### Recycled Plastic Beach Chair



A set of folding beach chairs using ocean-recycled plastic for their injection-molded components. I brought the project from an initial concept to the final product, executing mechanical design, CAD, and the sewing/assembly of the initial prototype for the client's photoshoot.

Josh Pelton | R&D Engineer

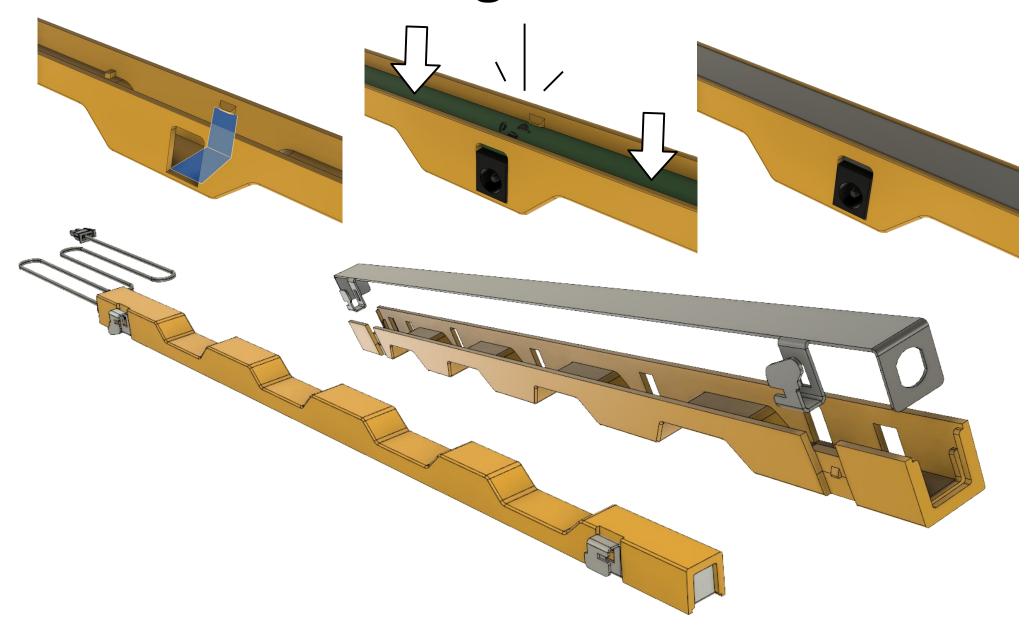
### Coathanger Chandelier



The original design for this fixture called for a heavy & expensive welded steel frame. After some experimentation, I developed a system of interlocking plates that reduced the overall weight to 10 lbs. & required only 3 tack welds. I was proud of the customer's enthusiasm for the new design.

Josh Pelton | R&D Engineer

## Power Bar Housing



This injection-molded enclosure holds a power distribution PCB. The tight space constraints forced me to find creative ways to assemble the unit without compromising moldability or UL certification. The lifters that create the "windows" for the barrel connectors also create the undercut for the snaps on the opposite side.

Josh Pelton | R&D Engineer

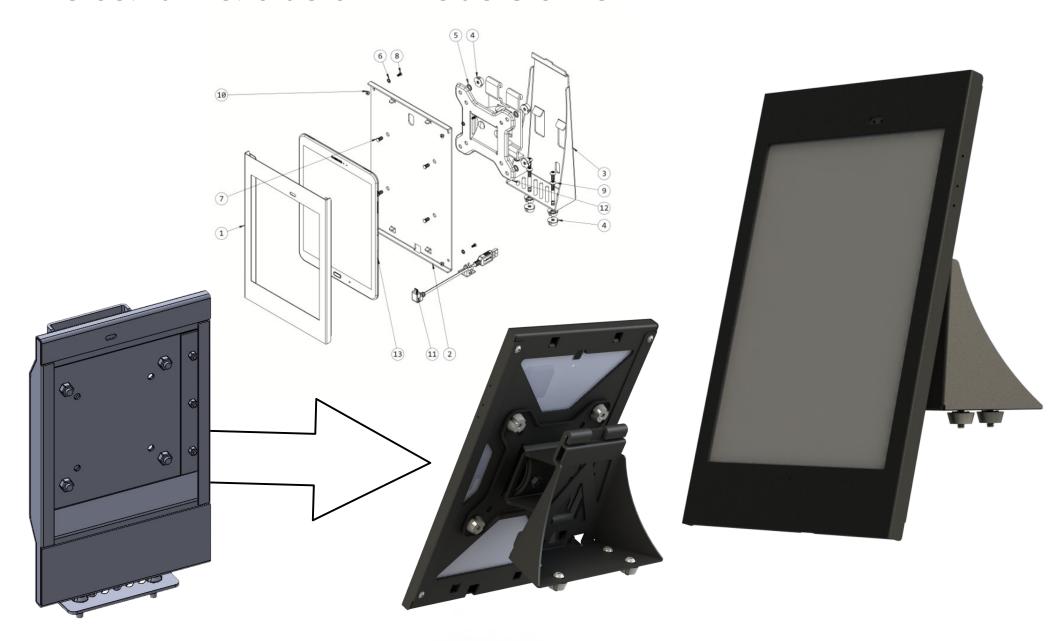
# Industrial Light Fixture Redesign



Contractors hated installing the 79OS light fixture; the instructions were a single page of text, & each fixture required an awkward bandsaw-cut piece to fill the space between the end & the wall. I created a tool-free telescoping version & (on my own initiative) developed friendly graphic instructions. An installer called from a job site to say: "Who finally taught you guys how to make instructions?"

Josh Pelton | R&D Engineer

#### Retail Tablet Enclosure



A tamper-proof housing for a tablet in a retail display. I shrank the client's bulky preliminary design into something much sleeker & prettier.

Josh Pelton | R&D Engineer

Hand Sketches MOUNTING POINT FOLDING CARDBOARD TRANSLUCENT STAKES ANCHOR BASE TO GROUND RECYCLED BALSA WOOD FOUNDATION - CHEAP, EASILY CONSTRUCTED - SEMI-PERMANENT EASILY TRANSPORTED

FLAT SHAPE FOR TRANSPORTATION / STORAGE

Josh Pelton | R&D Engineer

### Beer Bottle Chandelier



A sheet metal chandelier created for Red Robin restaurants. Each individual arc segment is modular, allowing them to be "chained" to fill a longer space. It was gratifying to hear that my tab/slot design "just fell together on the welding table."

Josh Pelton | R&D Engineer

# 3D Printed Projects











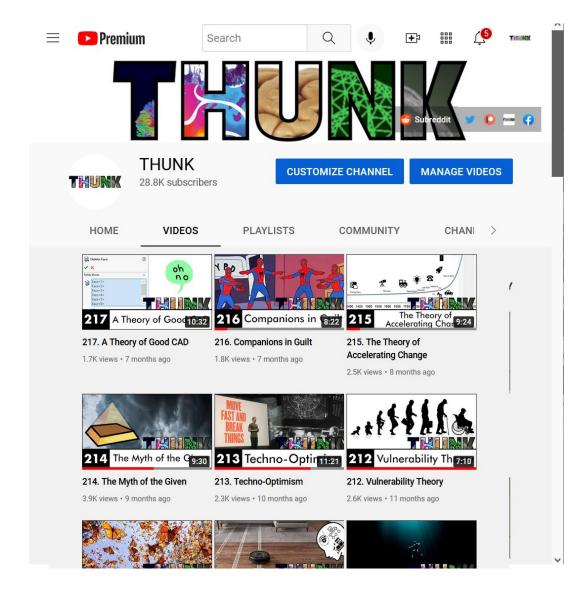




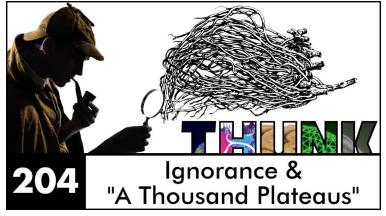
My design experience & CAD expertise allows me the privilege of giving back to my community. If I need to print something for a personal project, I make sure it's available for others. I regularly contribute to Thingiverse & Printables, & my designs have seen tens of thousands of downloads.

Josh Pelton | R&D Engineer

#### Educational YouTube Show







Once every few weeks, I write, record, edit, & upload a ~10-minute educational video about a subject I find interesting. I've been at it for 8 years, with 30,000 subscribers, over 1 million views, & recommendations by faculty at multiple universities. It requires research, technical communication, presentation...and making awful puns.

Josh Pelton | R&D Engineer