

Hinge Caps

Saturday, February 28, 2026

1:18 PM

Onshape

- ☐ Import scan into Onshape
- ☐ Export scan for Blender

Blender:

- ☐ Delete hinge area
- ☐ Add faces across hole (bottom edge and end of flat section)
- ☐ Export STL for Meshlab

Meshlab:

- ☐ Repair non manifold Edges
- ☐ Close all holes (go up in size, e.g. 3000)
- ☐ Export STL from Meshlab

In Onshape:

- ☐ Create top constraint surface
 - ☐ Extend edges
 - ☐ Create front constraint surface
 - ☐ Extend edges
 - ☐ Trim faces mutual with "merge" option on
 - ☐ Filet mutual edge by 8.4 mm
 - ☐ Draw box
 - ☐ Split with topfront.
 - ☐ Draw on hinge plane cutout for hinge, extrude to hinge thickness and well below
 - ☐ Draw bolt circles 14 mm
 - ☐ Extrude front ones 11 mm, rear ones 9 mm
 - ☐ Created bolt circles on rear, 5 mm, extrude 4 mm high
 - ☐ Create bolt cutouts 14 mm on top, extrude full
 - ☐ Subtract hinge / bolts from box
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- ☐ Split with scan
 - ☐ Export to blender for edge trimming

Blender

- ☐ New doc
- ☐ Import print part with extending junk edges.
- ☐ Edit mode, faces, select all, Mesh Bisect, Edit last operation, Fill, Inner
- ☐ Export to Onshape