



TrashStation (Parametrized Lube Station for Cherry MX/Kailh switches)



trashcandrummer

[VIEW IN BROWSER](#)

updated 15. 7. 2022 | published 7. 5. 2021

Summary

Lube station which also allows closing the switches sitting in the station (Cherry MX and even Kailh style switches)



1.66 hrs



2 pcs



0.20 mm



0.40 mm



PLA



19 g



Prusa
MK3/S/S+

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Tags:

switch

mechanical

station

cherry

lube

kailh

cherrymx

switches

mechkeyboards

mechanicalkeyboards

Parameterized lube station for your mechanical keyboard switches or a simple switch display plate if you choose the cutout size to exactly fit Cherry style switches (14x14mm).

How to print

- Orientation: Face down (no supports)
- Perimeters: 3 (looks the best, but will also work with only 2)

- Infill: 20% Grid
- Material: PLA, PETG, etc.

Recommendations

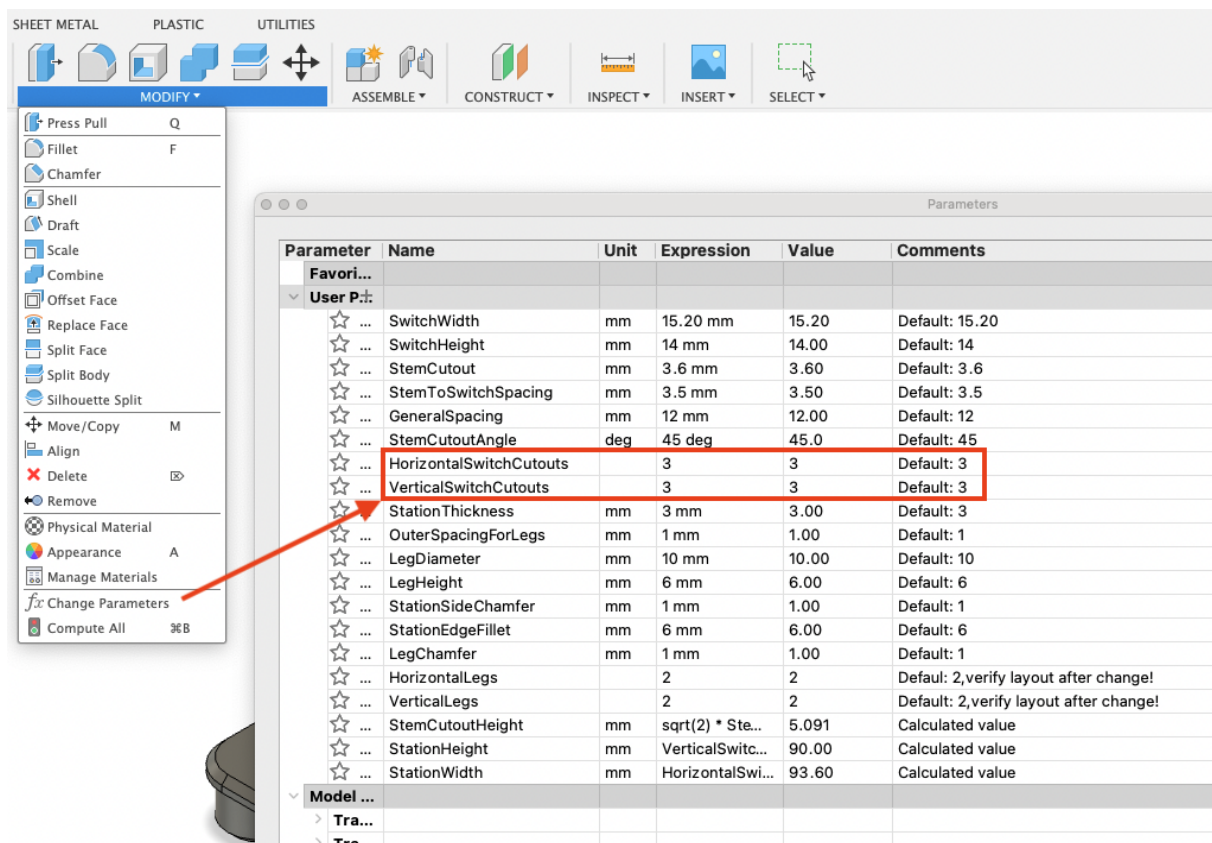
To avoid scratches on any surface, stick SJ5302 bumpers (2,2x7,9mm) onto the station feet. You either have extras from your keyboards or you can order them online - they are really cheap :)

Customize the model to fit your need

Create your own size

The Fusion360 project is attached so you can easily change the parameters of the model to export the lube station in a size you prefer.

The more Switch cutouts you define, the bigger the model gets :)



| Parameter | Name | Unit | Expression | Value | Comments |
|-----------|-------------------------|------|--------------------------------|-------|--|
| ... | SwitchWidth | mm | 15.20 mm | 15.20 | Default: 15.20 |
| ... | SwitchHeight | mm | 14 mm | 14.00 | Default: 14 |
| ... | StemCutout | mm | 3.6 mm | 3.60 | Default: 3.6 |
| ... | StemToSwitchSpacing | mm | 3.5 mm | 3.50 | Default: 3.5 |
| ... | GeneralSpacing | mm | 12 mm | 12.00 | Default: 12 |
| ... | StemCutoutAngle | deg | 45 deg | 45.0 | Default: 45 |
| ... | HorizontalSwitchCutouts | | 3 | 3 | Default: 3 |
| ... | VerticalSwitchCutouts | | 3 | 3 | Default: 3 |
| ... | StationThickness | mm | 3 mm | 3.00 | Default: 3 |
| ... | OuterSpacingForLegs | mm | 1 mm | 1.00 | Default: 1 |
| ... | LegDiameter | mm | 10 mm | 10.00 | Default: 10 |
| ... | LegHeight | mm | 6 mm | 6.00 | Default: 6 |
| ... | StationSideChamfer | mm | 1 mm | 1.00 | Default: 1 |
| ... | StationEdgeFillet | mm | 6 mm | 6.00 | Default: 6 |
| ... | LegChamfer | mm | 1 mm | 1.00 | Default: 1 |
| ... | HorizontalLegs | | 2 | 2 | Default: 2,verify layout after change! |
| ... | VerticalLegs | | 2 | 2 | Default: 2,verify layout after change! |
| ... | StemCutoutHeight | mm | $\sqrt{2} * \text{StemCutout}$ | 5.091 | Calculated value |
| ... | StationHeight | mm | VerticalSwitchCutouts * 2 | 90.00 | Calculated value |
| ... | StationWidth | mm | HorizontalSwitchCutouts * 2 | 93.60 | Calculated value |

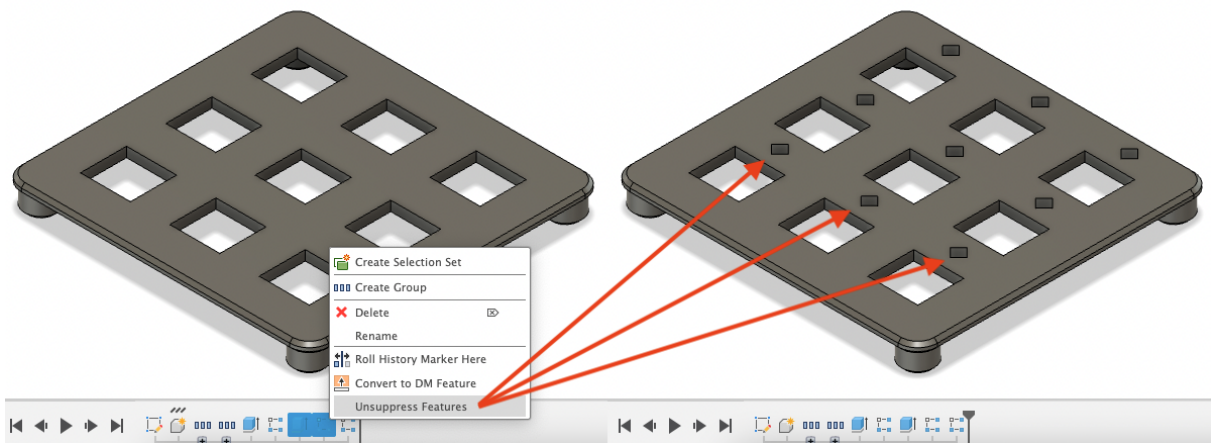
(Un-)hide stem cutouts

You can also disable the stem-holes if you want your station to only have switch cutouts.

Simply select the two icons as shown in the following screenshot, rightclick and choose

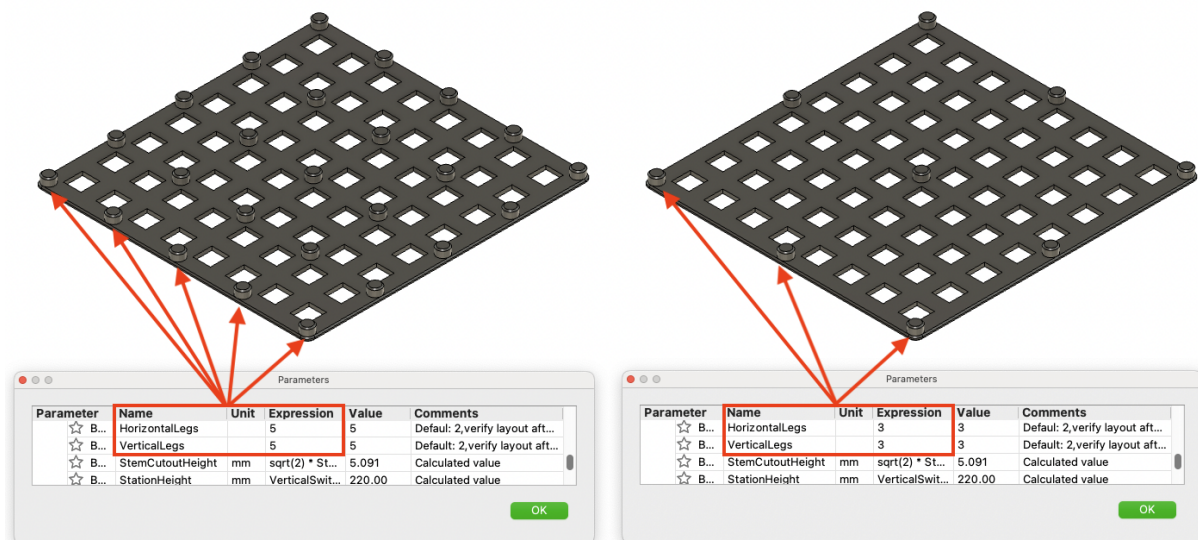
- Suppress feature: If you want to have stem cutouts

- Unsuppress feature: If you don't



Define leg count

Depending on your Station size you might want to change the leg count to improve stability:



Happy printing!

Model files



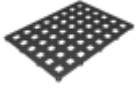
trashistation_3x3.3mf

☐ Minimal version of the Station excluding stem cutouts



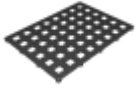
trashistation_3x3_with_stem_cutouts.3mf

☐ Minimal version of the Station including stem cutouts



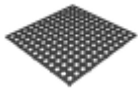
trashistation_8x6_mk3.3mf

☐ Maximum size station to fit on the Prusa MK3S+ printbed excluding stem cutouts



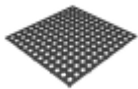
trashistation_8x6_with_stem_cutouts_mk3.3mf

☐ Maximum size station to fit on the Prusa MK3S+ printbed including stem cutouts



trashistation_12x12_xl.3mf

☐ Maximum size station to fit on the Prusa XL printbed excluding stem cutouts



trashistation_12x12_with_stem_cutouts_xl.3mf

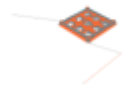
☐ Maximum size station to fit on the Prusa XL printbed including stem cutouts



trashistation.f3d

☐ Source file you can change in Fusion (Parameters) to export the Station in your desired size

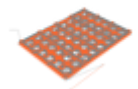
Print files



trashistation_3x3_with_stem_cutouts_pla_1h40m.gcode

⚙️ PLA ⚙️ 0.40 mm ⚙️ 0.20 mm ⌚ 1.66 hrs ⚖️ 19 g 🖨️ Prusa MK3/S/S+

☐ Small Station: Ready for printing on your MK3/S/S+



trashistation_8x6_with_stem_cutouts_mk3_pla_7h3.gcode

⚙️ PLA ⚙️ 0.40 mm ⚙️ 0.20 mm ⌚ 7.51 hrs ⚖️ 86 g 🖨️ Prusa MK3/S/S+

☐ Station as big as possible (for a Prusa MK3/S/S+): Ready for printing

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