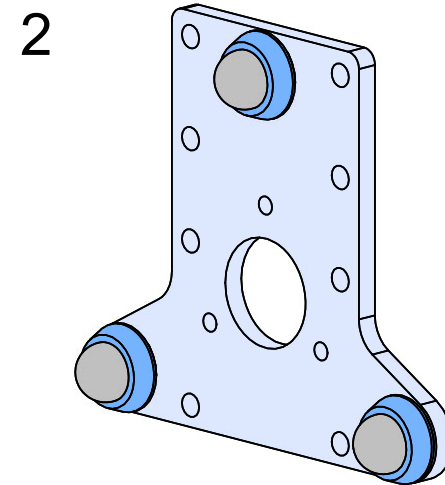
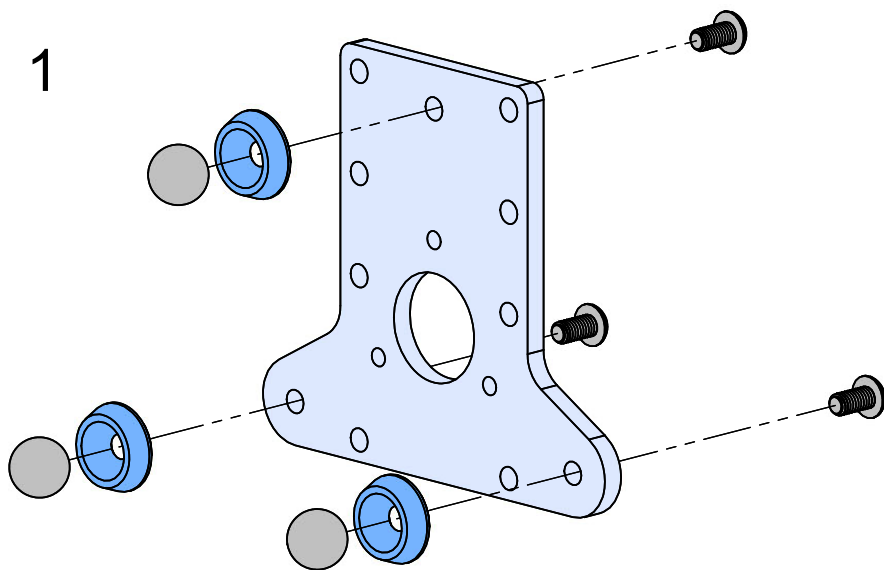
Case Assembly		
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Ensure that two wire leads have been soldered to the led strip first.
Then, peel away the LED strip's blue sticky backing, and adhere it to the outside of the printed part.




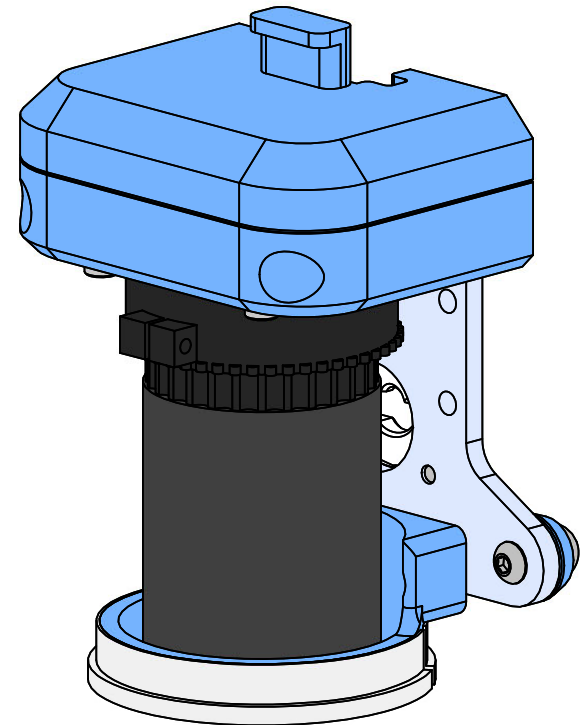
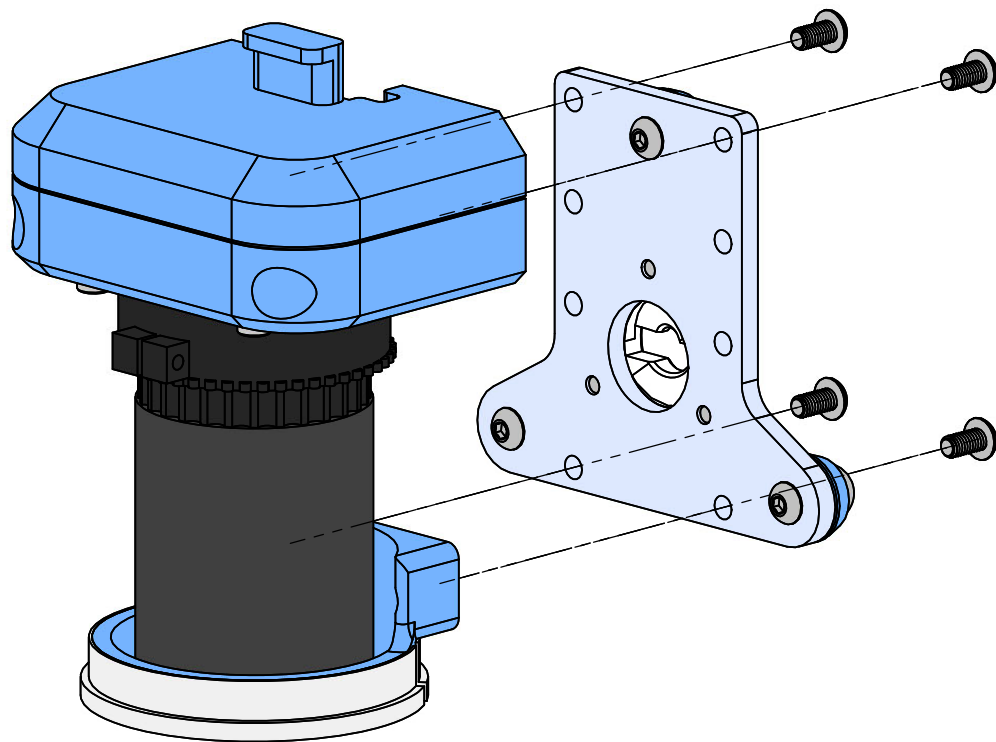
DESCRIPTION	QTY.
Printed LED Mount	1
M3 Tapered Heat Set Insert	2
COB LED Strip, cut to ~132mm	1

Cob Mount Assembly		
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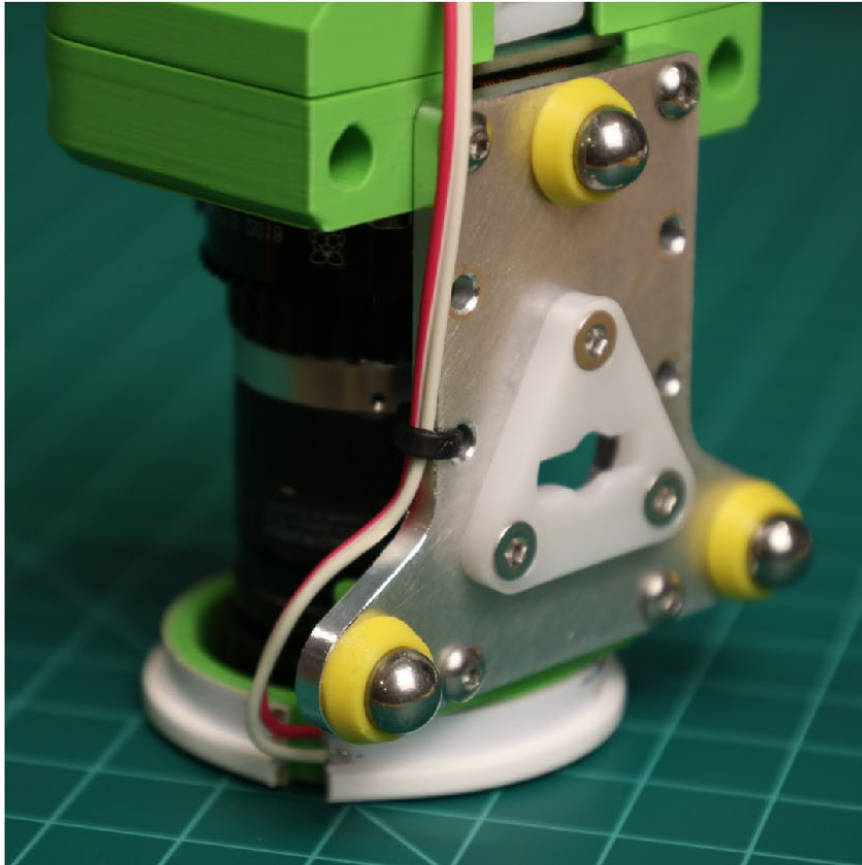
DESCRIPTION	QTY.
Tool Plate	1
M3 Buttonhead Screw, 6mm long	3
M3 Threaded 8mm Tool Ball	3
Wedge Plate	1
Tool Ball Cup	3
M3 Flathead Screw, 6mm long	3

Tool Plate Assembly		
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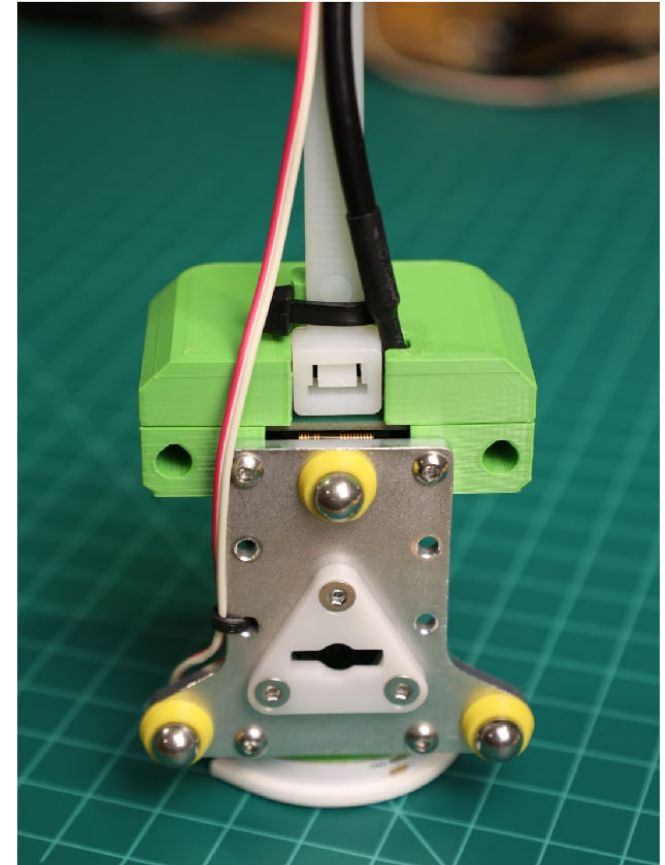


DESCRIPTION	QTY.
Camera Case Assembly	1
Cob Mount Assembly	1
Base Tool Plate Assembly	1
M3 Buttonhead Screw, 6mm long	4


Tool Plate Installation		
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A small zip tie can secure the COB LED wire to the tool plate.



A large (48-in.) zip tie can be used to manage wires extending from the tool to its parking post.

Wire Management		
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