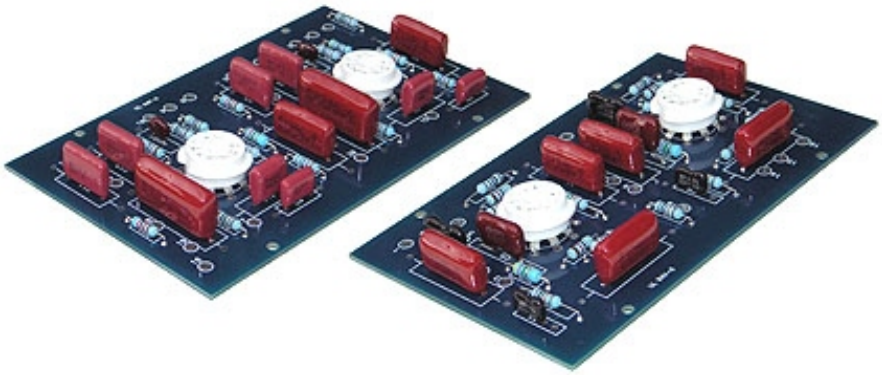
Audio Regenesis

Restoration Board Set



for Dynaco PAS 2, 3, 3X Preamplifiers

Thank you for choosing Audio Regenesis products for your Dynaco restoration project.

Our PAS Phono and Line Stage restoration board set replaces the following Dynaco components:

- **PC-5 Line Stage board**
- **PC-6 Preamp. board**

When performing a complete restoration you may also wish to consider replacing the following:

- The quadruple section power supply filter capacitor
- The power transformer
- The selenium rectifier

Audio Regenesis restoration boards are based upon the original Dynaco circuitry but employ modern high quality components, like fiberglass FR-4 circuit boards, metalized poly and silver mica capacitors, and low noise metal film resistors. The circuit board mounting holes and solder connection eyelets are located for compatibility with the original Dynaco circuit boards to ensure a quick and easy installation.

Installation is quite easy, however, it is assumed you possess basic soldering skills and equipment. It may be helpful to have a copy of the original Dynaco assembly manual to refer to when installing the Audio Regenesis boards.

If you require an assembly manual a free copy may be downloaded at **www.audioregenesis.com/manuals**

HIGH VOLTAGE WARNING

Vacuum tube amplifiers contain lethal voltages. Before beginning the installation of your new Audio Regenesis boards, make sure the power switch has been set to the OFF position and the power cord is disconnected from the 115 VAC outlet. Wait 30 minutes before removing the top and bottom covers to allow the voltage on the power supply capacitors to bleed off.

Please Note:

Please take extra care when connecting and soldering to the eyelets on the bottom side of the PC-5 and PC-6 boards. The solder mask on my latest run of boards is thicker than usual (new supplier) and thus the eyelet identification numbers are more difficult to read. To avoid wiring errors, I would recommend double checking against the numbers on the top silkscreen which are very easy to read.

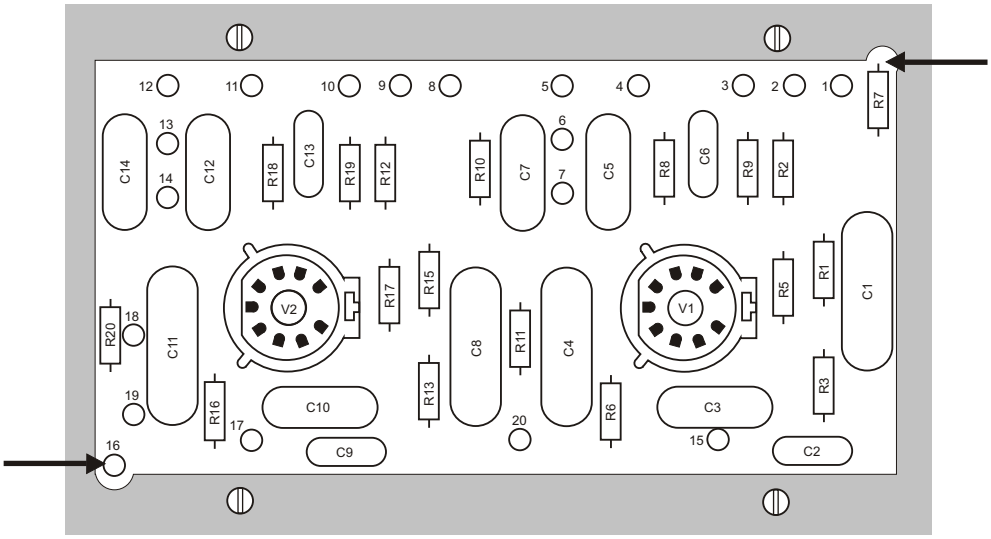
PC-5 Installation

☐ **Step 1:**
After allowing time for the power supply capacitors to discharge remove the top and bottom covers, as well as the tubes on the existing PC-5 circuit board.

☐ **Step 2:**
Carefully unsolder and remove all the wires from the eyelets on the original Dynaco PC-5 circuit board. **Label each wire with the related eyelet number as you remove them.**

☐ **Step 3:**
When all the wires are unsoldered and labeled remove the four screws that secure the original PC-5 board and remove the board.

☐ **Step 4:**
Install the Audio Regenesis PC-5 board using the screws that were removed in step 3. Be careful to install In the same orientation. Before securing the screws note the position of resistor R7 and Eyelet 16 as indicated in the diagram below. These may come very close to the edge of the chassis. Position the circuit board such that neither the eyelet nor the wire lead on the resistor is allowed to contact the chassis.



☐ **Step 5:**
Solder the wires (previously removed and labeled) to the related eyelets on the Audio Regenesis PC-5 board.

PC-6 Installation

☐ **Step 1:**
Remove the tubes on the existing PC-6 circuit board.

☐ **Step 2:**
Carefully unsolder and remove all the wires from the eyelets on the original Dynaco PC-6 circuit board. **Be sure to label** each wire with the related eyelet number as you remove them.

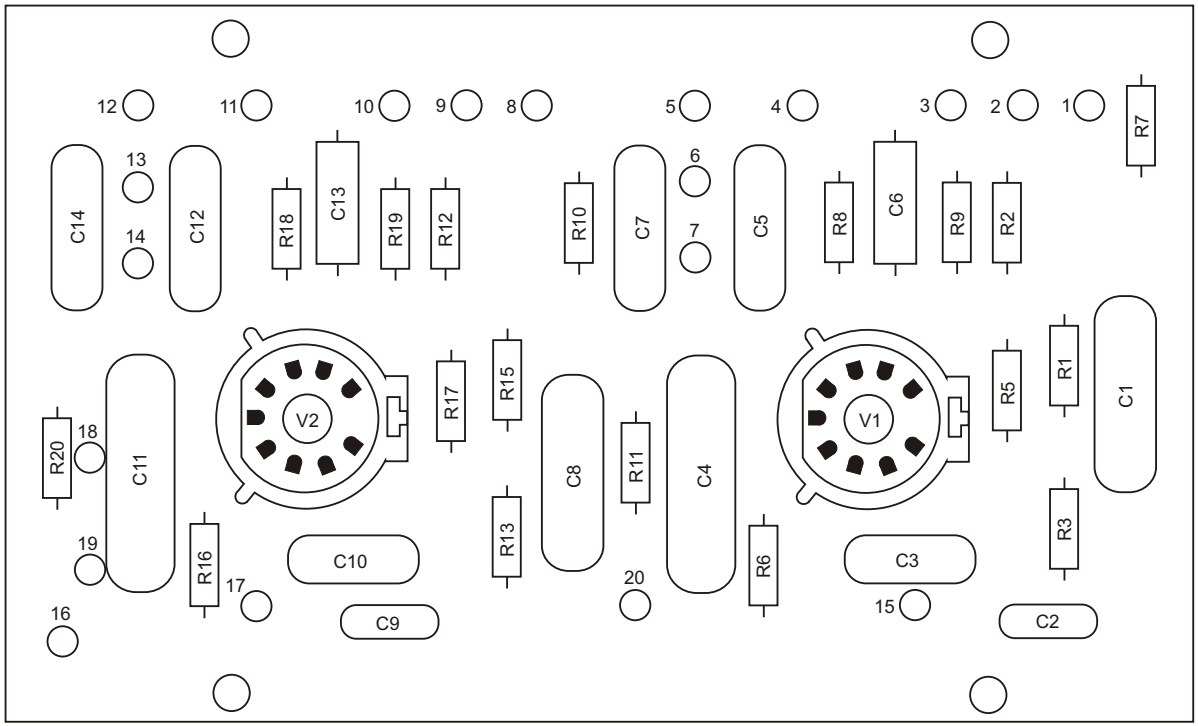
☐ **Step 3:**
When all the wires are unsoldered and labeled remove the four screws that secure the original PC-6 board and remove the board.

☐ **Step 4:**
Install the Audio Regenesis PC-6 board using the screws that were removed in step 2. Be careful to install in the same orientation.

☐ **Step 5:**
Solder the wires (previously removed and labeled) to the related eyelets on the Audio Regenesis PC-6 board.

C1 0.1uF 630V
C2 .0015uF 630V
C3 .0039uF 630V
C4 0.22uF 630V
C5 .0082uF 630V
C6 33pF 500V
C7 .0082uF 630V
C8 0.1uF 630V
C9 .0015uF 630V
C10 .0039uF 630V
C11 0.22uF 630V
C12 .0082uF 630V
C13 33pF 500V
C14 .0082uF 630V

R1 470K 0.5W
R2 4.7K 0.5W
R3 18K 0.5W
R5 1.2M 0.5W
R6 100K 0.5W
R7 1K 0.5W
R8 47K 0.5W
R9 1k 0.5W
R10 62K 0.5W
R11 470K 0.5W
R12 4.7K 0.5W
R13 18K 0.5W
R15 1.2M 0.5W
R16 100K 0.5W
R17 1k 0.5W
R18 47K 0.5W
R19 1K 0.5W
R20 62K 0.5W



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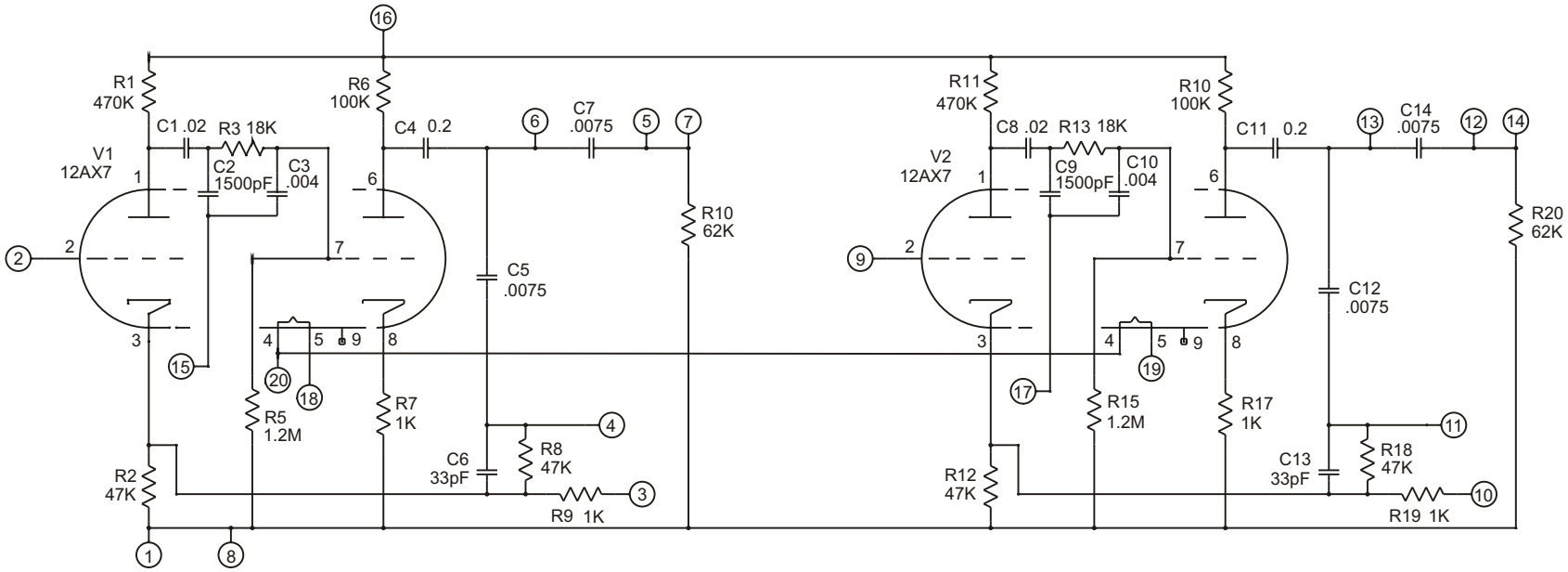
PC-5 Assembly



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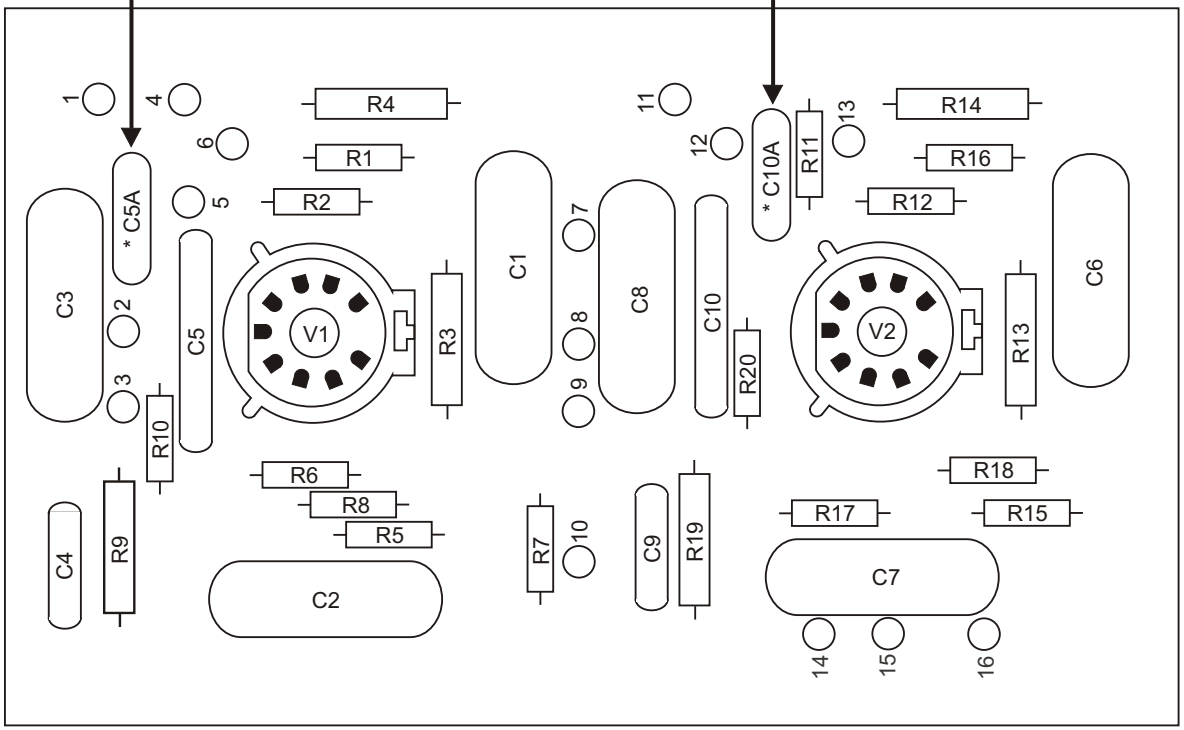
PC-5 Schematic

C1 0.1uF 630V
C2 0.1uF 630V
C3 0.1uF 630V
C4 68pF 500V
C5 2000pF 500V
C5A* 750pF 500V
C6 0.1uF 630V
C7 0.1uF 630V
C8 0.1uF 630V
C9 68pF 500V
C10 2000pF 500V
C10A* 750pF 500V

R1 47K 0.5W
R2 10K 0.5W
R3 150K 0.5W
R4 1K 0.5W
R5 1.2M 0.5W
R6 47K 0.5W
R7 100K 0.5W
R8 1K 0.5W
R9 100K 0.5W
R10 4.7M 0.5W
R11 47K 0.5W
R12 10K 0.5W
R13 150K 0.5W
R14 1K 0.5W
R15 1.2M 0.5W
R16 47K 0.5W
R17 100K 0.5W
R18 1k 0.5W
R19 100K 0.5W
R20 4.7M 0.5W

*** Note:**
Capacitors C5A and C10A are NOT found on the original Dynaco PC-6. These parts are in parallel with C5 and C10 respectively. The original Dynaco part for C5 and C10 was a ceramic capacitor rated at 2750pF +/-1%. Audio Regenesis assembled boards use silver mica capacitors in place of ceramic capacitors where used on the original Dynaco boards. Since 2750pF is not readily available, two parallel capacitors are used to make up the equivalent value. 2000pF and 750pF are readily available in silver mica, and their parallel value results in a value within the 1% tolerance range of 2750pF. Each capacitor is measured individually before installation to ensure the combined values are within 1% of 2750pF.



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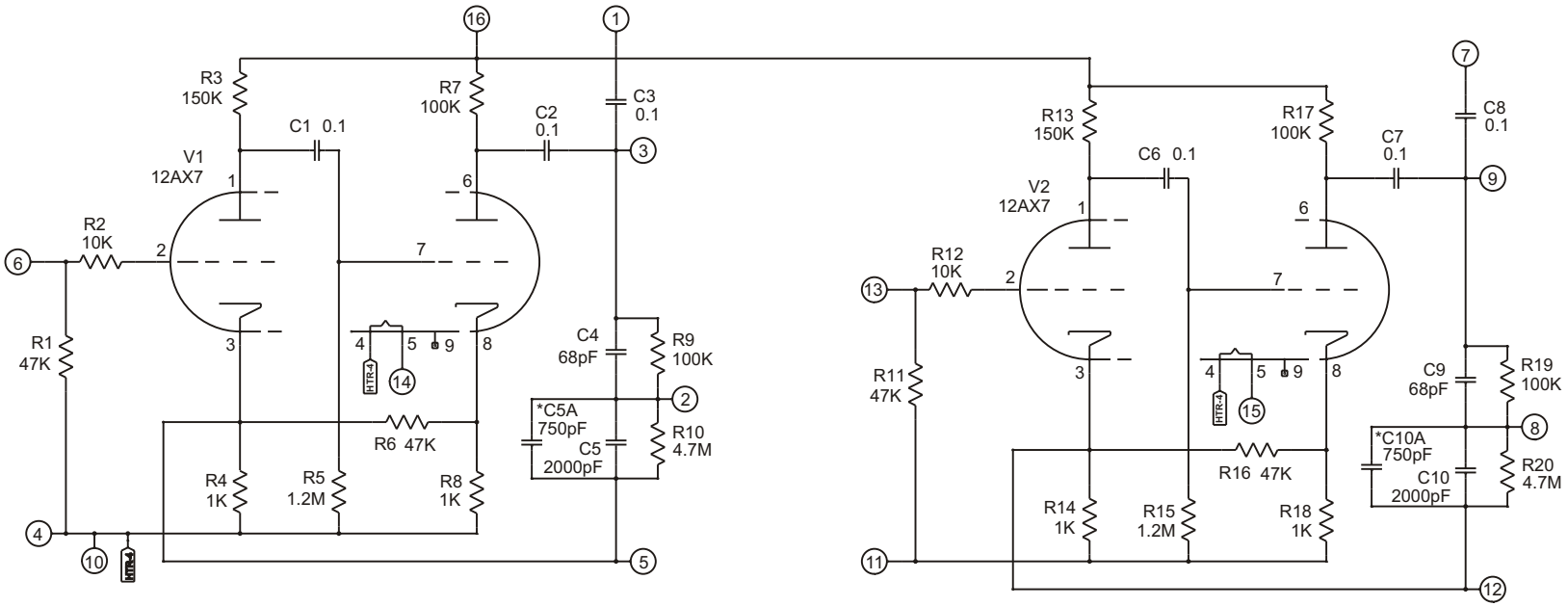
PC-6 Assembly



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PC-6 Schematic