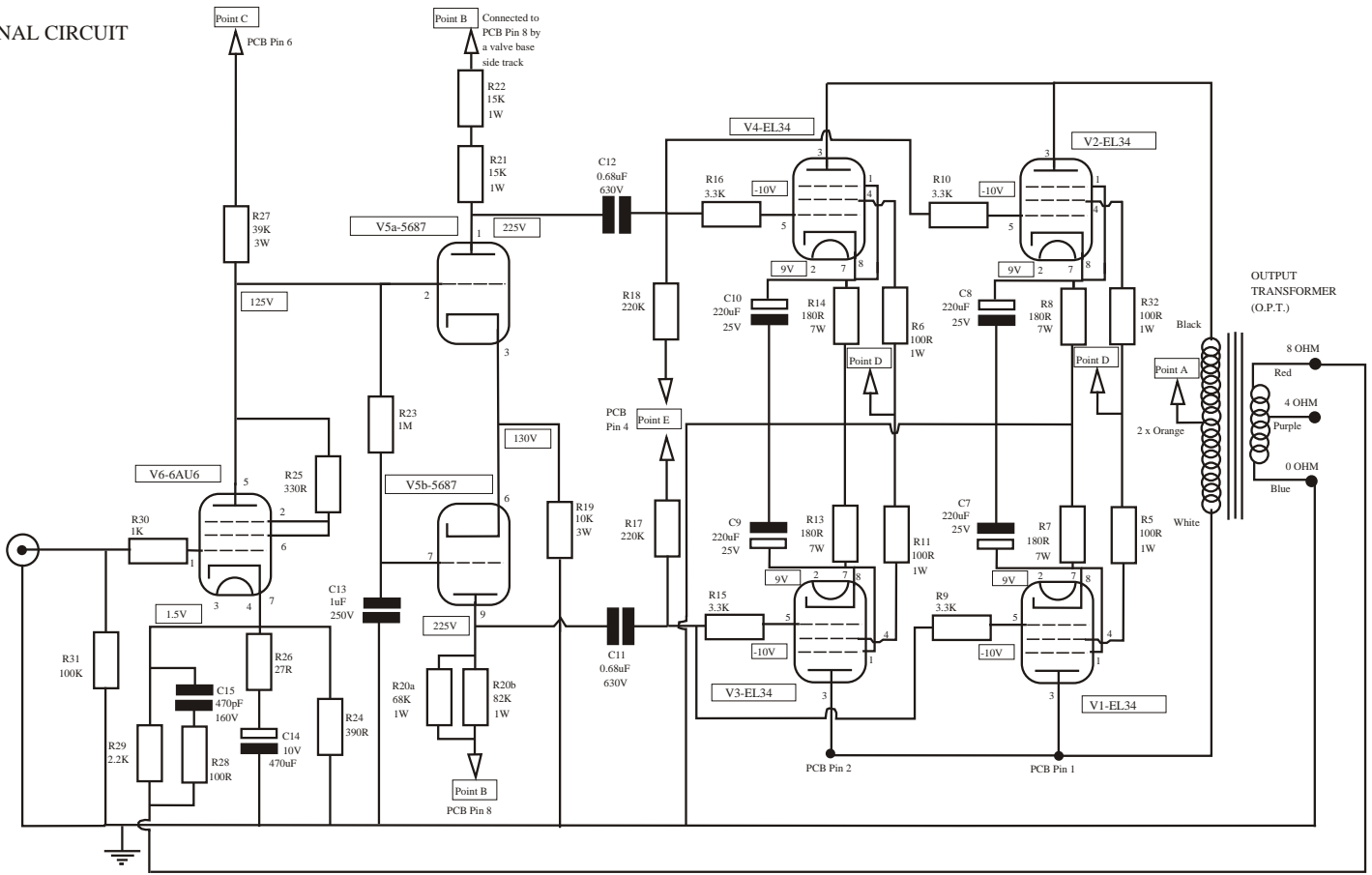


**KEL80**  
**MONOBLOC**  
**INSTRUCTION**  
**MANUAL**  
diagrams only

# KEL 80 MONOBLOC CIRCUIT DIAGRAM

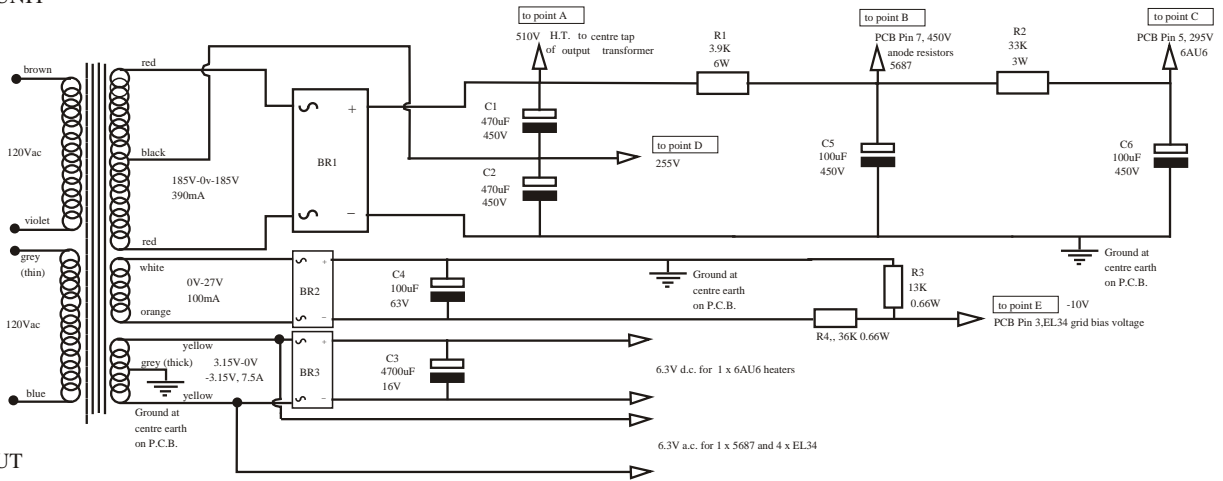
## SIGNAL CIRCUIT



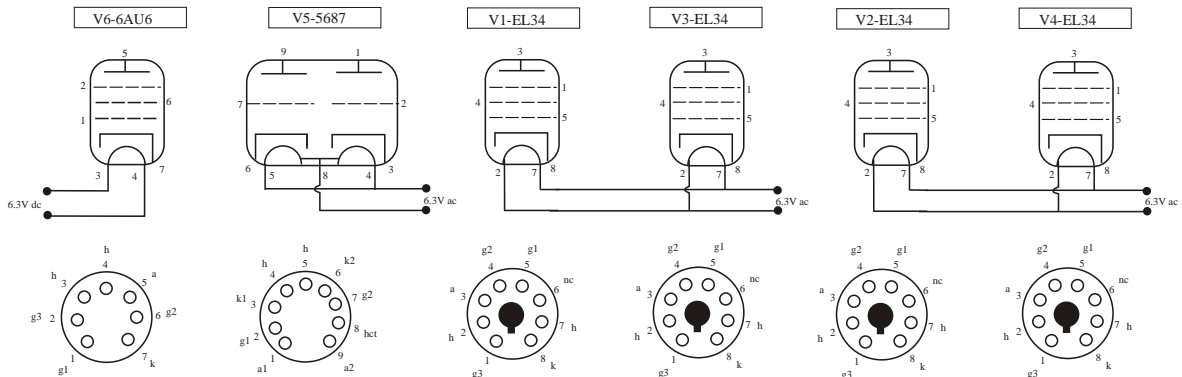
## POWER SUPPLY UNIT

For 230V/240V operation:  
join windings in series, join violet & grey together and insulate. Brown is 230V/240V and blue is 0V.

For 110V/ 120V operation:  
join windings in parallel, join brown & grey together, becoming 110V/120V and join blue & violet together, becoming 0V.



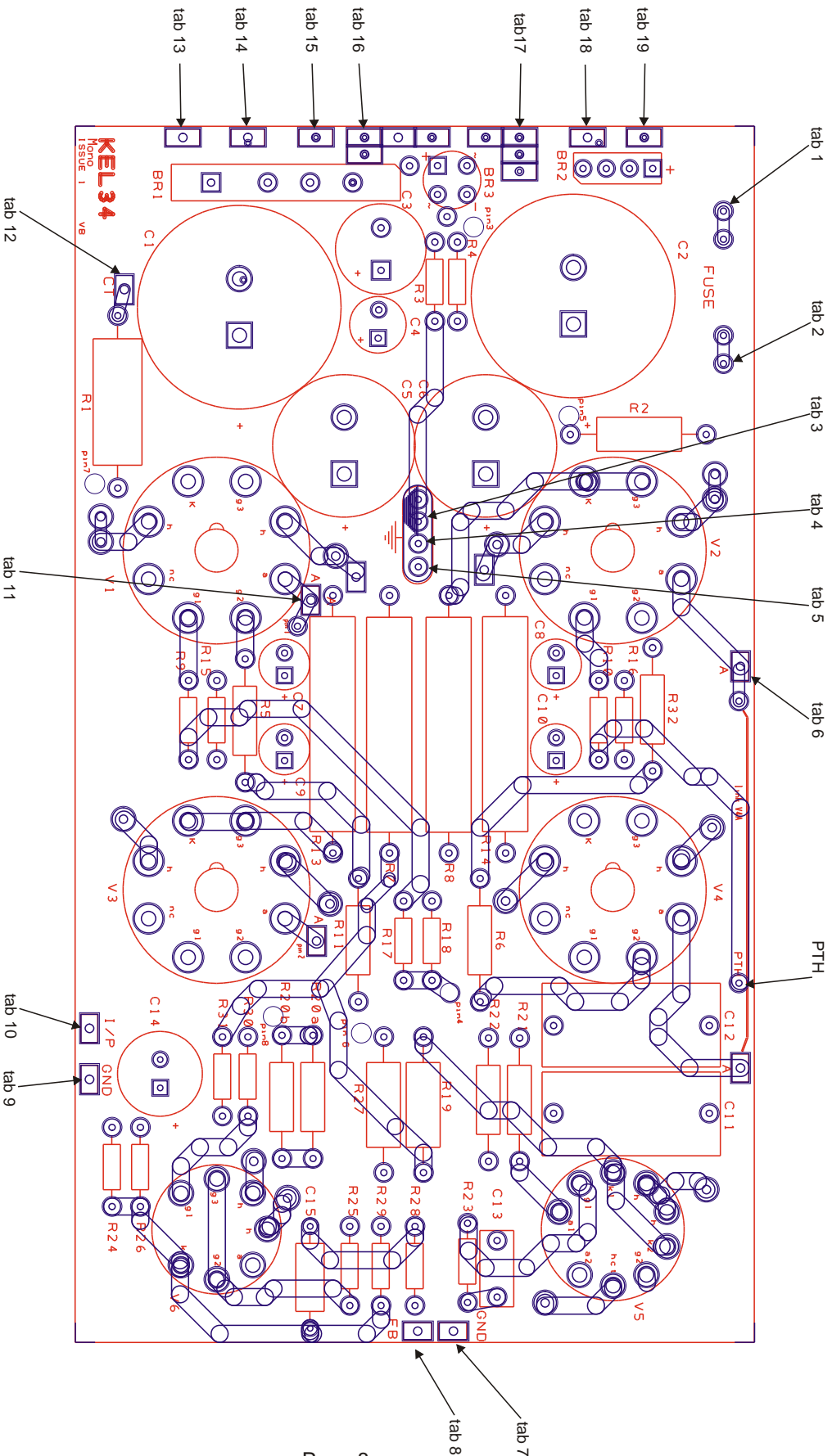
## VALVE PIN LAYOUT



Views are from underneath valve or valve holder  
h = heater hct = heater centre tap k = cathode a = anode nc = no connection

# PRINTED CIRCUIT BOARD TAB DIAGRAM

Diagram shows the position of all the tabs (1 - 19) that have connections external to the PCB. At these tab points insert the terminal pins provided and solder both sides of the PCB, insure they project out onto the component side. Additionally, the diagram shows the position of one pin (PTH) that does not relate to a component. Using a piece of wire, thread through and solder both sides and snip off the excess.



**KEY:**

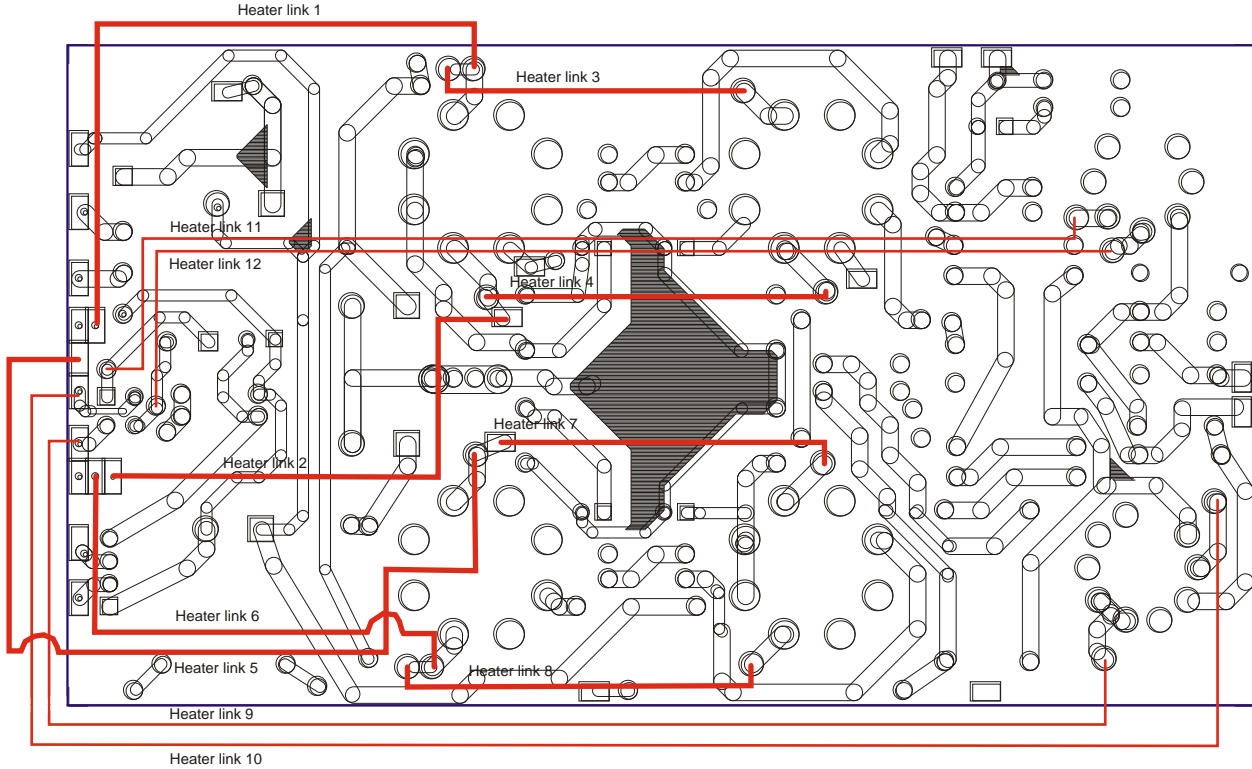
- IDENT - denotes the position, outline, name and orientation of the components and pin labels.
- COMPONENT SIDE - follows the route of all the solder tracks that are on the component side.

**QUICK TAB GUIDE:**

tab 1 - brown wire from mains lead.	tab 6 - black wire from O/P T.	tab 13 - black wire from mains T.
tab 2 - brown wire to mains switch.	tab 7 - ground of feedback screened wire	tab 14 - 1 x red wire from mains T.
tab 3 - earth wire mains lead.	tab 8 - signal of feedback screened wire.	tab 15 - 1 x red wire from mains T.
tab 4 - grey wire from mains T.	tab 9 - ground of signal screened wire.	tab 16 - 1 x yellow wire from mains T.
tab 5 - OV wire from speaker terminal	tab 10 - signal of signal screened wire.	tab 17 - 1 x yellow wire from mains T.
	tab 11 - white wire from O/P T.	tab 18 - white wire from mains T.
	tab 12 - 2 x orange wire from O/P T.	tab 19 - orange wire from mains T.

# PRINTED CIRCUIT BOARD HEATER LINK DIAGRAM

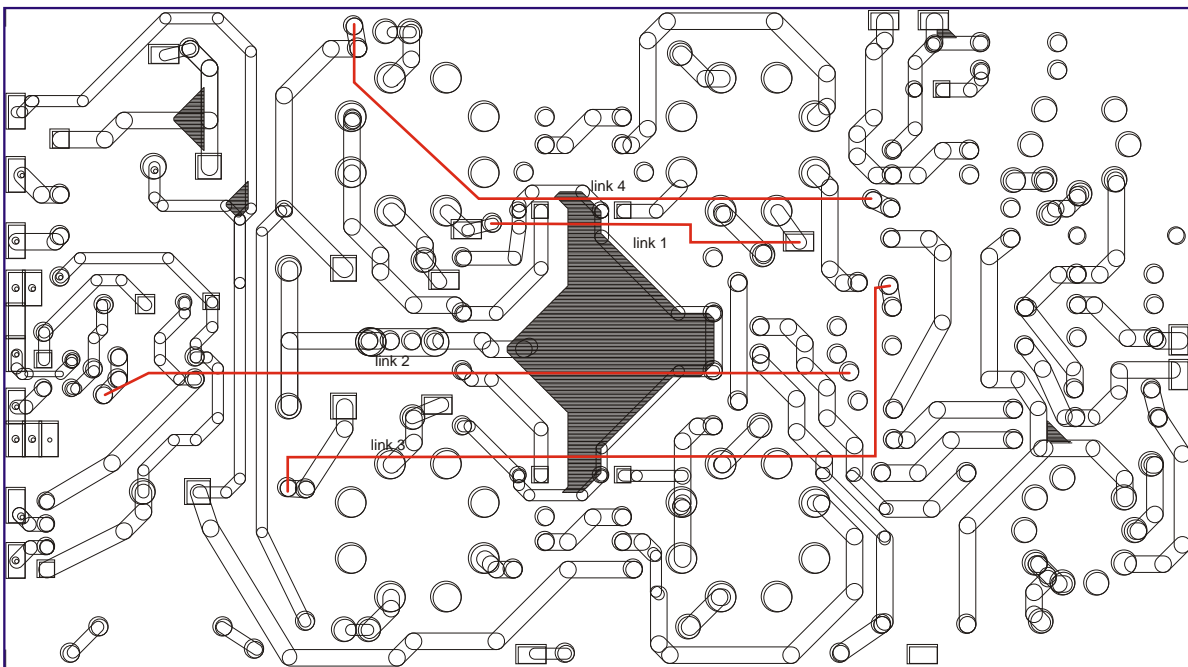
Diagram shows the valve base side of the KEL80 PCB and illustrates the position and route of all the valve heater wiring. Position all links on valve base side.



Please note, that the route of all the links on both diagrams are drawn for ease of view. All links should run their shortest path. For the heater links, all number pairs i.e. Heater link 1 & 2, heater link 3 & 4... should run in twisted pairs To reduce hum levels. N.B. Solder both side of all pins.

# PRINTED CIRCUIT BOARD INTER - LINK DIAGRAM

Diagram shows the valve base side of the KEL80 PCB and illustrates all the inter PCB links. Link 1 connects PCB pin 1 to pin 2. Link 2 connects PCB pin 3 to pin 4. Link 3 connects PCB pin 5 to pin 6. Link 4 connects pin 7 to pin 8. Position all links on valve base side.



KEY:	—	VALVE BASE SIDE - follows the route of all the solder tracks that are on the valve base side
	—	Wire links USE BLACK 1/0.16 wire provided
	—	Wire links USE BLACK 1/1.13 wire provided

# MAINS TRANSFORMER

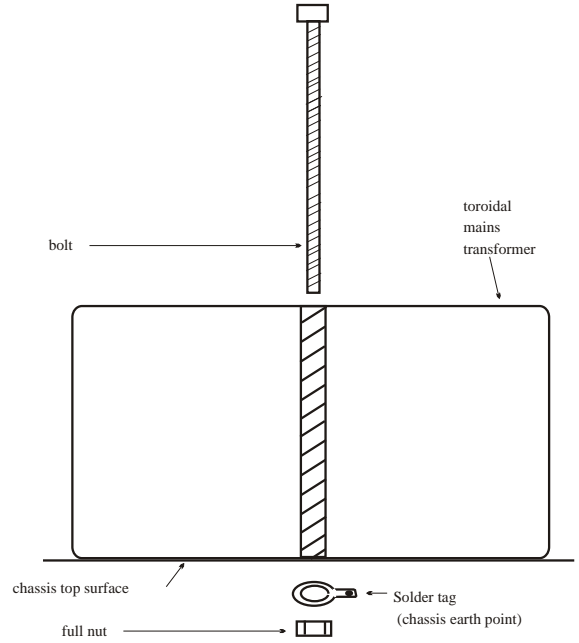
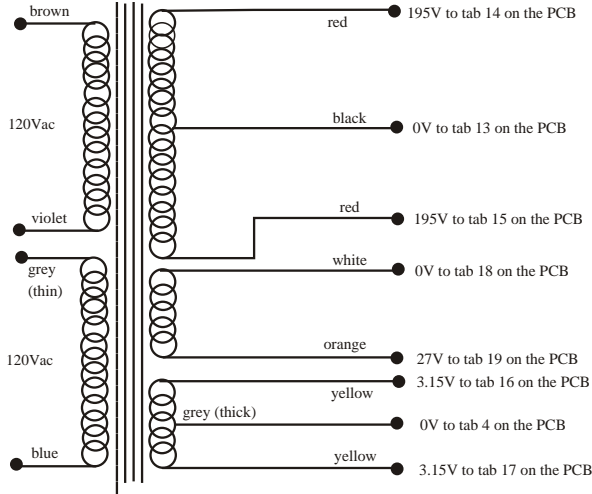
Schematic diagram, soldering points and fitting of.

## PRIMARY WINDING

## SECONDARY WINDING

For 230V/240V operation:  
join windings in series, join violet & grey together and insulate. Brown is 120Vac

For 110V/120V operation:  
join windings in parallel, join brown & grey together, to become 110V/120V and join blue & violet together, to become 0V.



# OUTPUT TRANSFORMER

Schematic diagram, soldering points and fitting of.

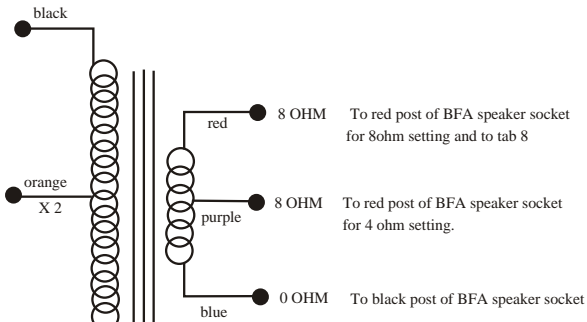
## PRIMARY WINDING

## SECONDARY WINDING

ANODE(1)  
To tab 6 on PCB

CENTRE TAP(CT)  
To tab 12 on PCB

ANODE(2)  
To tab 11 on PCB



NEVER CONNECT RED (8 ohm tap) AND PURPLE (4 ohm tap) TOGETHER, USE ONE OR THE OTHER OR YOU WILL DESTROY THE OUTPUT TRANSFORMER.

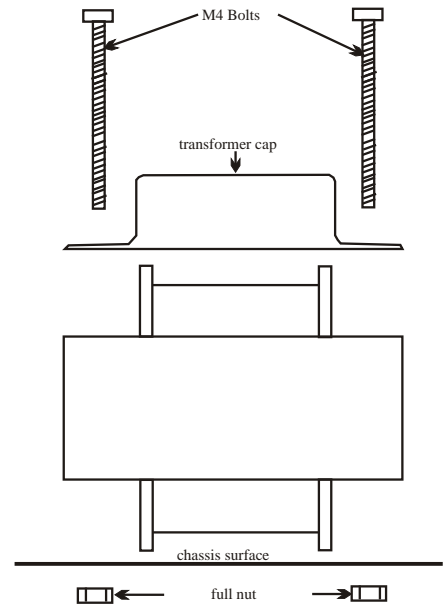
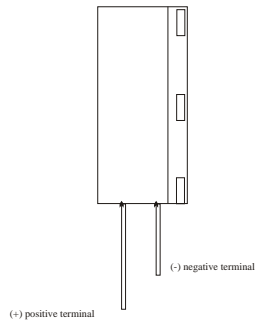
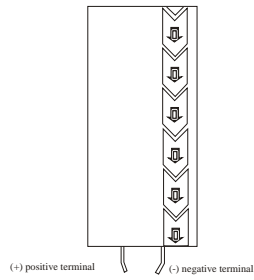


FIG. 1. LAYOUT AND ORIENTATION OF THE ELECTROLYTIC CAPACITORS

POLARITY MARKINGS  
FOR C3, C4, C7-10, C14



POLARITY MARKINGS  
FOR C5 & C6



POLARITY MARKINGS  
FOR C1 & C2

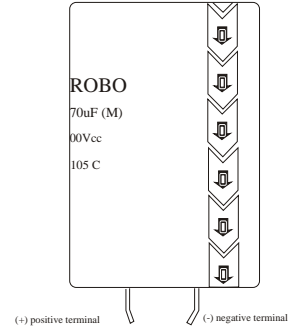
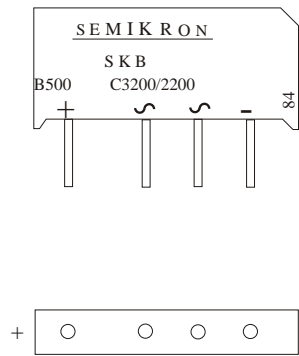
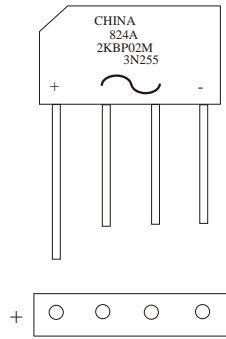


FIG. 2. LAYOUT AND ORIENTATION OF BR1,2 & 3.

BR1 MAINS HT  
BRIDGE RECTIFIER



BR2 BIAS  
BRIDGE RECTIFIER



BR3 HEATER  
BRIDGE RECTIFIER

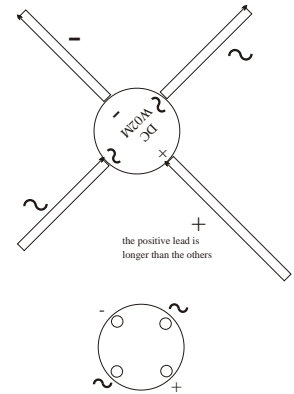


FIG 3. SW1 MAINS ROCKER SWITCH

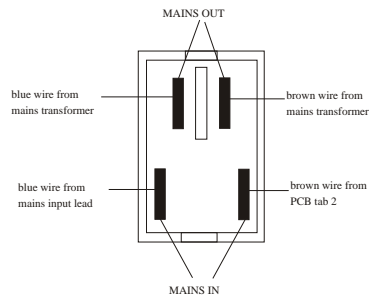


FIG. 4. EXPLODED VIEW OF HOW TO FIT THE PHONO SOCKET

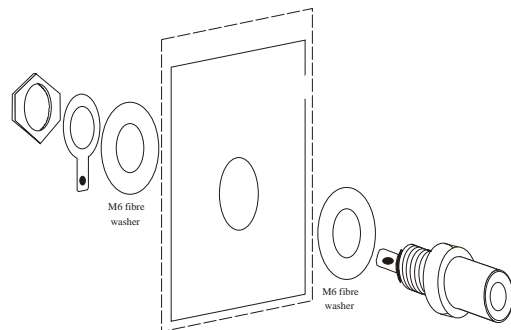


FIG.5. FITTING OF STRAIN RELIEF

