

# Dynaco PAS 2, 3 & 3X Selenium Filament Rectifier Replacement Instructions

This document describes the specific instructions and steps associated with the removal and replacement of the original selenium rectifier used to rectify and provide a source of DC voltage to power the system's tube filaments. This document is applicable to Dynaco PAS series of vacuum tube preamplifiers (PAS 2, 3 & 3X).

This procedure requires basic soldering skills and tools outlined in the following documents (available from our web page [www.curcioaudio.com](http://www.curcioaudio.com)) :

- a. Soldering Tutorial (CAE Tech Note # 2)
- b. Recommended Tools & Test Instruments (CAE Tech Note # 3)

Please take the time to familiarize yourself with all of these documents in particular Tech Note # 2.

Refer to figure 1 and proceed with the following steps.

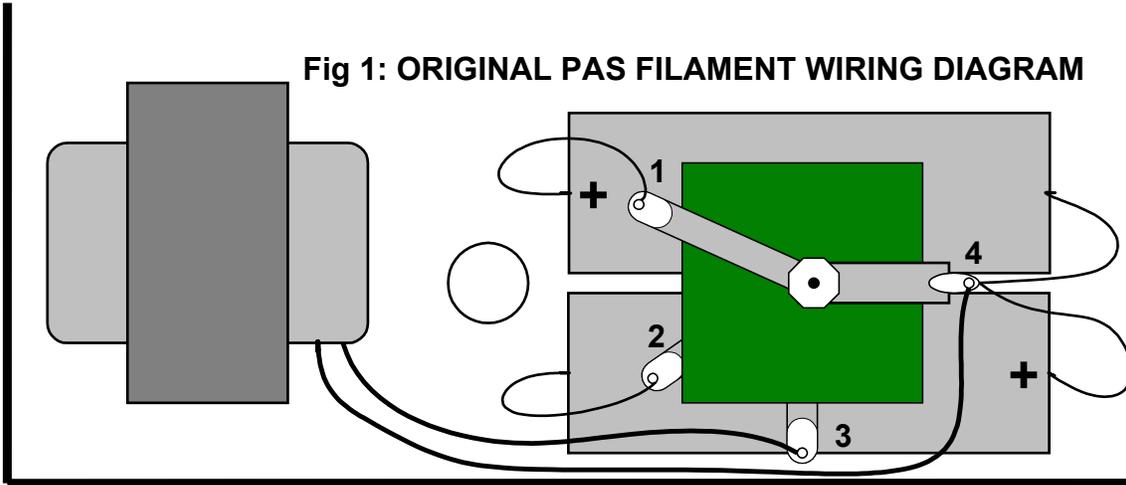
1. Disconnect your PAS preamplifier from the AC mains and allow the internal voltages possibly stored in the electrolytic capacitor to discharge over a 20 minute period.
2. Remove the four screws holding the top cover and remove the top cover.
3. Next remove the bottom plate exposing the foil side of both printed circuit cards (PC-5 & PC-6).

We will first remove the original selenium rectifier. Referring to figure 1, the selenium rectifier is the large (approximately 1-1/2" ) square device located towards the rear of the preamplifier and mounted into place using one long 8-32 machine screw atop two cylindrical capacitors.

4. Referring to figure 1, first remove all of the wires connected to terminals labeled 1 through 4. As you remove each wire, label it according to its associated terminal number. NOTE – For clarity not all of the original wires are shown – nonetheless, you should label each wire removed with its associated label number.
5. Loosen the 8-32 nut that secures the 1 pin terminal and the selenium rectifier and remove and discard both items. You will be retaining the two capacitors and securing bracket.
6. Locate the new 5 pin terminal strip (Radio Shack # 274-688 or equiv) and mount as shown in figure 2. NOTE – It will probably be necessary to drill out the mounting hole for this bracket to clear the 8-32 screw.
7. Obtain and install the two new 1N4006 diodes (Radio Shack # 276-1003 or equiv) as shown in figure 2. NOTE – these diodes are polar so be sure to observe the correct orientation as shown in figure 2.
8. Re-connect each of the original wires to the corresponding terminal numbers as shown in figure 2.
9. Replace the bottom plate and top cover and secure with the four screws.

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**Fig 1: ORIGINAL PAS FILAMENT WIRING DIAGRAM**



**Fig 2: REVISED PAS FILAMENT WIRING DIAGRAM**

