



Servo Controlled Blast Gate + AC sensor

T Tailslide

VIEW IN BROWSER

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Summary

<https://youtu.be/kXWEuUqU3tQ> I printed gears and mount in ABS and it seems to work fine. I printed a second set with...

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Tags: **servo**

I printed gears and mount in ABS and it seems to work fine. I printed a second set with the gears made from armadillo filament. Time will tell if there is any real world difference.

Travel will cover a 4 inch blast gate and all three pieces will print on a single 200x200 bed.

For smaller gates, you can trim off the end of the geared rack.

You will probably want to lubricate the gears/slider mechanism.

For servos, you need something with some torque. I used these: <https://www.aliexpress.com/item/1-pieces-MG946R-upgrade-RC-Metal-Gear-Torque-Servo-For-Boat-CAR-13KG-Torque-Metal-Servo/32854187745.html?spm=a2g0s.9042311.0.0.3da24c4d3N29DO>

I like them a lot.. metal gears and screw hole.. just mount the horn that matches the indentation on the wheel and use a longer bolt to mount it.

It's running powered off an arduino uno running from a 7 volt power supply. Don't try to power these servos from a 5 volt USB.

If you want these to automatically open when power is detected on your tool you will want the sensors and my case for them from here: <https://www.thingiverse.com/thing:3368330>

See Arduino source code here: <https://github.com/Tailslide/BlastGateServo>

I don't have a wiring diagram but if you google wiring buttons and leds to an arduino there should be some good examples.

Print Settings

Printer:

FLSUN i3

Rafts:

No

Supports:

Yes

Resolution:

0.25mm

Infill:

55%

Category: Machine Tools

Model files



hugegear.stl



hugerack4.stl



mount3.stl

[Find source .stl files on Thingiverse.com](#)

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