

# INVENTHUB

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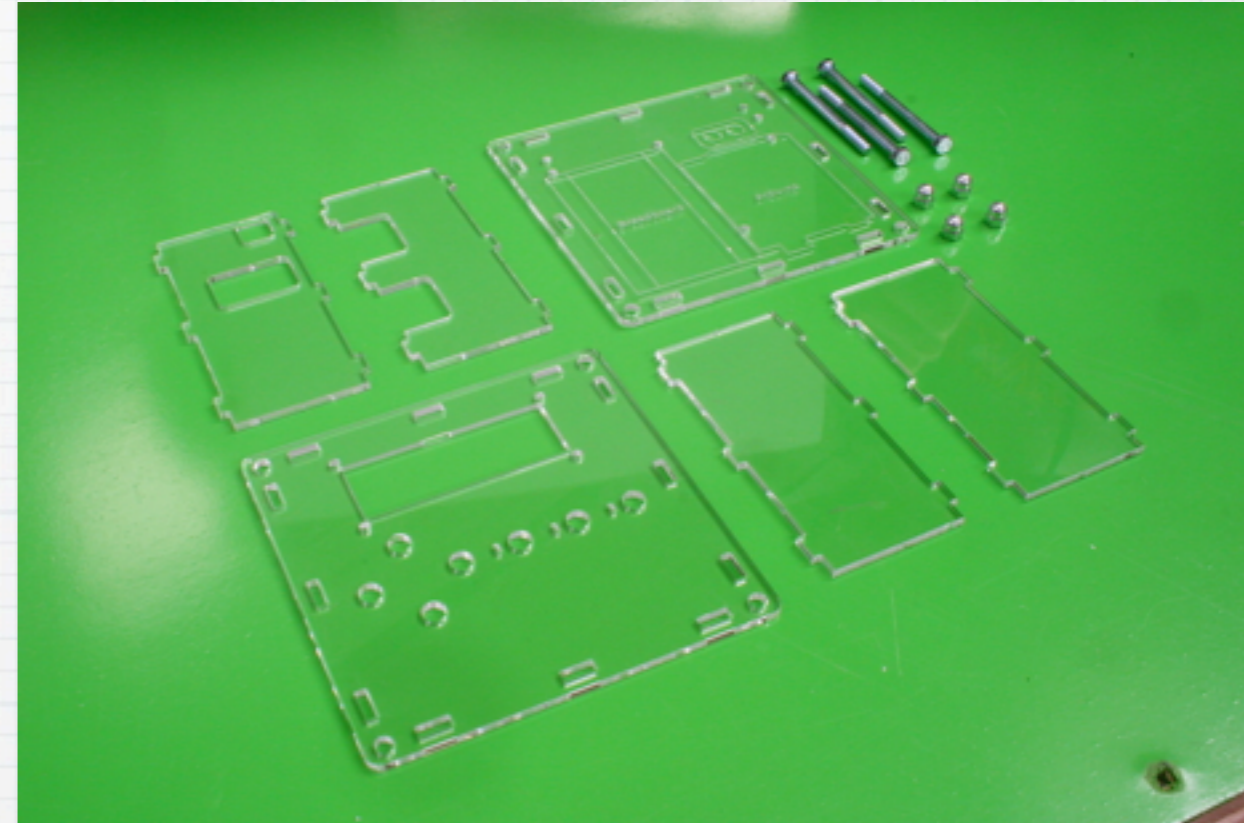
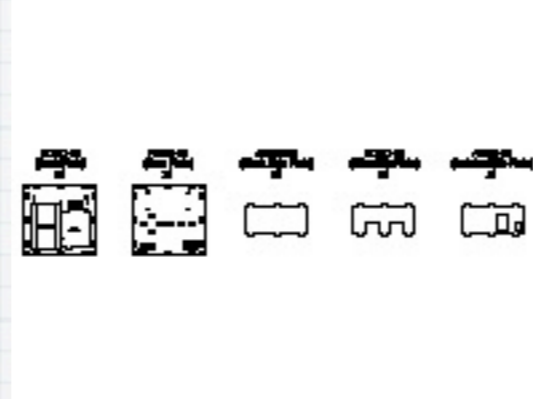
# Automatic Generation of Assembly Instruction Images

Bill Alford <[balford@atlantisdiy.com](mailto:balford@atlantisdiy.com)>  
<http://inventhub.org/>

# Problem: Assembly Instructions can be Hard to Follow

- \* CNC (computer numerical controlled) laser cutters, routers, and 3D printers are used by more & more hobbyists
- \* Technical hobbyists usually don't have time to write good instructions for the lay person

# Assembly Examples



- \* <http://www.thingiverse.com/thing:6940>
- \* ADBO - Project Box for Arduino (laser cut) by [oomlout](#)
- \* <http://www.robotshop.com/education-lego-mindstorms.html>

# Proposed Solution

- \* When a design (various formats) is added to a project, find and label the parts
- \* A helper widget will prompt the user about the part labeling and persist a labeled parts list if confirmed
- \* Detect in the instruction steps when Part N is attached to Part M
- \* Try to fit Part N to part M
- \* A helper widget will prompt if the fit is correct
- \* If correct, the project instruction step is updated with a helper image showing how Parts N & M assemble