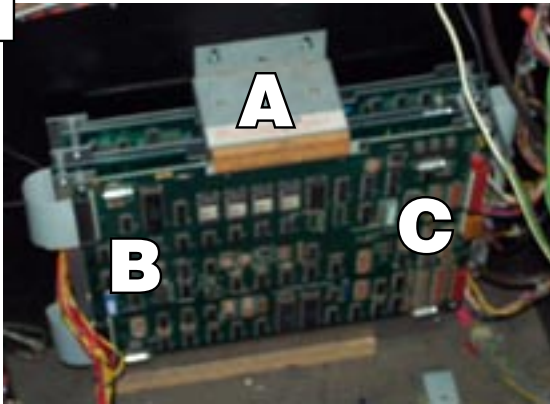# Installation Instructions.

1

The first step to installing your freeplay chips is to remove the main PCB from the cabinet. The PCB is held into the cabinet by the assembly marked (A) in the photo. Use a 1/8" socket to loosen, but not remove, the two screws holding the assembly to the cabinet wood. Once loose, the assembly will slide up and can be removed and set aside. Next carefully remove the large power connector from the left (B). You may want to tilt the PCB towards you for a better view while removing this connector. It may be brittle with age, so try not to force it. Next you can remove all the connectors on the right side (C). There are 4. Three on the top board and one (video) on the middle board. Gently work them back and forth until they come free. The connectors are keyed so they can not be plugged in wrong later when you reconnect the PCB.
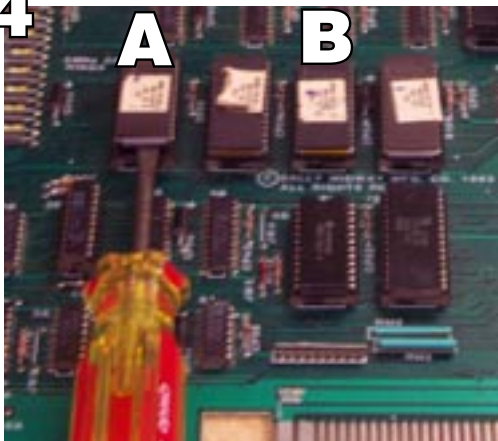
2

The next step may not seem that important now, but you'll thank yourself later if you do it. Make careful note of how the PCBs are joined to the metal plate. Either take a picture or make markings on the plates to show yourself how it all goes back together.
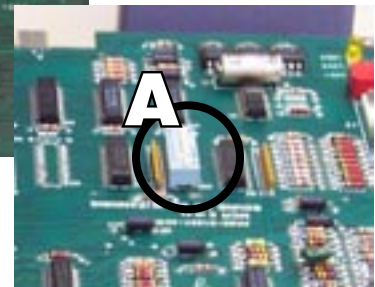
3

The interconnect cables are fragile, so take extra care when handling the board set. Once you have the three PCBs separated, lay them out flat on a large empty surface with plenty of room to work. Take your time and think about how to best handle the large, unwieldy boardset. You'll be working on the middle board of the three. There are four EPROMs located together at locations 1C, 2C, 3C and 4C.

4

Next, remove the EPROMs at locations 1C (A in the photo) and 3C (B in the photo). Detailed instructions on how to remove/install EPROMs can be found on page 2.

5

Once the new chips are installed, put everything back together. Freeplay is now enabled by putting switch 3 of the dip switch set SW1 into the ON position. When the board is installed in the cabinet, SW1 is located in the upper right area of the PCB, (A in the photo above).
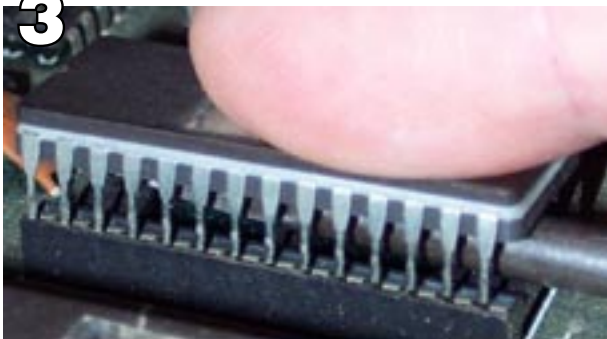
How to replace EPROMs

1 First, remove the original chip. To remove, gently insert the tip of a flat head screwdriver under the edge of the EPROM. Slightly twist the screwdriver so that the pins on the end start to come out of the socket.

2

Next, slide the screwdriver forward towards the front of the EPROM and give it another twist so that more pins come out of the socket. When you twist, you want to make sure the screwdriver is pressing against the plastic bits of the socket and not the circuit board underneath the chip or you could damage your PCB.
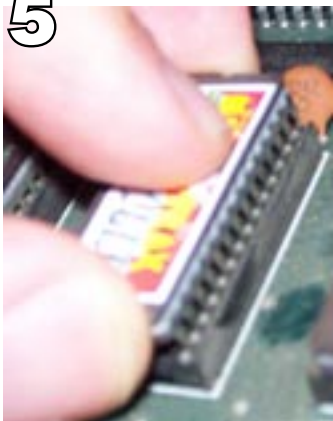
3

When the chip has lifted up enough that you can get the screwdriver all the way under, place your index finger over the chip, holding the screwdriver underneath with the rest of your fingers and gently lift the EPROM the rest of the way out of the socket. Store the EPROM in a safe, static-free place in case you ever need it.

4 To install the new chip, first, make note of the notch at the top of the chip. This should face the same direction as the notches on the other EPROMs on the PCB. Then, line up the pins of one row with the socket. Don't apply any pressure at this point.

5 Next, bring the opposite row of pins down to line up with the other side of the socket. You may need to apply slight, even pressure to the chip to seat the pins into the socket. Do not apply full pressure until you're sure all the pins are lined up with the socket. Visually check for any pins that are not seated.

6 When you're sure all pins are properly aligned in the socket, apply firm, even pressure with your thumb in the center of the chip to press the pins fully into the socket. You should not have to force the chip. If you suspect you bent a pin, remove the chip, straighten the pin and try again.