

brandeismakerlab

Accessible Door Knob Adapter

This 3D printed attachment can transform a door knob into a levered door handle without removing or damaging the existing hardware. (Your lease is safe!)

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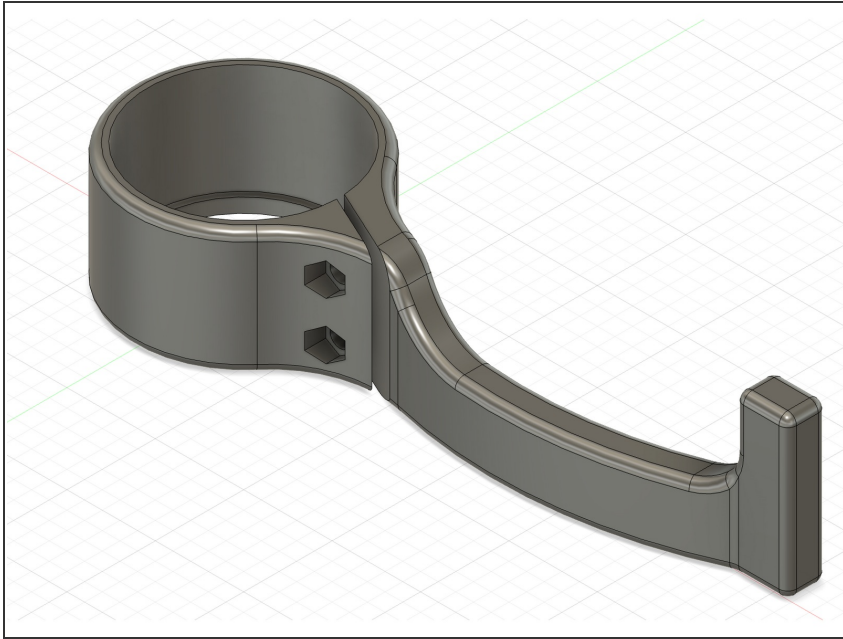
 **TOOLS:**

- 3D Printer (1)
- Phillips Head Screw Driver (+) (1)

 **PARTS:**

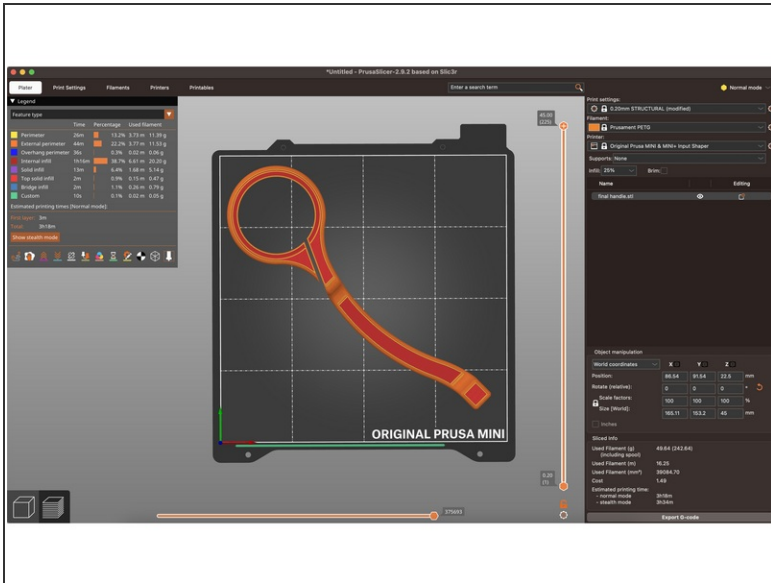
- M5 x 35mm Phillips Head Bolt (2)
- M5 Nut (2)

Step 1 — Download the STL File



- [Thingiverse](#)
- The STL files are also located at the bottom of this guide

Step 2 — Open the STL File in a Slicer



- We used PrusaSlicer for this step
- We printed in PETG using the following material settings:
- 120mm/s print speed
- 0.20mm layer height
- Nozzle 245°C
- Bed 85°C
- 15-25% gyroid infill (higher infill will make it more rigid and harder to fit over larger door knobs, but more sturdy)

Step 3 — Print the File!



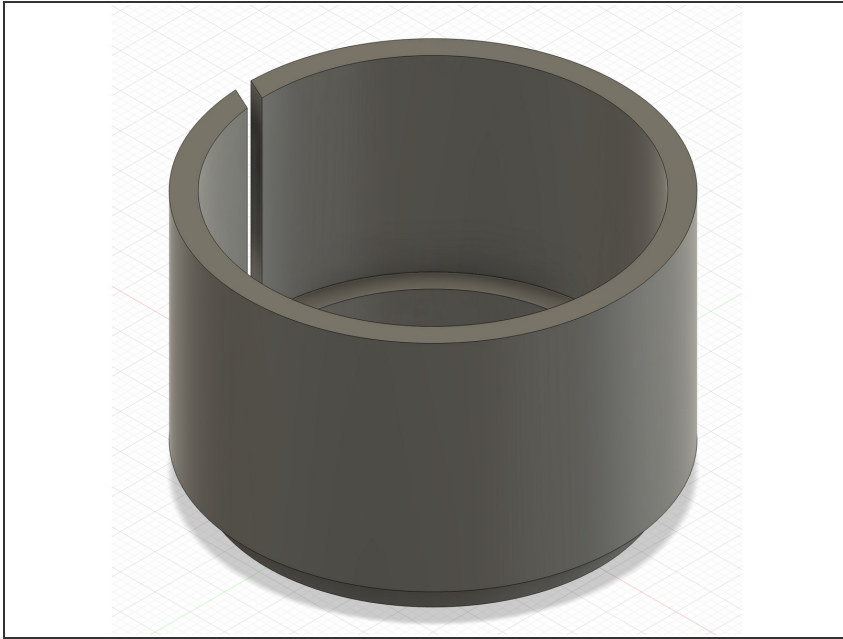
- It will take approximately 3 hours to print depending on settings/material

Step 4 — Place the Adapter on the Door Knob



- You may have to open the adapter slightly to allow it to fit over different sizes of door knob
- The side with the slight lip should be facing outwards

Step 5 — TPU Insert



- This step is only necessary if your door knob is too small for the adapter (<54 mm diameter)
- Print in TPU with supports and the following print settings:
- 80mm/s print speed
- 0.2mm layer height
- Nozzle 235°C
- Bed 50°C
- 15% grid infill

Step 6 — Add the Bolts



- Insert the 2 M5x30mm bolts through the circular holes in the handle

Step 7 — Add the Nuts



- Screw the 2 M5 nuts on the other end of the bolts, this should be on the side with the hexagonal holes

Step 8 — Secure the Adapter



- Use the hex key to tighten the bolts as far as they will go to ensure a snug fit

Step 9 — Open Your Door With Ease!

- You should now be able to open your door as you would with a normal door handle