



Kingsong S22 Extended & Ergonomic Trolley Handle



tomadto

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Summary

This trolley handle moves the trolley position up and further back. MUCH comfortable and controllable than stock!

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[kss22](#)

(distant remix of the linked one!)

My improvement for the tragic s22 trolley handle!

This handle addresses all the major gripes I had with the stock handle (well, before I broke it):

- It's significantly taller, standing at about 5.5in in height above the battery boxes when stowed compared to just 2in stock
- It's closer to the middle/center of mass of the wheel. so it's actually comfortable to trolley the wheel facing forwards, and there's more options for how to trolley the wheel.
- The angle that your hand is at makes sense (idk how to best describe it)

- It's easier to lift the wheel up from parked to standing.
- There's more to wrap your hand around!
- There's slightly better access to the power button and charge ports.
- It acts as a secondary bumper, protecting the mainboards from the front
- It looks cooler (definitely a fact).
- Probably more that I haven't noticed haha...

Difference between the versions?

All versions do not block the screen and are designed to nest with the **original seat**. The long version is my favorite, but depending on your seating position it might make seated riding a bit more uncomfortable (especially if you don't have rollers). The shortened version doesn't impede seated riding at all, at the cost of a bit of trolleying ability (still much better than stock). The rectangular version fits a bit better with the aesthetics of the wheel imo, but the end piece is a bit less comfortable to hold and it gets more in the way with seated riding. See the pics!

My printing set up

Sovol SV06, 0.6mm nozzle, 0.4mm layer height. 4 perimeters, 10% gyroid infill.

Snug or organic/tree supports (snug gave me slightly better quality, organic was much easier to remove) and overhang threshold at 30 degrees.

Note: PLA snapped after a day in the sun, now trying PETG

I used PLA+/PLA Meta. Would recommend purely because it's plenty strong enough for normal use (I can even lift my s22 solely from this trolley handle!) and cheap to replace in the event of a crash that would snap it.

- I also added more perimeters at the thinnest sections of the part, and 100% infill at and a bit above the connection interfaces between the stalks and the part.

I may try and make this in 95A or 98A TPU, but if you get to that before me let me know! might be tough because of the overhangs.

Note that this uses around 200g (short)/300g (long) of material. Make sure you have enough!

Assembly

4x M3 Nuts required. The screw holes should be clearance holes, and the cutout for the nut should be a snug fit (tip: use the screw to pull the nut in before inserting your part into the stalks). You can reuse the original countersunk screws from the s22.

Questions? Comments? Requests?

Reach out to me on

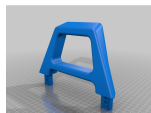
- discord: tomadto#4557
- telegram: https://t.me/hint_of_tomadto
- or printables (more likely to check the other two :X)

I'd love to get your feedback and thoughts!!!

how did i make this???

onshape, and lots of hours and experimenting! xd

This remix is based on



King Song S22 Trolley Handle

by astro757

Model files

s22-extended-and-ergonomic-handle-long-by-tomadto.stl

s22-extended-and-ergonomic-handle-shortened-by-toma... .stl

s22-extended-and-ergonomic-handle-rect-not-recommen... .stl

☐ I personally like this version the least, but it fits the s22 the most, so I'm throwing this in

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