Resin Wash Station Kit Assembly Guide

Tools Required

Soldering iron and solder.
Flush cutters.
Blob of blue tack
Solder wick, just in case.
Helping hands or a PCB stand.
The ability to not poke yourself in the face with the hot end of the iron.

This kit is pretty self explanatory to anybody with light soldering skills.

The header sockets go in the rows for the Arduino and the driver board, it may be easier to insert the boards into the headers before soldering to the board. I hold the headers to the board with a couple blobs of blue tack.

The buck converter is directional, so pay attention to the markings on both the PCB and the buck. Cut 4 of the header pins for each corner of the buck. Again I used blue tack to hold the pins in place while I soldered them in place. Once soldered, the top of the pins can be snipped off with a pair of flush cutters.

The four remaining pins can be soldered in the stepper location, want to guess how I hold them in place? My stepper came with a 4 pin dupont style connector, that's why I used this type of pin. The 4 pin JST connector also fits this hole configuration, so if you have a stepper with a JST, that can also work here, but you might have to change your pinouts. Stepper pins top to bottom, B2 B1 A1 A2

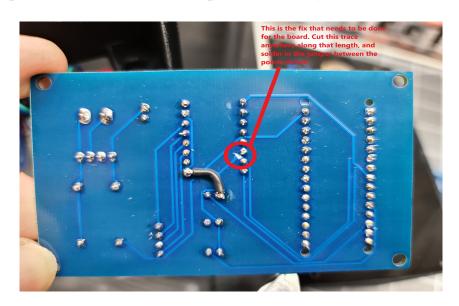
If you decide to not use the JST connectors, double check the schematic for your proper pin configurations. I hard wired the connection for the power switches LED into the board.

The DRV8825 driver board will have to be adjusted for the current draw of the stepper you choose. This is one of the better videos for adjusting that board.

Adjust output voltage on the buck to around 8 volts, do this before putting the Arduino in place.

You can always refer to the <u>Wash Station build page</u> for a few other tips and things I ran into along the way, while I was designing/building this project.

There was an error on this version of the board, this is the easiest way to fix it. Cut anywhere along the trace (circled in red) between the two pads, double check with a continuity test to make sure you have full separation. Then solder a jumper as shown, basically you are soldering the button circuit common wire to ground. It is easiest to solder this jumper after the driver header pins are already installed.



Make sure when placing the stepper driver board in the headers it's in the orientation shown below, with the current limit pot to the top left of the board.

