

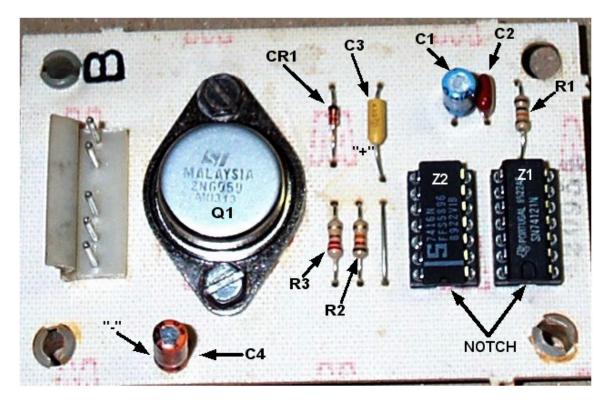
This is a picture of the pop bumper driver board before I rebuilt it. You can tell by the orientation of the black tantalum capacitor (C3) and the single 1N4148 diode that this board is the modified version.

Be sure to read Clay's guide on Gottlieb Pop Bumper Driver boards before you start to work on yours so you will know for sure if your board is a modified board, or one that has not yet been modified, and is wrong.

http://www.marvin3m.com/sys80/index1.htm#popbump

Also, please understand that the Pop Bumper Driver kit you purchased from Big Daddy contains the parts that are recommended by Clay in his repair guide, and are the proper parts for a *modified* Pop Bumper Driver board.

The 2nd page shows a rebuild board with the parts supplied in your kit



Here is the same board with all new components from the Pop Bumper Driver kit. Remember, the values and placement of these components are based on Clay's mandatory and recommended modifications. I strongly recommend you become familiar with the Pop Bumper Driver section of his System-80 Repair Guide.

CR1 – 1N4148 diode – note the orientation of the banded end (black stripe).

C1 – 1uF non-polarized electrolytic capacitor – no need to worry which lead goes where.

C2 - .01uF poly-metal capacitor – these also are non-polarized.

C3 - 4.7uF Tantalum capacitor – the positive end is tapered, and must be installed as shown.

C4 - 47uF electrolytic capacitor – the negative terminal is marked w/ a stripe and must be installed as shown.

- **R1** 10K Ohm resistor, Brown/Black/Orange.
- **R2** 12K Ohm resistor, Brown/Red/Orange.
- R3 220 Ohm resistor, Red/Red/Brown.
- Q1 2N6059 Transistor.
- Z1 SN74121 One-Shot Multivibrator note the notched end and use the socket.
- Z2 SN7416 Hex Buffer note the notched end and use the socket.