For a long time I have been meaning to buy a laser cutter to add to my tool set. The main reason for this, is to save time. For a while now I have been using my CNC mill to cut plastic parts (mostly 2D), but I am getting tried of the setup time and milling time (broken bits when cutting gears, the work moves while cutting, etc.). I even built an aluminium bed to accept 6"x6" plastics to simplify the mounting process, but it still takes time. So I am hopping that a laser cutter will be more efficient at there processes.

After researching allot on the internet I found that there are really only a few models coming from China and a few from the US. I decided to by from China since the price it extremely low. However, I was a bit concerned after reading allot of horror stories on the import process and machines coming in broken. I feel like I can fix anything, so the broken machines did not deter me, and I though it will be nice to learn what it takes to import from china.

12/19/2010

I started contacting several companies to find prices and to see if it will meet my requirements. Originally I was thinking of a 40W laser CO2 laser as I was mainly wanting to cut 1/4" acrylic, but found out that I will need at least 60W to do this in an efficient manner. Talked to Mandy from jcut she was very helpful, and answered all my questions right away. I determined that the JCUT-3040 with the 60W laser will be perfect for me. I also wanted the honeycomb for cutting, the auto focus, the raise down platform, as well as the red dot pointer. She was able to get me a good deal if I was willing to send the money though bank transfer or

western union. Mandy told me that I can send half the money right now, and the other half once they complete building the laser cutter.

12/22/2010

I sent half the payment though western union. It was a bit nerve racking to send that much cash to china. However, western union called me and send that the person that I sent the payment to is flagged, and I will need his ID, birth date, and phone number in order to release the money. I felt a bit nervous, but talked to Wendy, who gave me the information right of way. I relayed that back to Western Union, and they released the money.

12/28/2010

Talked to Mandy about the shipping options. It looks like it will cost about $398 to ship it to my door from the sea port, and I will only need to pay custom tax. My other option is to go though an import broker which seems to run at about $310 for all the info that they need to fill in (FDA forms, custom, ISF filings, and other forms to keep the government employees busy). Lastly, I could also ship it via Air which will cost $798. I decided to go with an import broker, as I felt that its better to fill all of these forms out. Plus I wanted to go to the sea port and check out the loading and unloading of these containers.

12/29/2010

I now needed to send the reset of the money. Since I still felt a bit nervous, I asked Mandy if they could cut my name out of acrylic and send a picture of it, just to verify that they are a legitimate company selling lasers. She told me that they already packaged up the laser and and they will not be able to do that. She was able to send me a video of my Laser Cutter being tested, and reassured me that they sold many lasers to the USA and they are a good company. I felt ok with this, so I sent the rest of the money.

12/30/2010

Mandy just sent me a picture of my name cut out of acrylic. This made me feel vary good, since I already sent them the money.



Mandy also informed me that they have the boat scheduled for the 1/5/2011 and that once they will get the Bill Of Lading, she will send it via TNT express. Now I just need a broker.

1/4/2011

Talked to a broker. He informed me that I will need to file a security filings known as ISF . And that I am suppose to file that 24 hours before the ship leaves. Otherwise I could be charged between $5000-$10000 penalty. This got me a bit worried, so I contacted Mandy one more time. It looks like the ISF became mandatory after 9/11 and they only way an individual could file it, is through a broker. Additionally, the broker will need to get a bond, so you have to pay for it. I also, needed the following information for the ISF and the import process:

1)Commercial Invoice
2)Packing List
3)Certificate of origin
4)FDA registration number.

Mandy sent me the information right of way, including a form that I can use to fill the ISF. I forward all this to my broker.

1/7/2011

Talked to the import broker. Everything seems to be in order. I just need to fax him the power of attorney so he can fill in the ISF information (which will be done on Monday). He said that although the ISF needs to be filled 24 hours in advance, the government have not been penalizing anyone so far, as long as it is filled some time. Now I am just waiting for the Bill of Lading and the contact for the arrival of the ship. It seems like the shipping company will contact me about the arrival date and the information for the agent in charge will be in the bill of lading (which I will need to contact, if they don't contact me first).

Need to fill out the FDA Form FDA 2877 from http://www.fda.gov/Radiation-EmittingProducts/ElectronicProductRadiationControlProgram/GettingaProducttoMarket/default.htm

1/14/2011
Got the Bill of Lading from Mandy. The broker has still not filed anything. I contacted the shipping company and it looks like the board is scheduled to arrived on the 20th.

1/20/2011
The ship has landed, but I still don't have anything filed or the original bill of lading. Talked to the shipping company and they stated that it takes several days before the unpack the

containers and get everything sorted out, so I still have time. However, I do need to send them $120 and surrender the original bill of lading by signing the back of it and sending it to them.

1/24/2011

Got the original bill of Lading by mail. Per the broker instructions, I signed one of the originals in the back, placed my check on top and the receipt I got from them on the bottom, and sent it to them express fdex ($14).

1/24/2011

The brokers just contacted me and said that the FDA form is not filled out, and I need the accession number in the FDA form. They also informed me that if I don't have that, the it it might not pass FDA inspection. If the FDA needs to inspect it then it might delay the process again. However, the broker informed me that in that case, I could pick up the laser in the box, keep it at my house. As long as I don't open the box, the FDA will come to me to inspect it (but who known how much that will be). I was a bit disappointed and felt stresses that the broker waited until the last minute to see if everything is in order. Contacted Mandy again, and she replied with the number: 0710487-00. This number if specific to the manufacture, and its a filing number that the FDA has inspected this product before. I must give allot of credit to her, she was very responsive.

1/28/2010

Finally I can go and pick up the laser. Got the ok from my broker that everything passed: FDA and customs. I had to pay them $360 for everything. I picked up the laser in m minivan, which I had to remove the seats for the box to fit. I did have to pay another $70 for the warehouse, and it was in Torrance, and not at the port (I guess the unpack the containers and more everything to the warehouse. The box was vary heavy (over 150 lb), and they used a fork lift in the warehouse to place the box in



(they used two of the fork lifts to get the box on its side and place it in the minivan).



However, I took the box apart outside to slowly take apart the box and the laser in the



Setup the stand



Now to set it up.

Final import conclusions:

Overall I am very satisfied with the laser. I am also very satisfied with Mandy at JCut. She was on top of everything and quickly replied to all my questions, concerns and needs. I feel very comfortable with their company. The laser cutter itself looks very well made. It was very easy to setup and worked right out of the box (see bellow). I had a great experience. My only stress came from the US brokers who waited until the last minute to check and file everything. So for a stress free import you will need to get all the ISF info beforehand, and the FDA accession number. As for costs, it looks like the import fees cost me about $500. This included the duties, which the broker paid directly. This is almost the same as if I had paid $398 + duties and got it to my door (but I am not sure if the FDA forms and the ISF still needs to be filed or not). Overall the price of the laser was much better then any of the USA companies selling the same Chinese laser. I am extremely satisfied with the laser. I have been using it for a month now, and it works flawlessly. I have saved so much time in the machining process (as opposed to the mill), and I

can finaly concentrate on on the design then the machining process, cleanup, etc. Projects that have been taking me days, are now take several minutes. Its very easy to maintain (just wipe the mirrors every once in a while, and insure that water is flowing (takes about a minute). I would highly recommend buying a laser cutter, and buying it from Mandy at JCut (chinacut@163.com).

Setup was vary simple. Everything seemed to be in order. I hammered a 4' 5/8 screw rod for ground and attached a 2mm solid copper wire to it. I also bought a 5 gallon bucket with a top from the hardware store and 5 gallons of deionized water from CVS pharmacy. I placed a couple of holes for the water in and out, and for the electrical cord. I filled the bucket with water and started the pump to get the water flowing. In the mean time, I hooked up the exhaust fan, and placed the DSP card in the computer (although the instructions sated that I need ps2 for both the mouse and the keyboard, my mouse is usb and the software seems to work). I plugged in the USB dongle, setup the software and hooked up the laser.

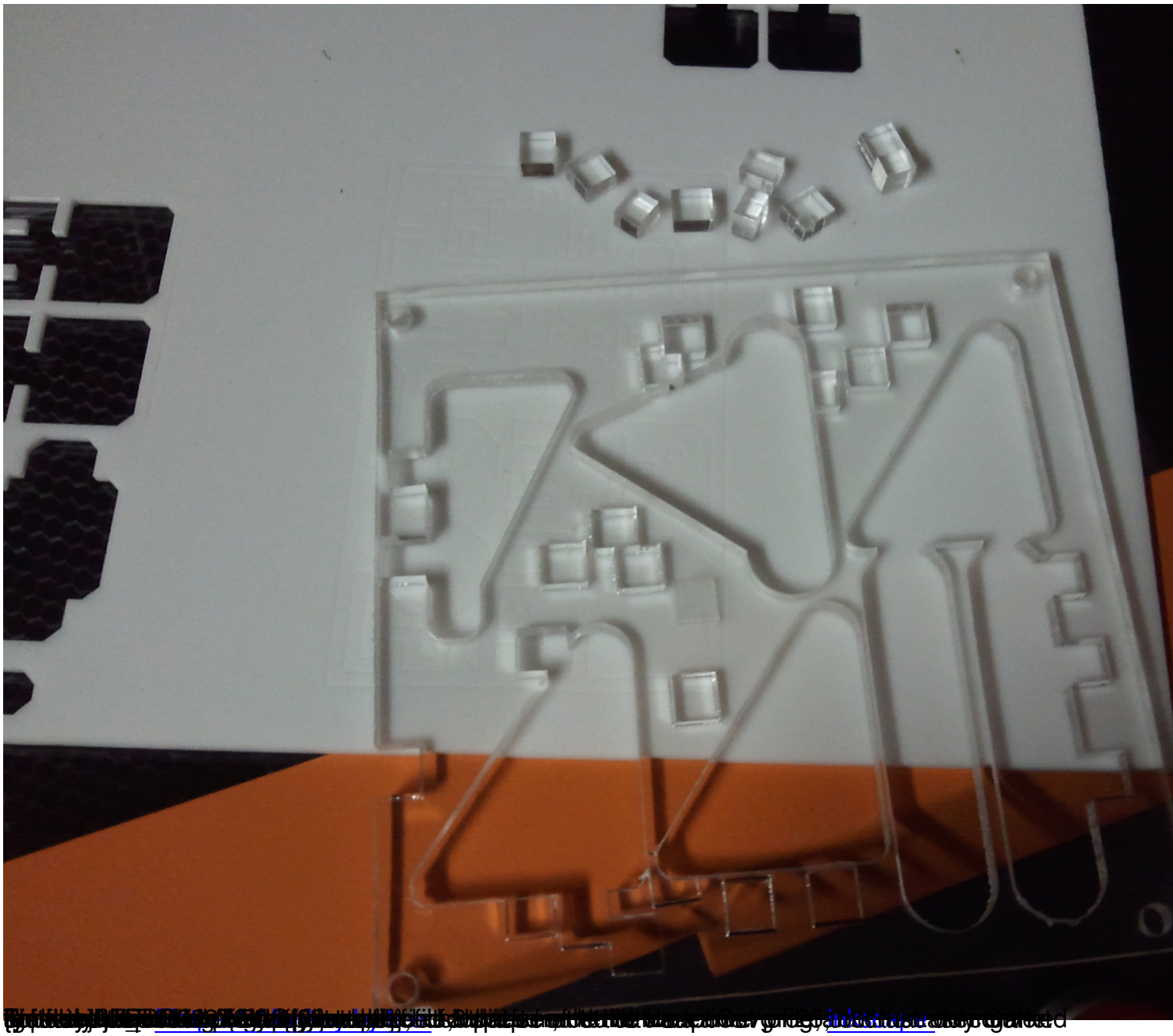
I tried to remove all the air bobbles from the laser tube as recommended by the manual. Since the laser tube was already mounted, I did not want to disturb it. Instead, I was squeezing the various tubes to disrupt the water flow and remove the bubbles. However, at one point, one of the tube to the water flow sensor got out, and water started going everywhere. Fortunately, non got on the laser. I placed the tube back in its place, and placed a zip tie around it (I did not have a hose small house clamp). Once there were no bubbles, I did a laser fire test into 1/4" acrylic, which seems to work flawlessly (no mirror adjustment were necessary).

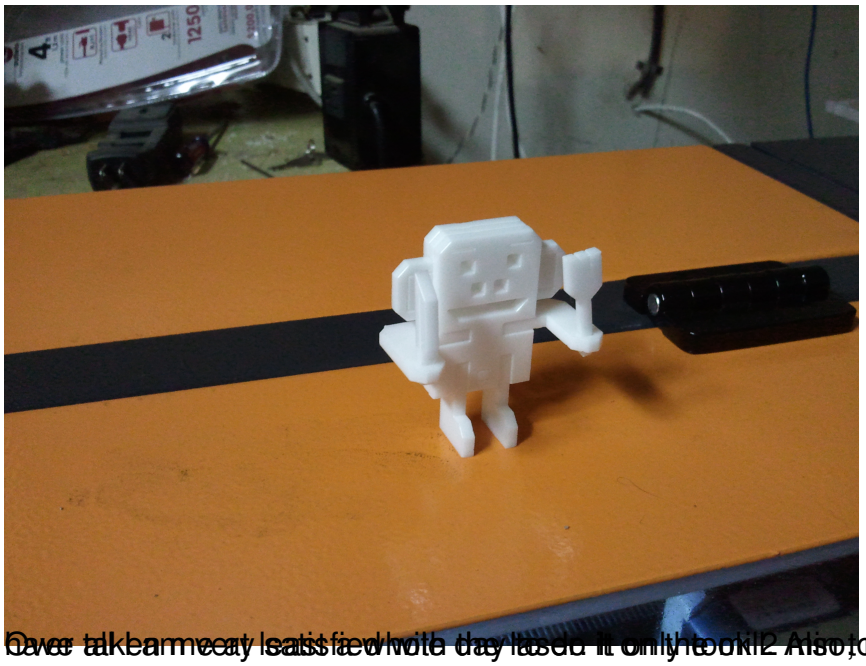
For the automated focus adjustment, you need to place the aluminium cylinder provided on top

of the stock right under the sensor (its the brass rectangle right next to the laser head). Then you can press the auto Z, which will cause the bed to lift up until it touches the aluminum stock.



The first few cuts I tired to make was on 1/4 clear acrylic (cutting squares). At first I has the speed set at 11 with a power of 100, and it would not cut all the way through. After experimenting a bit I found that a power of 50 will work great with a speed of 6. Now to cut something more interesting.





Over all I am very satisfied with the laser cutter. It only took 2 hours to cut this robot, where it would have taken me days to do it with the hand saw. Also, no cutting tools to clean up.