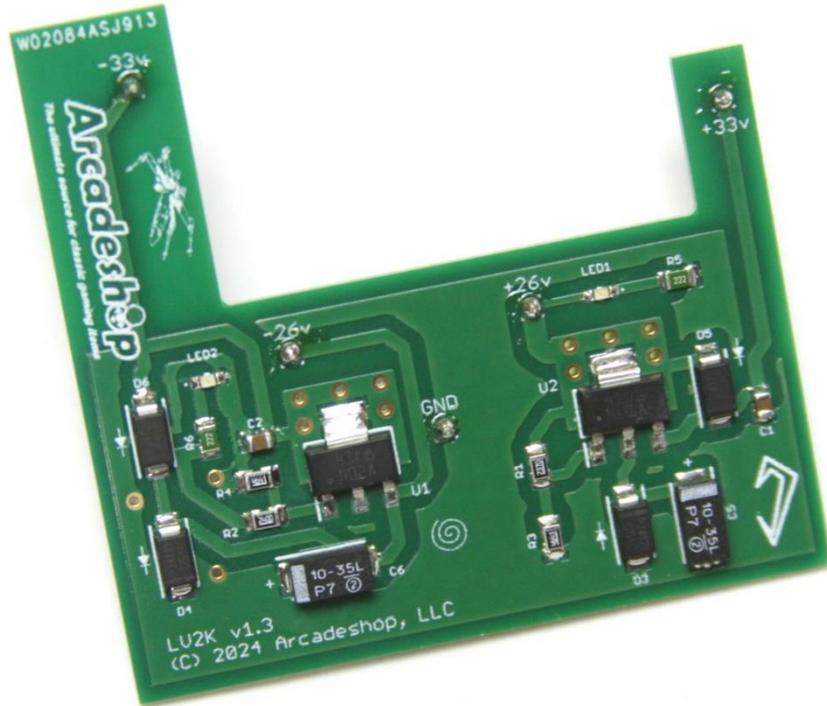


## LV-2K Upgrade for the Wells Gardner K6100

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**WARNING**

Although this upgrade has been tested and the techniques used will not directly cause harm to your game. If you do something wrong, you can very seriously damage the electronics! So...

...Please read the instructions.

<b>NOTICE</b>	
<b>Read and understand operator's manual and all other safety instructions before using this equipment.</b>	

### **To perform this upgrade, you should:**

- Have a working understanding of electronics.
- Be familiar with safe handling procedures for electronic components.
- Have basic soldering and electronic assembly skills.
- Be able to follow directions.

Anytime you start messing around with something (particularly something electronic) you accept a certain amount of risk that you may break something. This kit carries with it no guaranty of compatibility to your game. If you carefully follow these instructions, you will do fine and everything will work. If this looks like it is above your confidence level, please recruit someone to install the kit for you!

### **Introduction**

Congratulations! You now have the kit which should bullet proof the low voltage power supply section of your deflection PCB. The original PCB's poorly designed low voltage power supply has caused games to break down on regular intervals. Those days are over!

Finally, before you get started, grab your favorite beverage, maybe something to snack on, and find a quiet place to read this manual so you fully understand what to do before you start tinkering around with your precious labor of love!

### **Necessary Parts and Tools:**

You will need the following parts/tools for this upgrade...

- Screwdriver/nut driver
- Soldering iron & de-soldering iron/pump or solder wick and rosin flux solder
- Flush cutter

### **Step One: Unplug the game from its power source and discharge the monitor!**

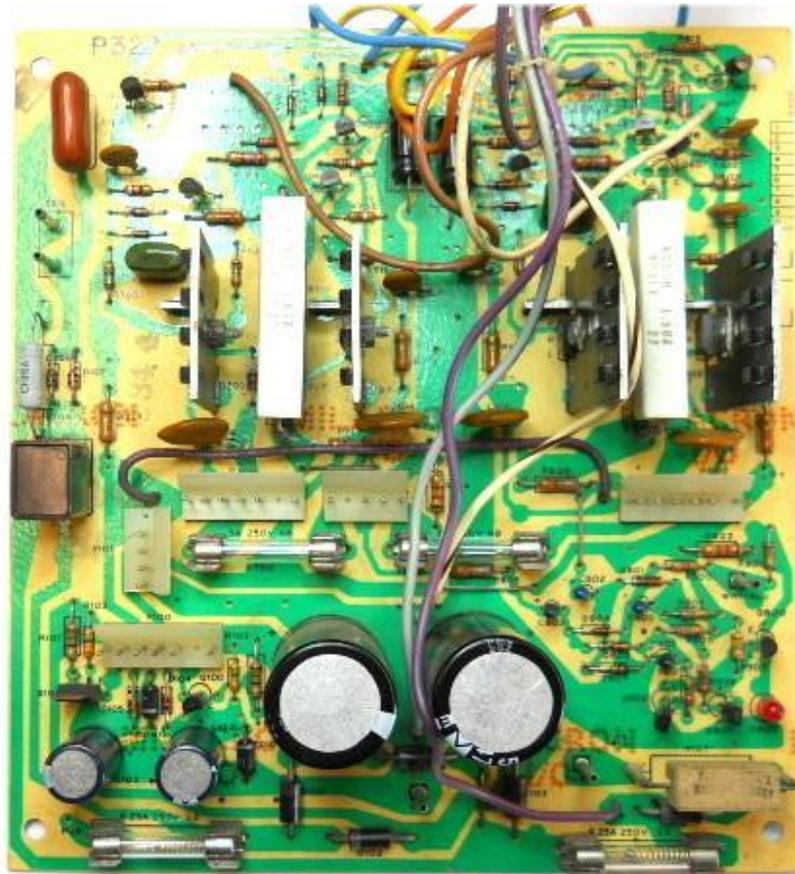


While installing this kit, electric shock is possible if power is present!

## Step Two: Remove the deflection board...

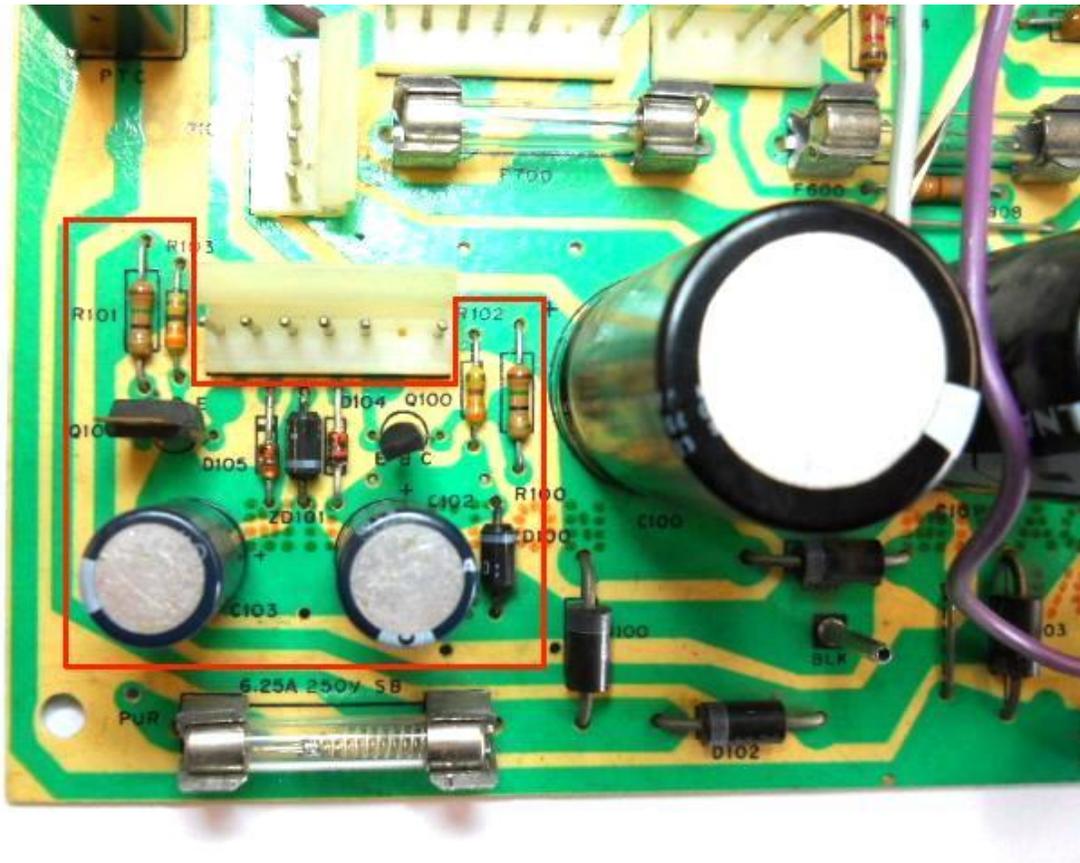
This is an easy one; pictured below is the deflection board. There is a total of 9 connectors needed to be disconnected. They are keyed and or labeled so reconnecting use be straight forward. Next remove the two screws and slide the board out.

This is the what the deflection pcb looks like when removed from the monitor frame.



### Step Three: Removing components...

This step you will remove 12 parts which are no longer required as they will be replaced by the LV-2K kit. The parts are outlined in red below:



The locations of the parts to remove are:

- |               |               |                |                |
|---------------|---------------|----------------|----------------|
| - <b>C103</b> | - <b>C102</b> | - <b>ZD100</b> | - <b>R100</b>  |
| - <b>R102</b> | - <b>Q100</b> | - <b>D104</b>  | - <b>ZD101</b> |
| - <b>D105</b> | - <b>Q101</b> | - <b>R101</b>  | - <b>R103</b>  |

When the parts are removed, your board should look like this:



### Step Five: Install the LV-2K kit...

This step is the easiest. Simply insert the board where the parts were removed:



The LV-2K will only plug in one way. Solder the pins and trim them flush.

**Thats it!**

You have installed the kit – congratulations! Your board should now look like this:



The LV-2K is optimally preset with output voltages of +/- 26v with a +/- 2% tolerance (25.48v to 26.52v) on each output.

**Tips & Suggestions:**

Header pins are prone to have cold solder joins. Its recommended you re-solder all the header pins on the deflection PCB. Consider installing the other kits/parts listed below for your game.

**Other items of interest...**

You should consider installing these parts along with this kit:

- Wells Gardner K6100/K6400 - Rebuild kit
- Wells Gardner K6100/K6400 - High Voltage Over Current Protection kit
- Wells Gardner K6100/K6400 - 4700uf 50v additional capacitors
- Atari Audio Regulator Rebuild Kit (Atari games)
- Big Blue transformer Capacitor (Atari games)

**Final Notes:**

This kit carries with it no guaranty of compatibility to your game. Although this kit has been tested with numerous games, there is a possibility that some of them are different. This kit carries no liability protection for your game, while there is no reason this kit should cause damage to your game, it is possible that incorrect or poor wiring can damage your game board(s). Liability is limited to repair/replacement of the Kit only.