

Tools, Materials & Stuff You'll Actually Use

Building a full-size, screen-accurate, 3D printed Ghostbusters Proton Pack sounds wild, but with the right gear (and maybe a little caffeine), it's 100% doable.

Here's everything I used in Part 1 of the build — from digital files to glue and everything in between:

3D Printing Essentials

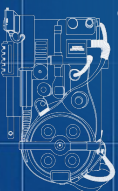
- Q-Pack STL Files – Open-source and legendary. Designed by Marc Carabelli and Quentin Machiels, these files are chef's kiss. <https://github.com/mr-kiou/q-pack>
- 3D Printer – I used a Sovol 1 (super basic), but any printer with a reasonable bed size should work. The files are modular, so no giant printer needed.
- PLA Filament – I used basic black, but color doesn't matter much since we're painting over it. <https://amzn.to/4mGJdAB>

Tools & Workshop Gear

- 5-Minute Epoxy – Fast drying, strong hold. For gluing parts that need to stay put through ghost-chasing and Comic-Cons. <https://amzn.to/3ZGKBsY>
- 3M Hex Screws + Hex Screwdriver – Essential for reinforcing your assembly. Get a range of sizes. <https://amzn.to/3Z8SLdH> & <https://amzn.to/4jnoO0x>
- Power Drill & Tapping Bit – For reaming out tight screw holes and threading where needed. Trust me, you'll thank yourself later. <https://amzn.to/43mBwlk> & <https://amzn.to/4kHVB1h>
- Small Screwdrivers – For those maddening tight spaces you can't reach with a full-size driver. <https://amzn.to/4dZFDOh>
- Clamps – To hold awkward parts while glue cures. <https://amzn.to/43ysE0V>
- Sandpaper – Various grits (start around 100–150 and go up to 220+ for finishing). <https://amzn.to/44WzEHn>
- Scraping Tools or Deburring Tool – To clean up edges and catch stray striations. <https://amzn.to/43TN2ej>

Filler & Surface Smoothing

- Car Body Filler – For hiding seams and joins between printed parts. You only have a few minutes once mixed, so work fast! <https://amzn.to/45B3Bgm>
- Bondo Thinned with Acetone – Painted on to fill tiny print lines and layer ridges. Super effective. Also super smelly. <https://amzn.to/4dJyQI7> & <https://amzn.to/3SqGcXn> (this is the best I could find on amazon – your local hardware store may have something better)
- Tongue Depressors – For applying filler <https://amzn.to/4kqO9bs>
- Respirator Mask – You do NOT want to be breathing in filler dust or Bondo fumes <https://amzn.to/3Sx993T>



Paint & Finishing

- Grey or Black Primer – Helps spot imperfections and preps for paint. <https://amzn.to/44Ylt3v>
- Truck Bed Liner Spray Paint – Gives the pack that amazing cast metal texture. Matte, bumpy, and awesome <https://amzn.to/4klhOCT>
- Flat Black Enamel Spray Paint – For smooth surface areas that shouldn't have texture (like parts of the power cell, ion arm, or motherboard). <https://amzn.to/4jogeP7>

Pack Mounting & Structure

- High-Density Particle Board or MDF – For the motherboard (aka the flat panel the pack bolts to). Personal preference here – you can get this from your local hardware store the type I chose was approx. 8mm thick
- Jigsaw – For cutting out the motherboard shape – You may have one already – or pick out a nice one at your hardware store.
- Metal Brackets, Nuts, and Bolts – Used to mount the shell securely to the motherboard. Again these are personal choice – I picked up some I had lying around in my workshop.
- Solder + Small Blow Torch – To attach nuts to brackets. This lets you bolt the shell from the outside later. <https://amzn.to/43FACW2>



Step-by-Step Build Process (Part 1: Physical Build)

STEP 1: Get the Files

Start by downloading the Q-Pack STL files and — seriously — grab the optional instruction guide too. It's worth the few bucks. You'll avoid a ton of frustration and learn the best orientation and print settings up front. GUIDE: <http://bit.ly/3HjZETm> & <https://github.com/mr-kiou/q-pack>

STEP 2: 3D Print All the Parts

Set your printer loose. This'll take a while, so settle in. I printed in batches, one big section at a time. Don't worry — I don't show endless timelapses in the video.

STEP 3: Assemble the Main Shell

Start putting the pack together piece by piece:

- Use epoxy and screws to reinforce your joints.
- Follow the Q-Pack guide as closely as possible.
- Some holes will be tight or imperfect — drill them out or use a tapping bit.
- You'll definitely need small tools to work in tight gaps.

STEP 4: Fill the Seams

- Use car body filler to blend the edges between printed sections.
- Apply, wait 5–10 minutes, sand smooth.
- Don't skip this step — it's what transforms it from “3D printed” to “movie prop.”

STEP 5: Smooth Print Lines

For curved or detailed areas, brush on Bondo mixed with acetone:

- It flows into those little grooves and evens out the layer lines.
- You'll need 2–3 coats with sanding in between.

STEP 6: Prime & Paint

- Hit the whole shell with a primer to check for rough spots.
- Then spray with truck bed liner to get that cast-metal look.
- For smooth parts (like labels or the power cell side), use flat black enamel.



STEP 7: Cut and Fit the Motherboard

- Trace the finished shell onto your particle board.
- Cut it out with a jigsaw and sand the edges.
- Dry-fit the shell and adjust until it's snug.

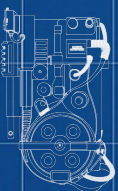
STEP 8: Mounting the Shell

- Add brackets and soldered nuts inside the motherboard.
- This lets you bolt the shell from the back side cleanly and securely.
- Align your mount points and screw it all together.

 **Boom. You've got yourself a full-size Ghostbusters proton pack — and it's ready for electronics.**

Want Part 2 with all the wiring, lights, smoke effects, and final weathering?

That's coming next — and you can find it at creativegeekery.com/ghostbusters



*Please note Amazon links provided in this document if used may pay Creative Geekery a small commission – this helps us keep making content and creating awesome builds – thanks in advice!