



Introduction to Animal Factory

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I first met Aditya Nandwana when I was in the 9th grade at Champion School. My father had a friend, Ferzad Veriyava, who was a musician and who had also helped find me my guitar teacher. Ferzad Veriyava knew Aditya and when I was looking for a Fuzz pedal recommended that I buy the Sonic Prism from Animal Factory Amplification. Animal Factory is a boutique guitar and synthesizer pedal manufacturer and has supplied pedals to such artists as St. Vincent, Fink, Ed Harcourt, Flood and Alan Moulder.

Anyway one day my Sonic Prism stopped working properly and made some rather bad noises so my dad called up Mr. Nandwana for help. At Mr. Nandwana's request, I sent the pedal to Animal Factory and they repaired it. It was during



this time my father asked Mr. Nandwana if he can teach me to repair the pedal myself. Mr Nandwana and I got to talking about pedals and next thing I knew was that Mr. Nandwana had invited me to do my internship in the summer of 2019 with Animal Factory Amplification.

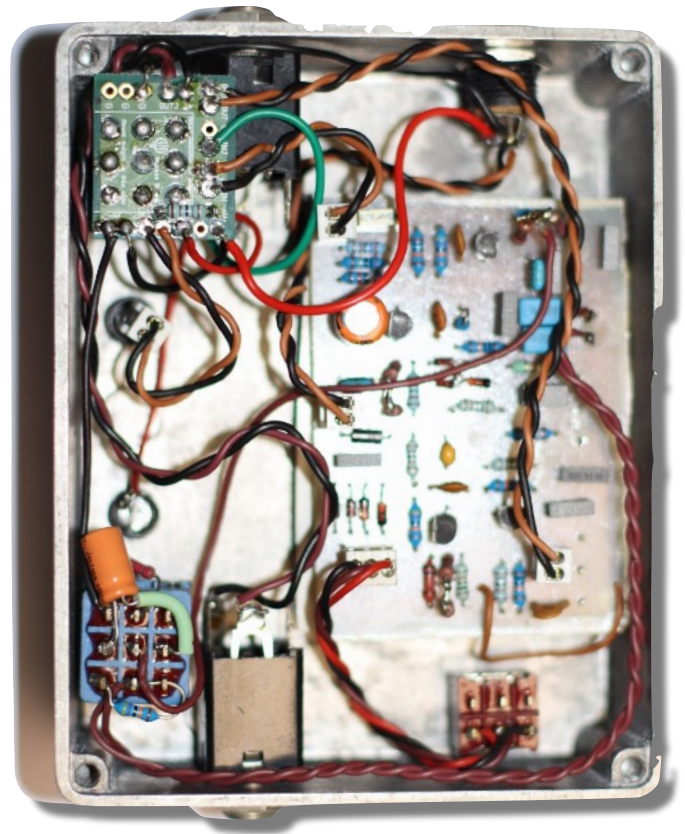
The original purpose of the internship was for me to learn a little about electronics and maybe be able to repair my own guitars and

amplifiers if any basic repairs were needed. However when I met Mr. Nandwana at his office, he had another idea.

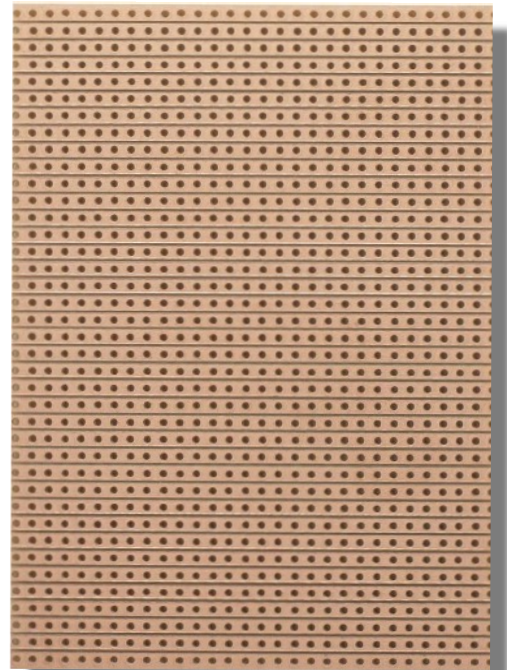
Mr. Nandwana said he would gift me a box, the knobs, and most of the parts to make my own pedal and I could then have something I could call my own at the end of the internship. This got me really excited. I am fond of art and I sketch in my spare time so this would give me the opportunity to build something that would be customized with my own graphics.

I had a break of 2 weeks between school and another internship in Germany with Joest which had been arranged earlier. Mr. Nandwana was willing to fit my internship in these two weeks. I was fortunate that Mr. Nandwana lived not very far from where I live so we used to travel to his office and workshop together.

At Animal Factory, Mr. Nandwana told me to read up about clipping of transistors. He then told me that diodes and transistors are very similar but looking at them I could not understand how. To be honest I still do not. I was more interested in building a pedal than learning so much theory.

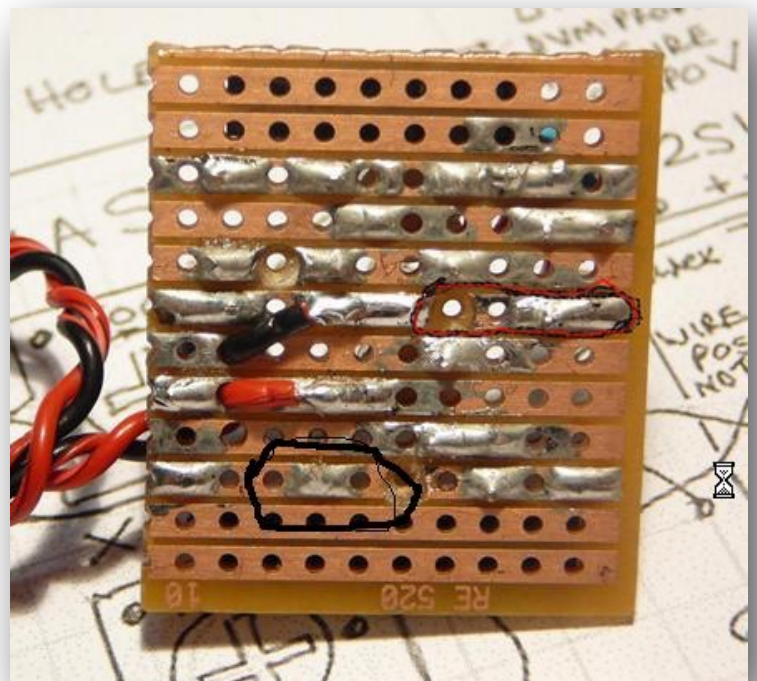


Later at night I went home and googled about how transistors work and “soft” clipping vs “hard” clipping. I also practiced doing some basic soldering with my soldering iron. Every day for the next two weeks this routine repeated itself. I would learn something at Animal Factory I did not fully understand, then I would go home and use google to help me better understand what I had learned.



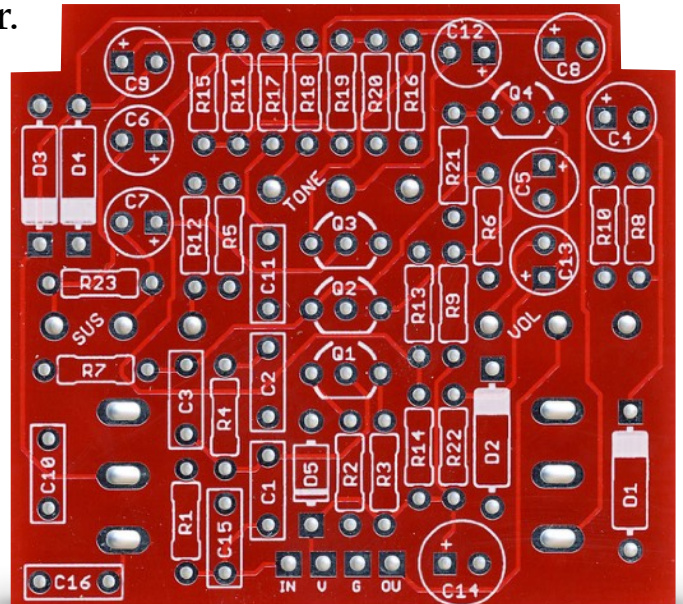
Mr. Nandwana first showed me the box he had for me. He also had many of the parts I needed like knobs, switches, transistors, capacitors and resistors. He set me up with a basic “vero” board and some diodes and resistors to solder.

For the first 2 days I practiced soldering trying not to damage the components. After a while I got pretty good at it or thought I did, until Mr. Nandwana gave me more components to solder. It was a mess. The solder would leak and drip and create shorts across the vero board. Big blobs of solder were in all



the wrong places. I began to think that my dream pedal would never get done. I also started having a lot of appreciation for the people at Animal Factory who did this every day.

After a few trial boards, Mr. Nandwana and I decided that it would make the project go faster if I got a kit. I did not need a box or knobs or many of the parts but a kit would give me what is called a Printed Circuit Board with the whole circuit already printed on the board and labels all the parts.



After talking to Mr. Nandwana several times and doing more research at home, we decided that we would build a dual-fuzz pedal with one half based on the Big Muff and the other half on the Foxx Tone Machine. As you will read in the Joke build report, it would be an ambitious project. We also found a shop in the United Kingdom called **Fuzz Dog Pedal Parts** that would send us PCB kits for these two circuits.

The evolution of the Joker. Building the Oumuamua.

