



STL Repair Checklist

Checks to run before sending a repaired mesh to your slicer.

INSPECT THE ORIGINAL

- ☐ Keep an untouched copy of the original STL.
- ☐ Confirm the intended physical dimensions and units.
- ☐ Look for holes, open boundaries, self-intersections, and disconnected shells.
- ☐ Check face directions and identify unusually thin walls or tiny details.

REPAIR CAREFULLY

- ☐ Use automatic repair on a duplicate, then compare the silhouette.
- ☐ Close holes only after checking that the opening is not intentional.
- ☐ Remove isolated fragments and merge shells only when they should be connected.
- ☐ Recalculate face directions and inspect the result from inside and outside.
- ☐ Avoid aggressive simplification that changes fit, threads, or functional surfaces.

VALIDATE IN THE SLICER

- ☐ Reopen the exported STL and confirm dimensions again.
- ☐ Slice the model and review every layer around repaired areas.
- ☐ Check wall count, top and bottom surfaces, supports, and small islands.
- ☐ Use layer preview to find missing sections or unexpected internal geometry.
- ☐ Confirm bed orientation and contact area before estimating print time.



BEFORE PRINTING

- ☐ Save the repaired file with a new descriptive filename.
- ☐ Record the repair tool and any important settings used.
- ☐ Run a small test print when dimensions or mechanical fit are critical.

PROJECT / FILE

TARGET / USE CASE

NOTES AND FOLLOW-UP

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