

Solder 16 AWG wires to the back of the motor on the encoder board.

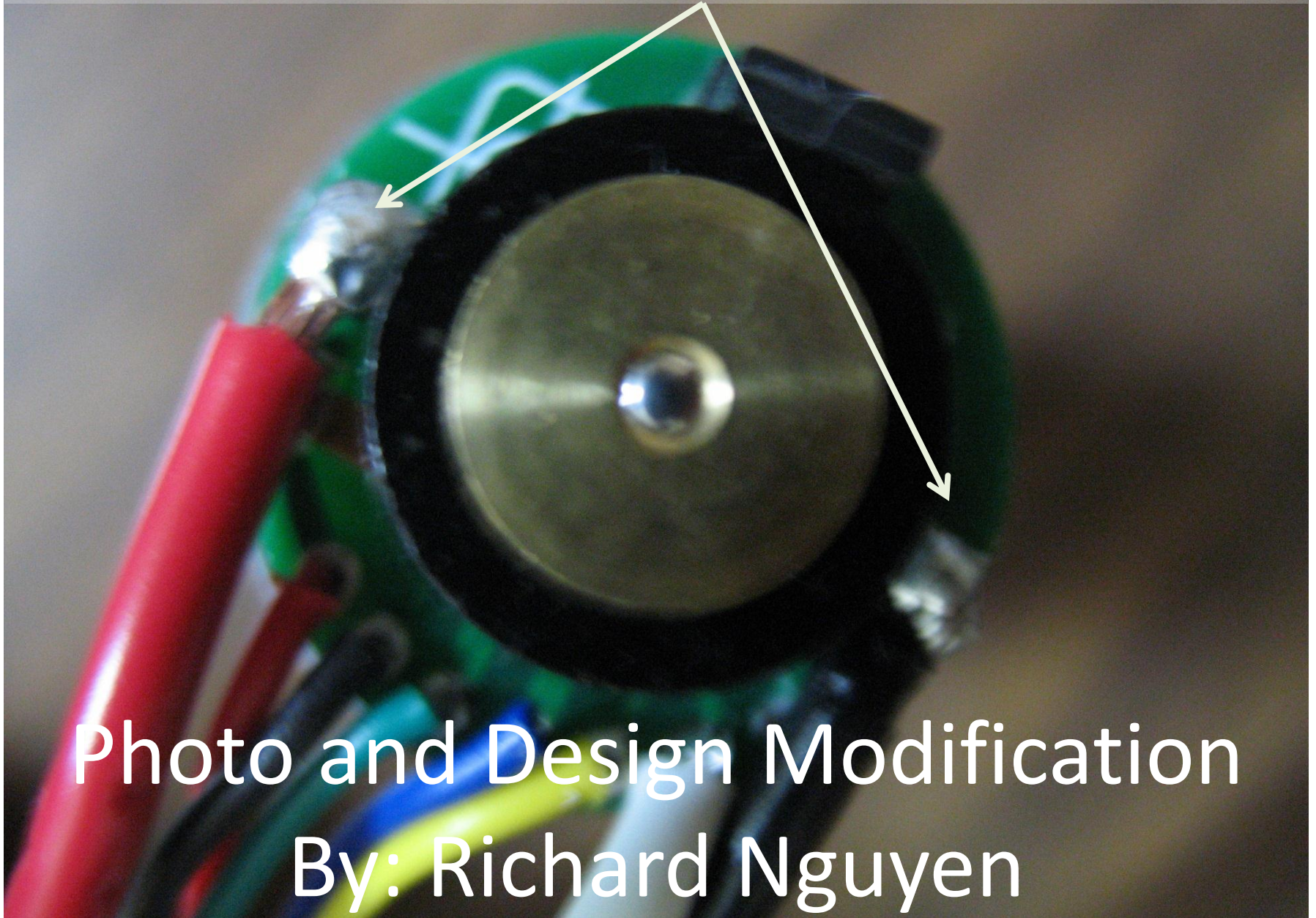


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Notice that the new current “bottleneck” is not the connection between the encoder board and the motor. The encoder board cannot be easily removed without damage so I did not try to add more solder to this connection.

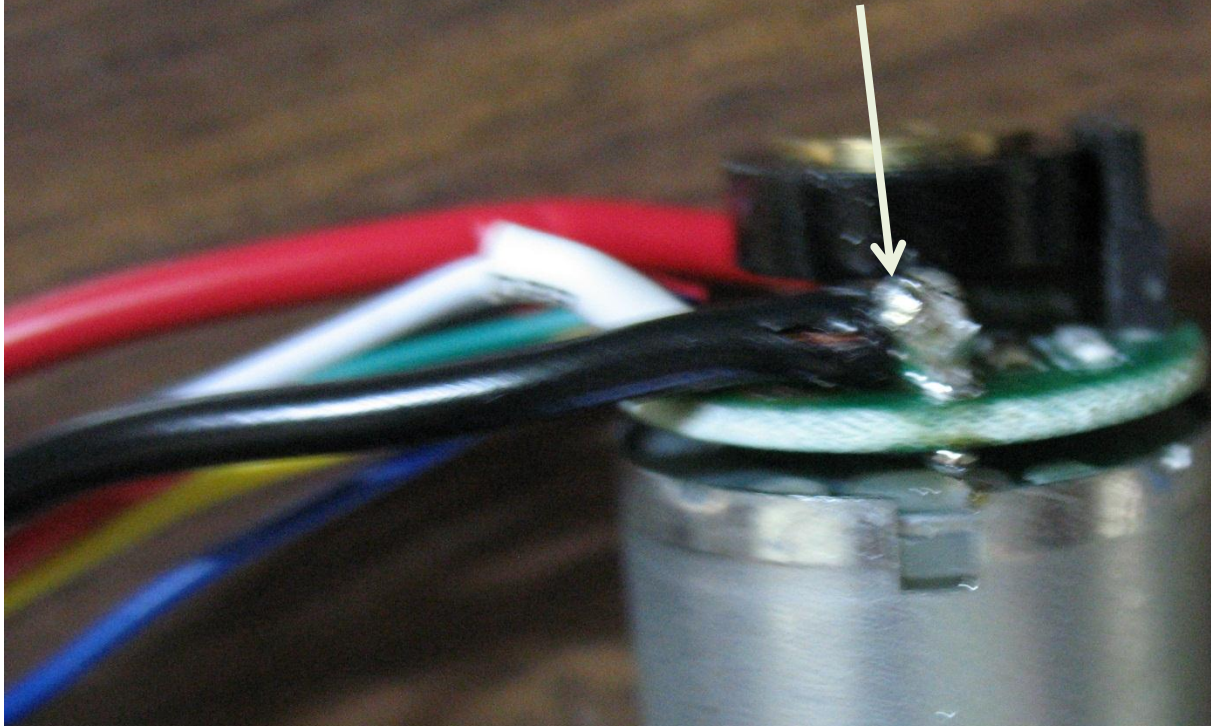
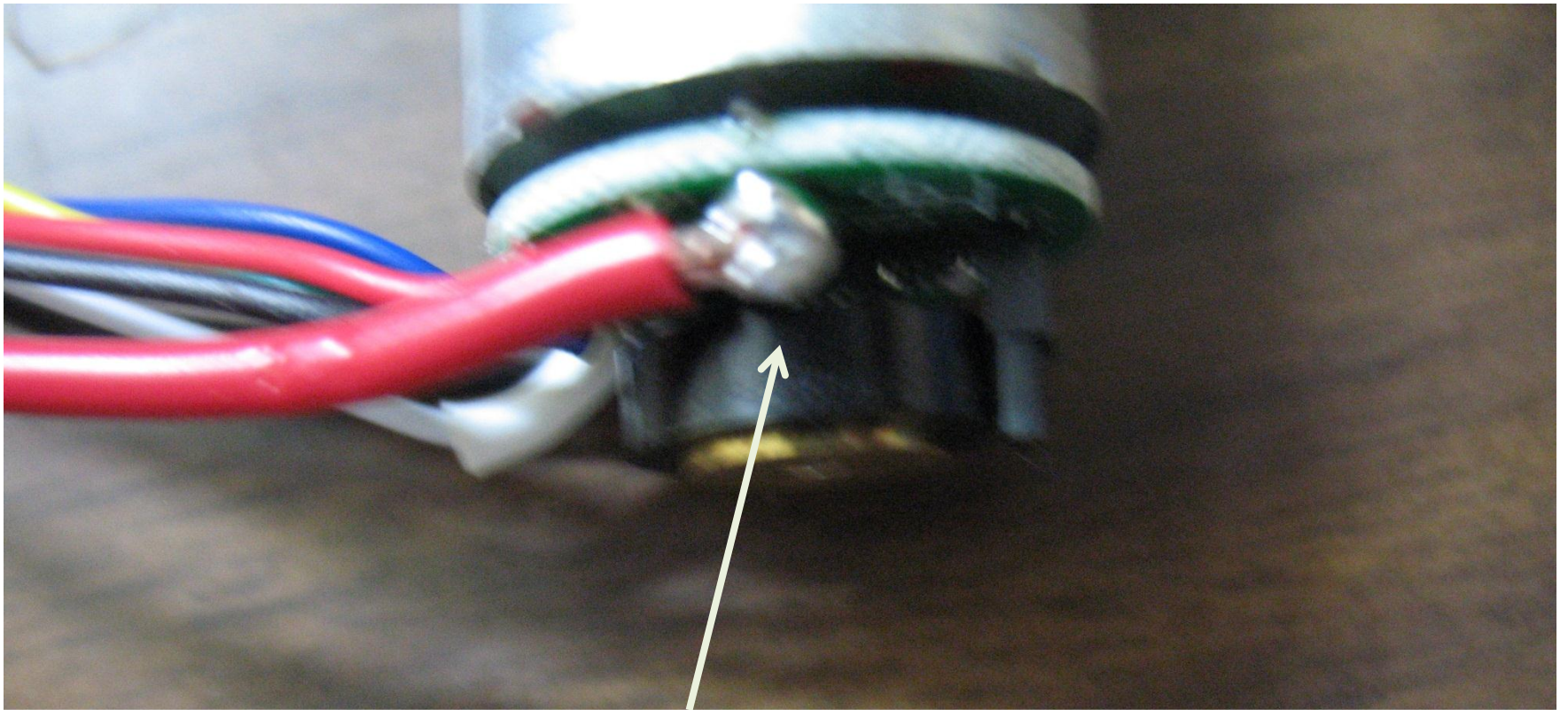


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Another view of one of the new solder joints.

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Use heat shrinks to prevent shorts, wire organization, and strain relief.

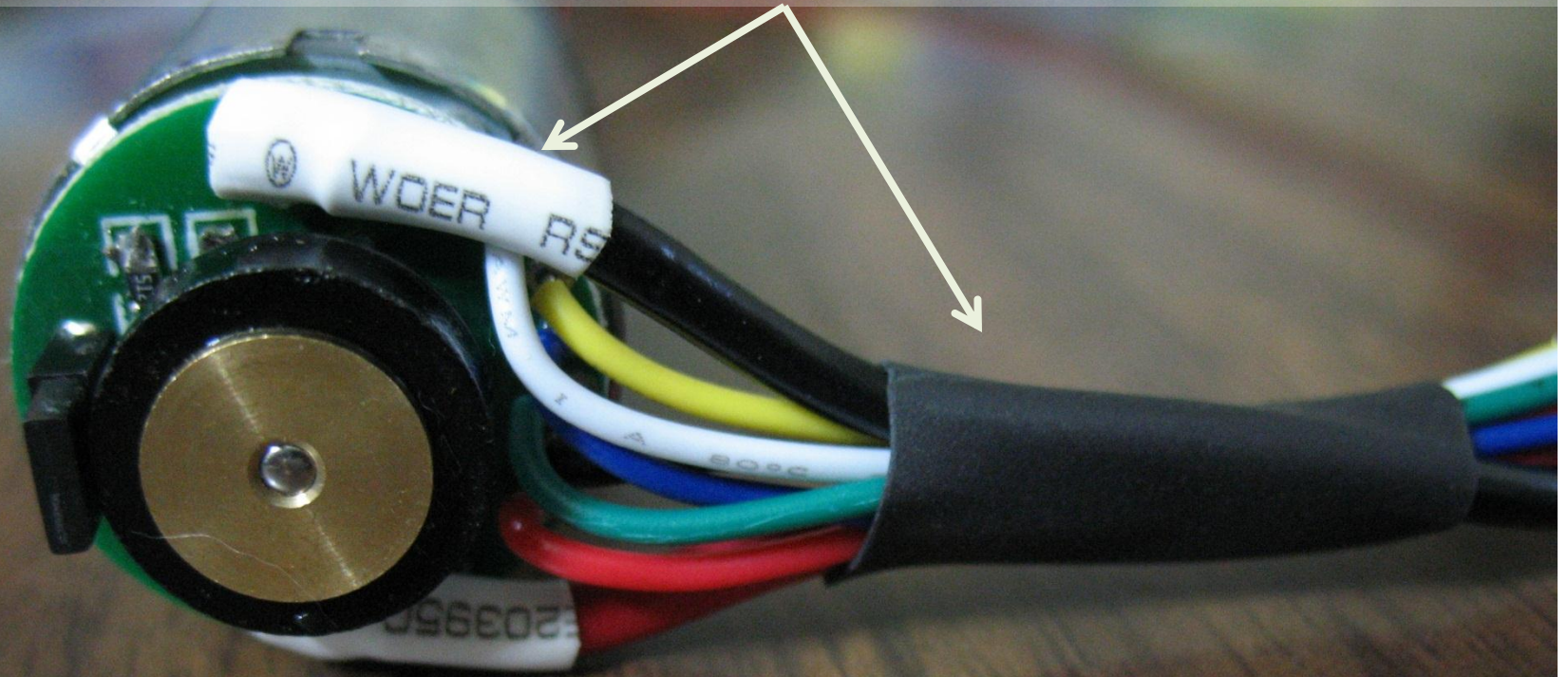


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Make the wires offset by about 90 degrees to that it won't get in the way of the encoder wheel.

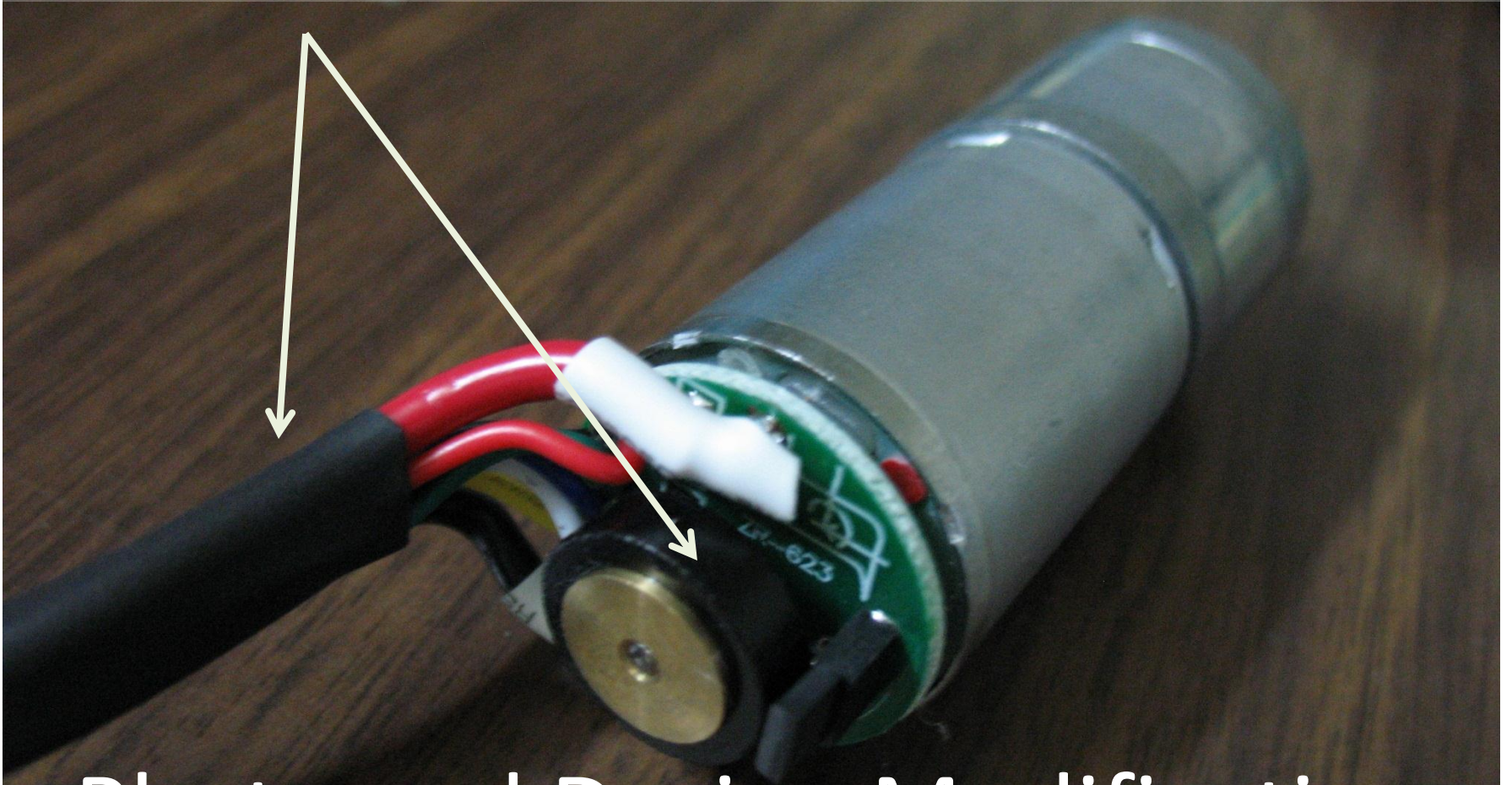



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Orient the motor so that the hall effect sensor is seen along the tube. This allows the motor to go in further without crushing the hall effect sensor.

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The wires are offset, so after making a second offset hole, the wires can be fed through the offset hole without interference. It is a tight fit though. Accurate measurements should be made. Also make sure the hole is drilled in a place where the side caps won't block it.

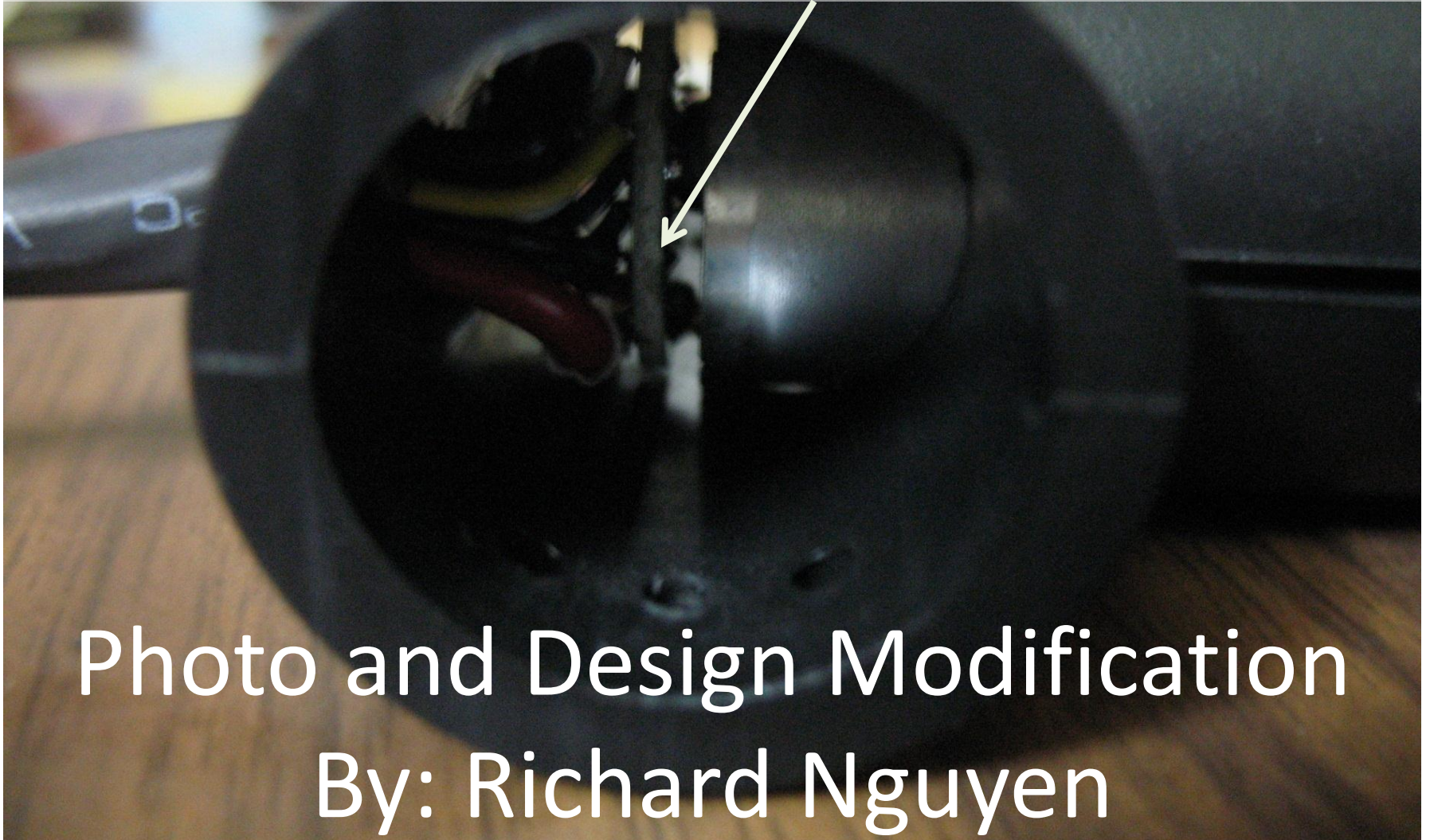
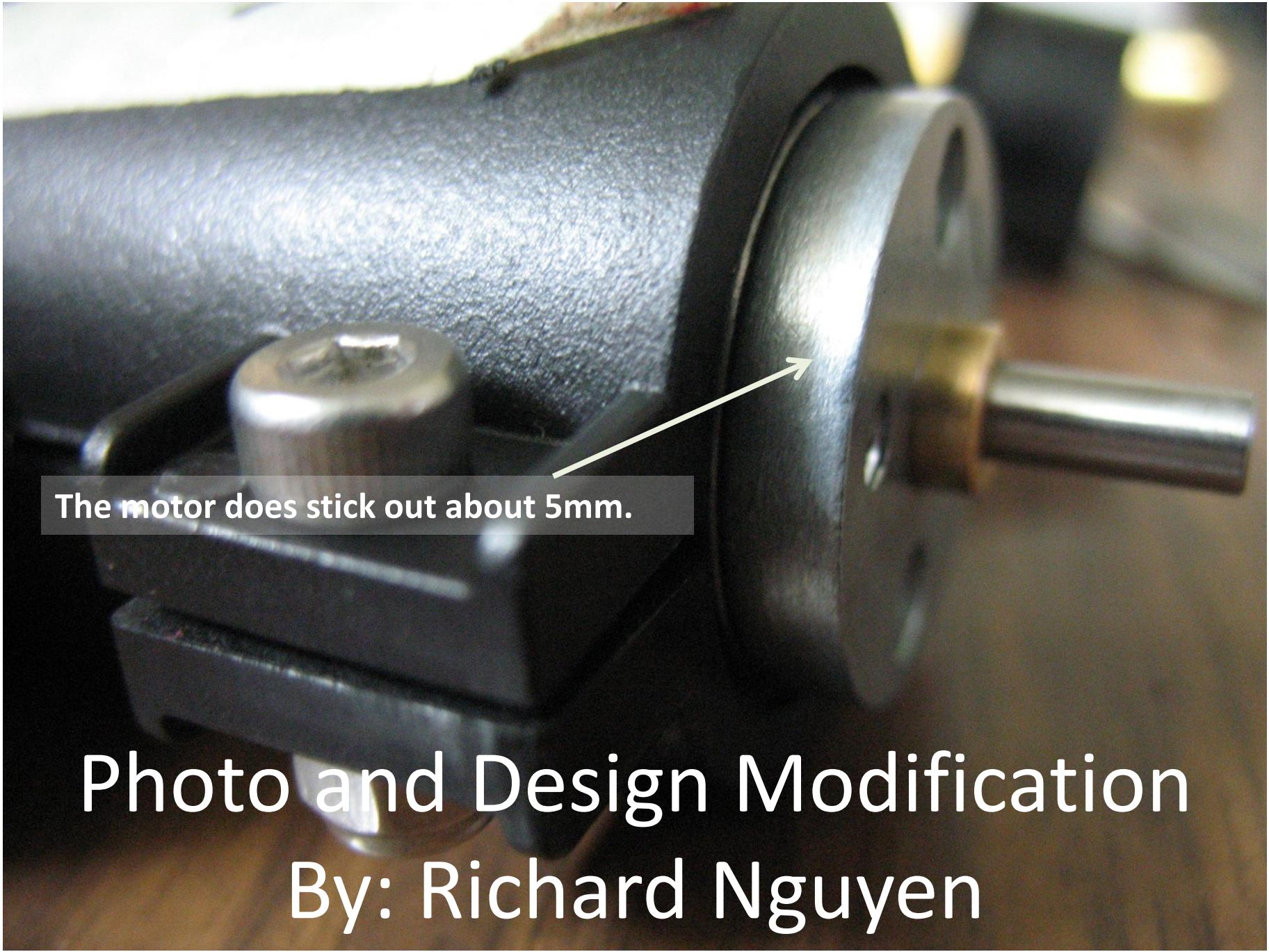


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The motor does stick out about 5mm.

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Make an offset hole since the wires are offset. Also the center hole can be used as access to the motor when need to remove it.



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