CS7.2 Homing Sensor Assembly GuideA group of small electronic components

AI-generated content may be incorrect.

The optical homing sensor for CS7.2 has been greatly improved and simplified.

The following parts are what is needed for assembly and are available from the CS7.2 repository at:

<https://github.com/sjseth/AI-Case-Sorter-CS7.2/blob/main/Models/Classifier/CS7.2%20Homing%20Sensor.stl>

Additional components needed for this build are a spring and optical sensor.

* 304 Stainless .3 x 4 x 20mm Compression Spring   
  amazon at: <https://www.amazon.com/Cilky-Compressed-Stainless-Diameter-Compression/dp/B0CVRZCPCM/ref=sr_1_1?s=industrial&sr=1-1>
* IR Sensor Module

<https://www.amazon.com/EC-Buying-Optocoupler-Measuring-Interrupter/dp/B0CHDRF497/ref=sr_1_4_pp?s=industrial&sr=1-4>

## 3D Printing Recommendations

**Layer Height:** 0.16 **Walls:** 3  
**Color:** Piston should be black (other colors may not interrupt properly  
**Infill:** 20%

## Assembly Steps

1. Insert spring into piston spring retention hole and hold in place with finger.
2. Insert piston and spring into homing sensor body guiding spring into retention hole in the body  
   A hand holding a small metal object

   AI-generated content may be incorrect.  
   It should look like this when completed.

A black object with a spring

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1. Slide sensor into place and seat all the way against the body of the part.

A small black and blue piece of electronics

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1. Guide retention clip through sensor mount holes and press firmly to seat against the body of the sensor.

A black and blue electronic device

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1. When you attach the wire, it should be connected in the following wire pattern where (Black) Ground is on the left, (Red) 5v+ is center and (Signal) white is on the right