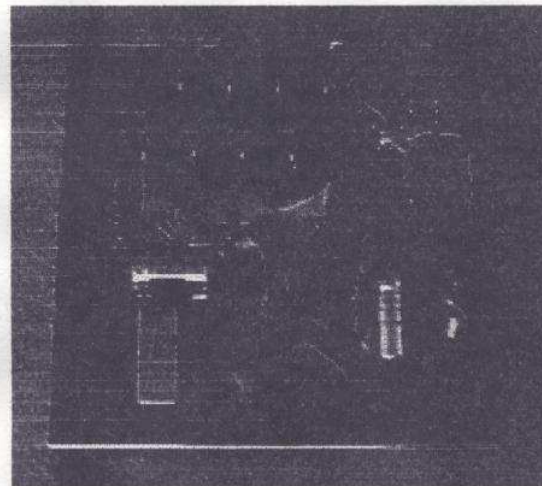
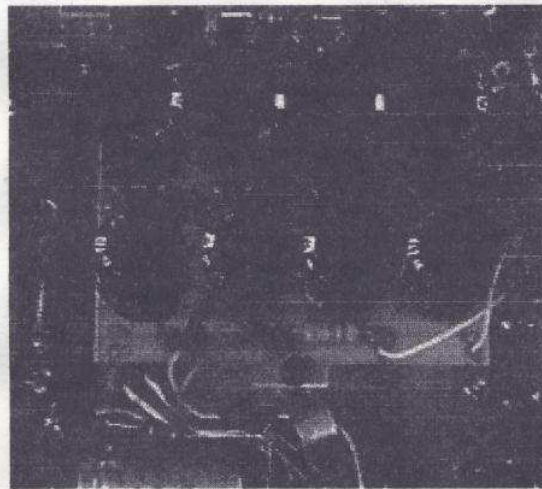


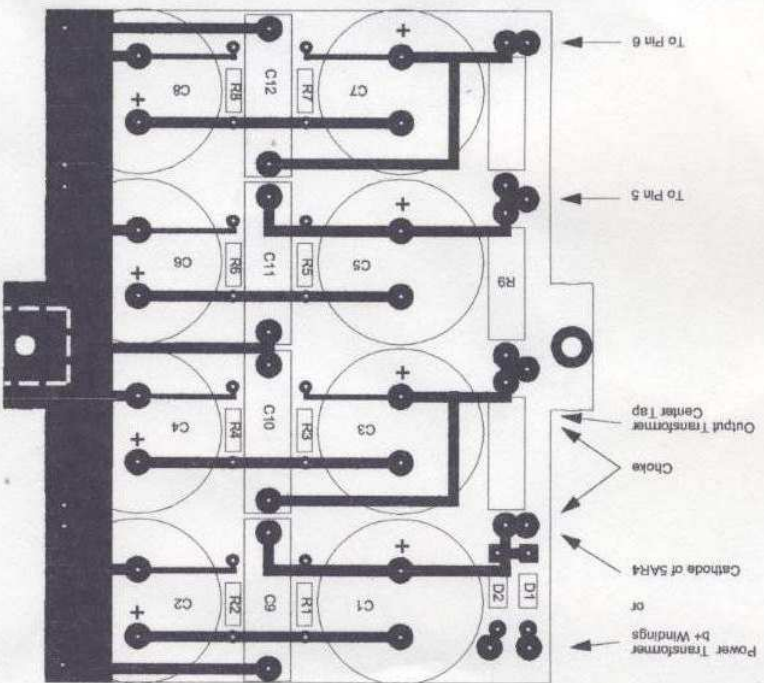
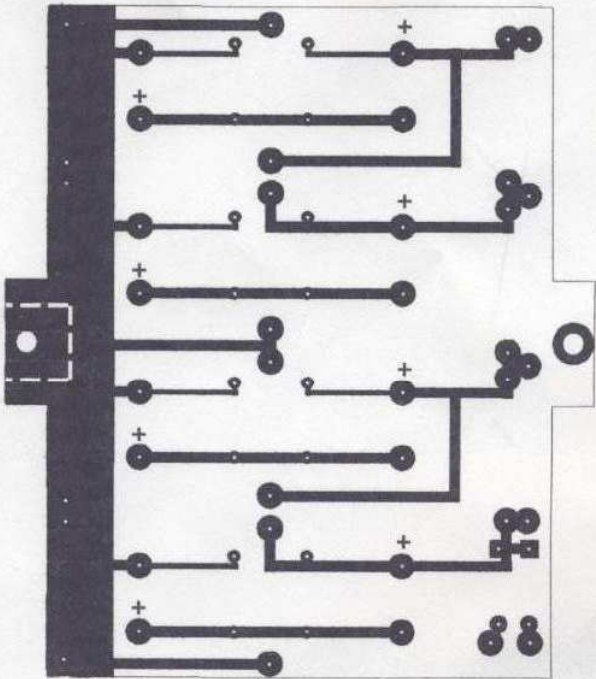
SDS Labs

Dynaco MKIII

Quad Cap Replacement Board

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Version 1.0





SDS Labs
 Dyna MKIII Capacitor Boards
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TRIODE ELECTRONICS/ SDS LABS CAPACITOR BOARD FOR DYNACO MK3, MK2 AND SUNN AMPLIFIERS

Easy Installation Instructions:

1. Solder the parts on the board where indicated (see parts list for part numbers)
2. The white stripe on the 100 uF indicates the negative side of the capacitor. The white stripe side **must be opposite** of the "+" indicator on the board. **The white stripe (band) of D1 & D2 diodes (if used) must be pointed AWAY from the red transformer wires. Improper installation will cause the capacitors to fail and possibly rupture or spew hot goo.**
3. The .1 uF 630V capacitors and the 330K resistors do not have any polarity, they can be installed in either direction.
4. Thread the standoffs provided on the screws of the output transformer, as shown on the photo (in the case of Mk2 & Mk3 Dynacos)
5. Place the board on the standoffs, and attach using nuts/screws provided.
6. Solder wires to the board as noted on the diagram.
7. **If you are repairing a Mark 2 or Sunn amplifier**, please read the notes regarding those amplifiers. They require parts not included in this kit.
8. It is not necessary to use a variac or other device to bring up the voltage slowly, but make sure you have the correct size fuse installed, and point the bottom of the amplifier away from your face when first powering up the unit, in case any components are improperly installed
9. Reset bias on output tubes (usually EL34's) to normal (usually 1.56V at biaset checkpoint on front panel) using the bias controls. Always check both sides twice in order (check the left, then the right, then go back and check the left then the right again).
10. A plug in solid-state 5AR4 rectifier replacement can be used in place of the 5AR4/GZ34 instead of using the D2 & D3 diodes on the board. Make board connections as if you were using a 5AR4/GZ34.
11. Always be sure and reset the bias when replacing the rectifier tube with either a new tube, a different tube (eg: a 5U4-G/GB) or a plug in solid-state rectifier replacement, or when replacing 6550/KT88/EL34's.
12. It's possible to broaden the bias range to accomodate tubes such as 6L6-GC or EL34 (if you have a Mk3 rather than a Mk2) by replacing the 10K bias controls with 20K or 25K controls or replacing R4 with 10K resistor. The Biaset voltage for 6L6-GC or EL34 should be set to 50 ma per tube, assuming your amp has the original 11.2 ohm Biaset resistor, that would be 1.12V rather than 1.56 with KT88 or 6550.
13. If the Biaset voltage is too low (won't come up to 1.56V) first check to make sure that the point on the board labelled "Cathode of 5AR4" is connected directly to Pin 8 on the 5AR4 socket.

If you need more information for servicing your Stereo 70, you can download the original manual from:

<http://www.triodeel.com/schindex.html>

and a troubleshooting guide may be found here:

<http://www.triodeel.com/trouble.html>

Part Number	Description
C1	100 uF 400V Panasonic Capacitor
C2	100 uF 400V Panasonic Capacitor
C3	100 uF 400V Panasonic Capacitor
C4	100 uF 400V Panasonic Capacitor
C5	100 uF 400V Panasonic Capacitor
C6	100 uF 400V Panasonic Capacitor
C7	100 uF 400V Panasonic Capacitor
C8	100 uF 400V Panasonic Capacitor
C9	.1 uF 630V Xicon Polypropylene Capacitor
C10	.1 uF 630V Xicon Polypropylene Capacitor
C11	.1 uF 630V Xicon Polypropylene Capacitor
C12	.1 uF 630V Xicon Polypropylene Capacitor
D1*	Diode 1 amp 1000V or better
D2*	Diode 1 amp 1000V or better
R1	330K 1/2W Resistor
R2	330K 1/2W Resistor
R3	330K 1/2W Resistor
R4	330K 1/2W Resistor
R5	330K 1/2W Resistor
R6	330K 1/2W Resistor
R7	330K 1/2W Resistor
R8	330K 1/2W Resistor
R9	6.8K 2W Resistor
R10**	See Notes. Not used on Dyna Mk3.
R11***	See Notes. Not used on Dynaco amps.

*D1 & D2 should be omitted if you are using a tube rectifier.

**R10 is blank pad between D1/D2 and R9. This is only used on Mk2 Dynaco and certain Sunn amplifiers. Ignore if you are repairing a Mk3 Dynaco.

***R11 is blank pad after R9. Used only on certain Sunn amplifiers.

Important Notes:

1. The white stripe on the 100 uF indicates the negative side of the capacitor.

The white stripe side **must be opposite** of the "+" indicator on the board. **Improper installation will cause the capacitors to fail and possibly rupture or spew hot goo.**

2. The .1 uF 630V capacitors do not have any polarity, they can be installed in either direction.

Note for Mark 2 Dynaco: R10 is a 50 ohm, 5W resistor, used rather than the choke shown on the hookup diagram.

Notes for Sunn Amplifiers:

2 #8 holes are usually required to be drilled for the standoffs in Sunn amps, this is normal, usually there isn't room directly under the transformer, or the spacing on the transformer bolts is different (ie: any Sunn using 4 6550/KT88).

Refer to diagram for your Sunn amplifier prior to installing.

On these amplifiers: Sonic II, 200S, Sorado, Sonic I-40, early 100S, Spectrum II, and 2000S:

On the hookup diagram, "pin 5" is equivalent to the hookup point "B", and "pin 6" is equivalent to hookup point "C".

On these amplifiers: 1200S, later 100S, Sceptre, Sentura I, Sentura II, Solarus:

On the hookup diagram, "pin 5" is equivalent to the hookup point "C", and "pin 6" is

equivalent to hookup point "D". The hookup point labelled "Output Transformer Center Tap" is

the same a hookup point "B", the other connection point labelled "Choke" is the same as hookup point "A".

These amplifiers use an additional 20 uF 600V capacitor which was not part of the original can capacitor, and is not included with this board kit.

Sunn Board Resistors

Sonic II, 200S, early 100S, Spectrum II, Sorado, Sonic I-40, 2000S: R9 is 15K 2W, R11 is 33K 1W, R10 not used.

1200S, later 100S, Sceptre, Sentura I, Sentura II, Solarus: R10 is 6.8K 2W, R9 is 6.8K 2W, R11 is 10K 2W

On 120W Sunns (1200S and 2000S), the board will not fit on the transformer bolts as on the 60W models,

two holes must be drilled for # 6 screws for the board standoffs.