

Suspension Cover

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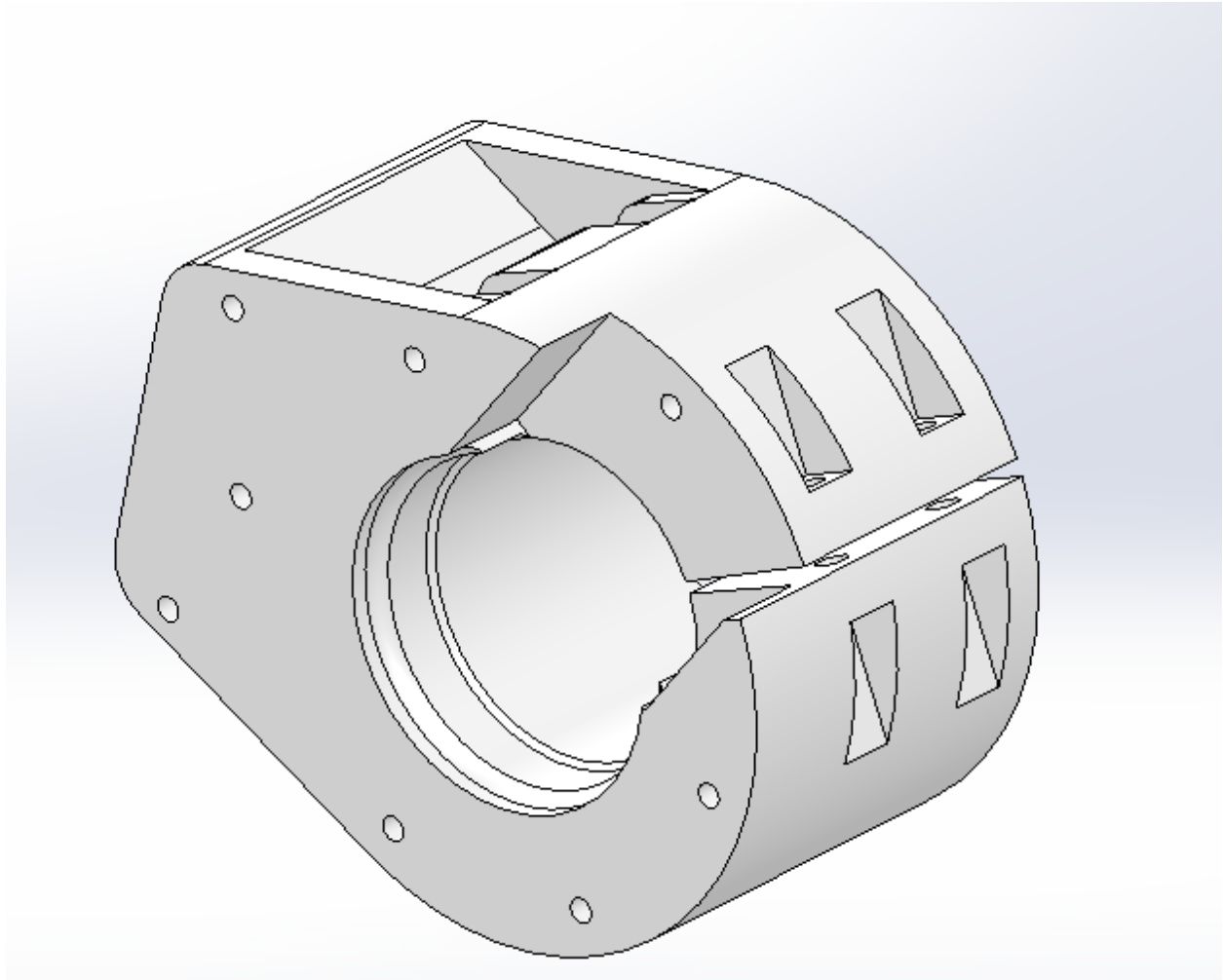




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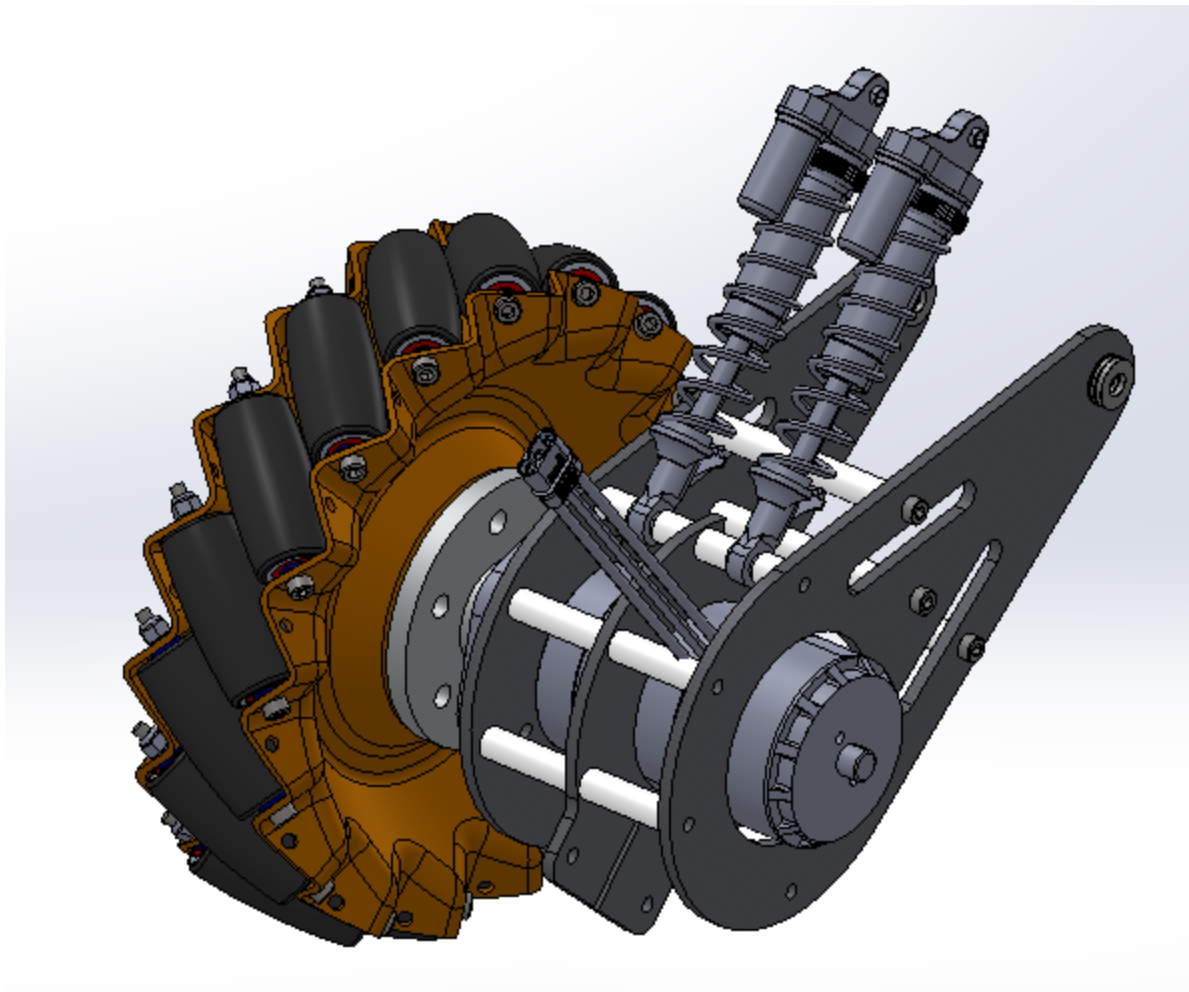
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[1] Abstract

The role of the suspension cover is to connect the shock absorbers to the suspension arm. Compared to the previous design, the slot allows the cover to clamp onto the motor to ensure it doesn't move.

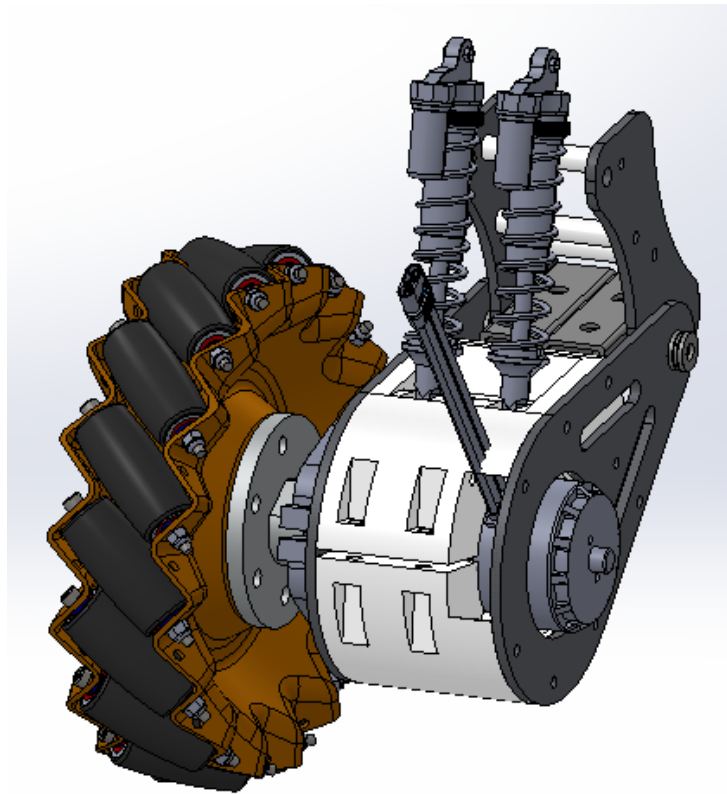
[2] Old vs. New Design

[2.1] Old

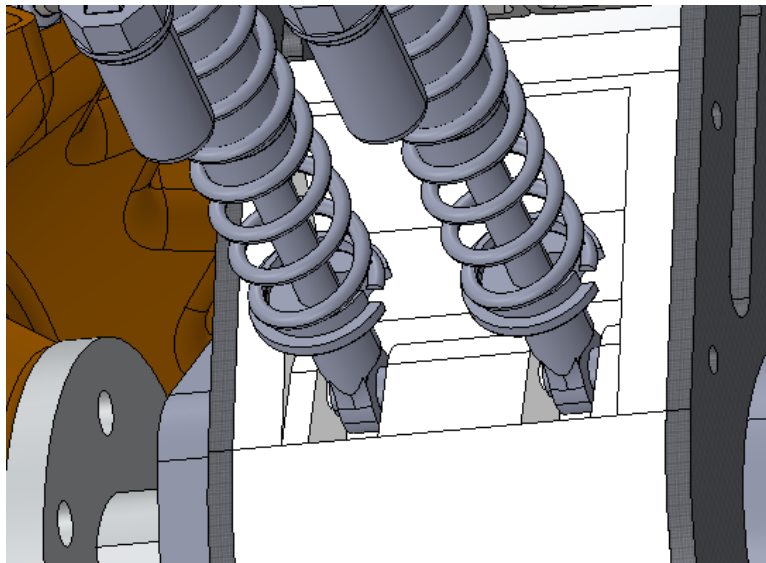


- In the old design, a plate was used between the suspension arms and L-brackets were to be used at the end of the middle plate to clamp onto the motor and reduce the load on the side plates. However, this didn't end up working and a cover was used instead to span the entire distance.

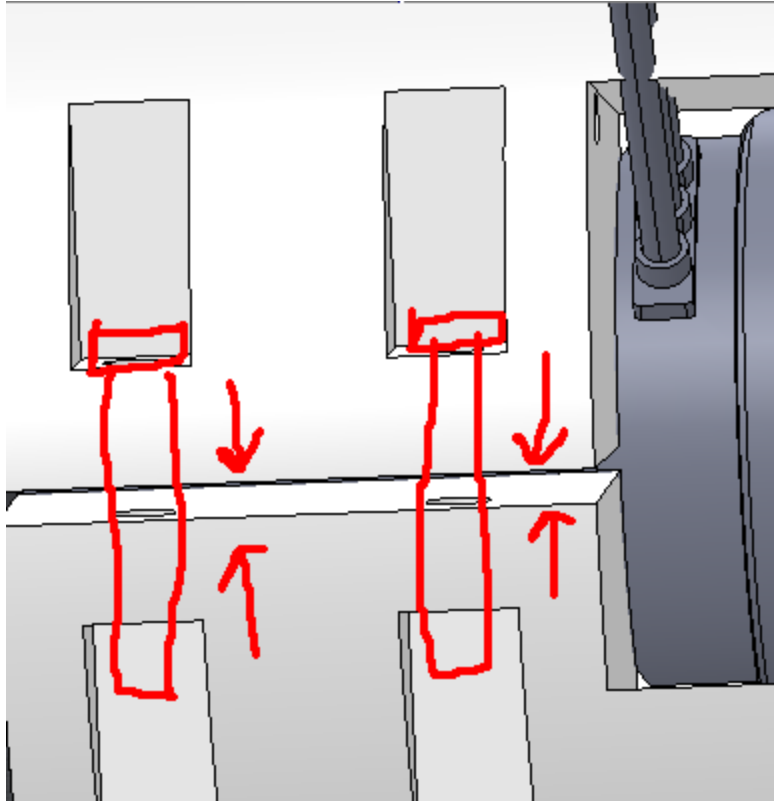
[2.2] New



- The new design spans the entire length of the side plates. There is a slot to allow for the wires of the motors to come out. There are also slots to allow for the shock absorbers to mount to the cover as shown below



[3] How it Works



- M3 screws will be used to clamp down the cover onto the motor. This should be able to distribute the load of the robot more evenly to the suspension arms.