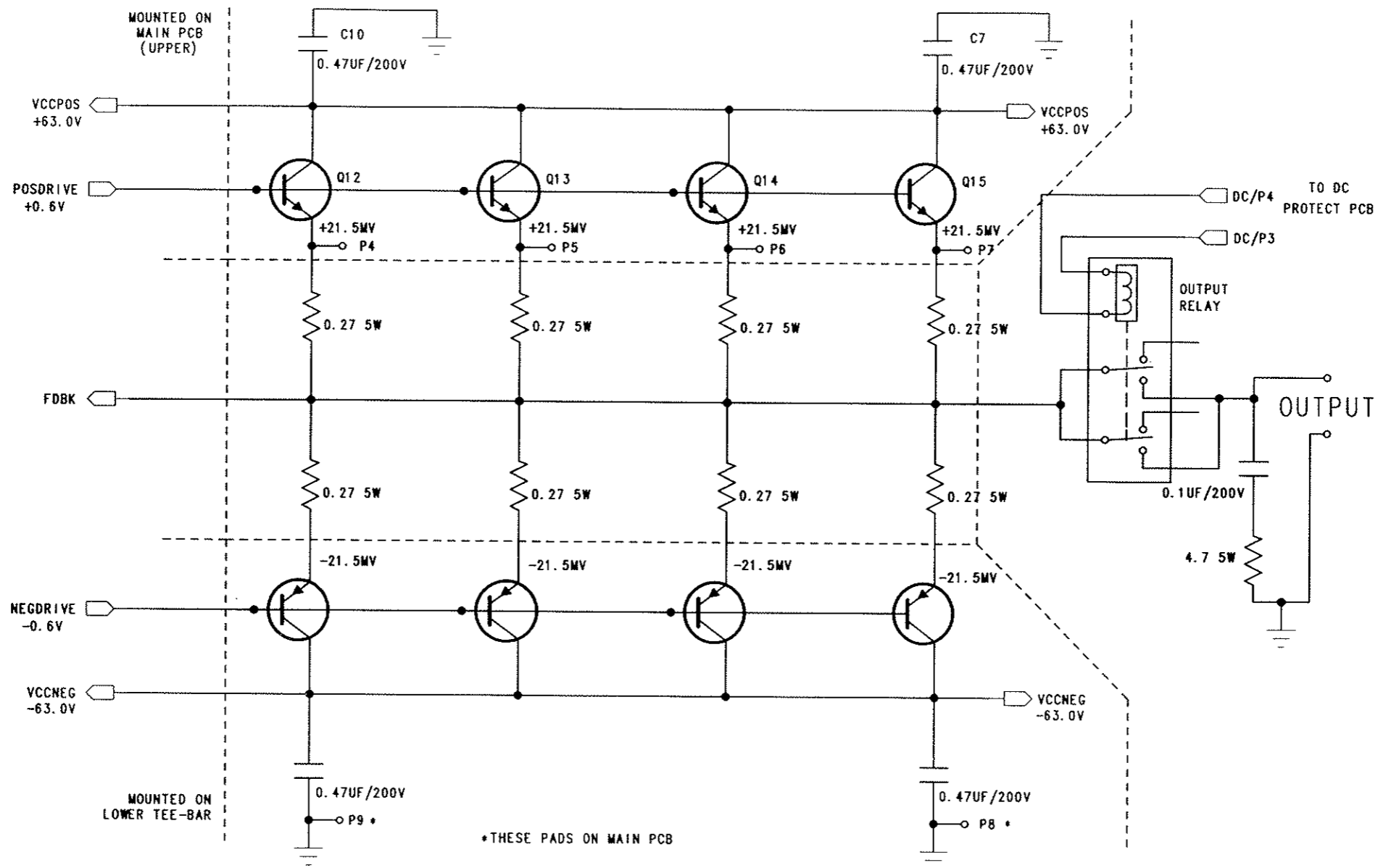


LEFT CHANNEL SHOWN

COMPANY: CLASSE AUDIO INC.	
TITLE: DR-15 POWER AMPLIFIER	
DESC: MAIN PCB	
DRAWING NO: 5011LR2	
DRAWN: DJR	DATE: FEB. 25/91. SHEET: 1 OF 5

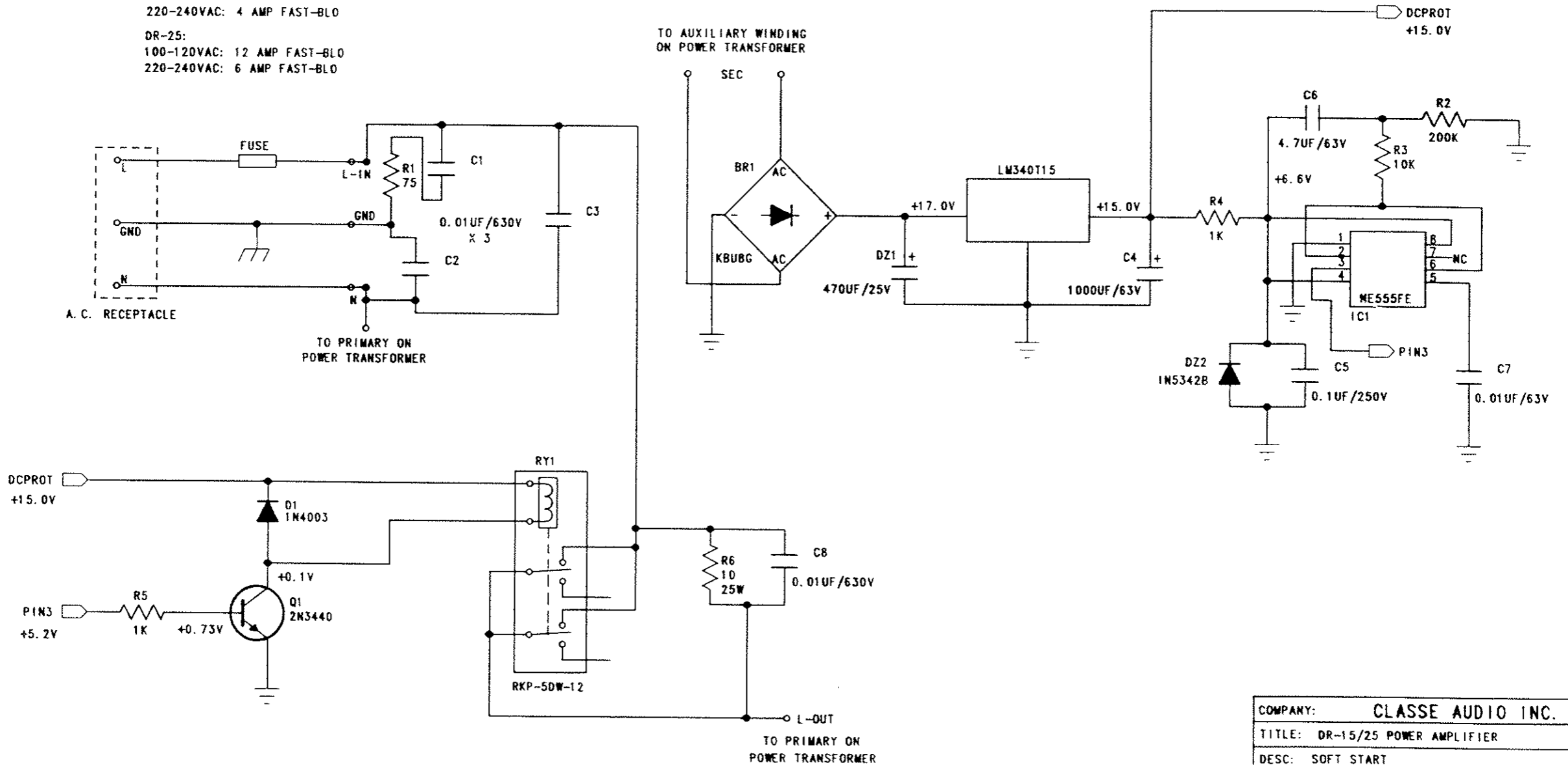


COMPANY:	CLASSE AUDIO INC.		
TITLE:	DR-15 POWER AMPLIFIER		
DESC:	OUTPUT STAGE		
DRAWING NO:	DR-15-2		
DRAWN:	DJR	DATE: FEB. 25/91.	SHEET: 2 OF 6

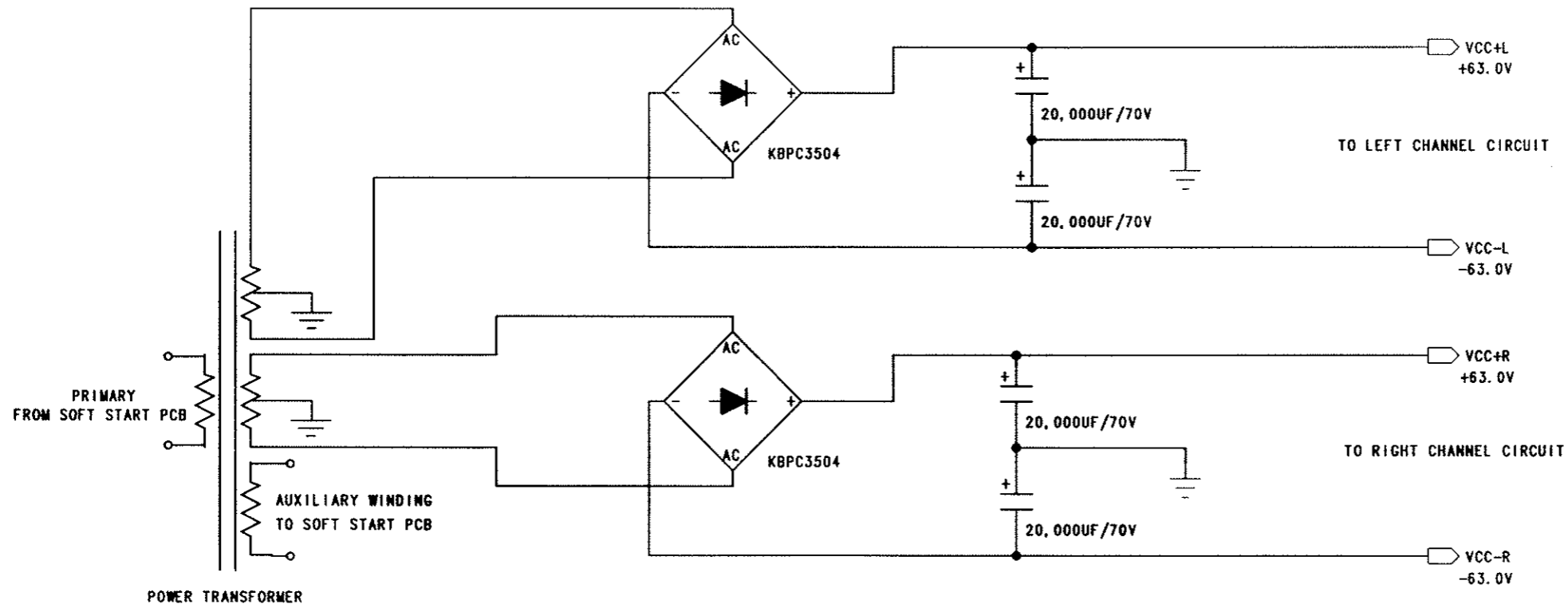
FUSE VALUES:

DR-15:  
 100-120VAC: 8 AMP FAST-BLO  
 220-240VAC: 4 AMP FAST-BLO

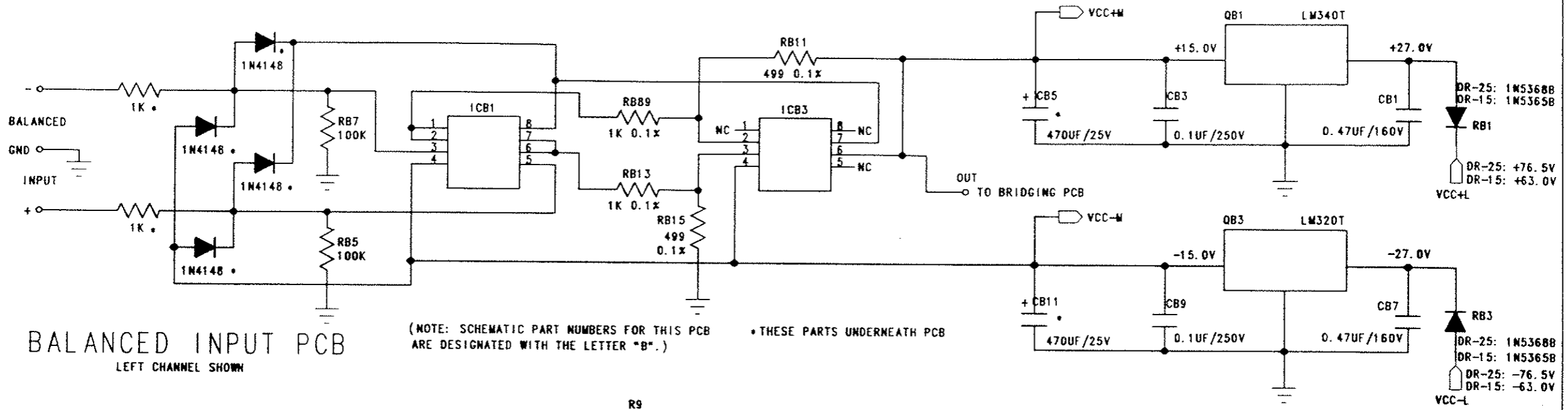
DR-25:  
 100-120VAC: 12 AMP FAST-BLO  
 220-240VAC: 6 AMP FAST-BLO



COMPANY: CLASSE AUDIO INC.	
TITLE: DR-15/25 POWER AMPLIFIER	
DESC: SOFT START	
DRAWING NO: DR-15/25-7R0	
DRAWN: DJR	DATE: FEB. 20/91 SHEET: 3 OF 6

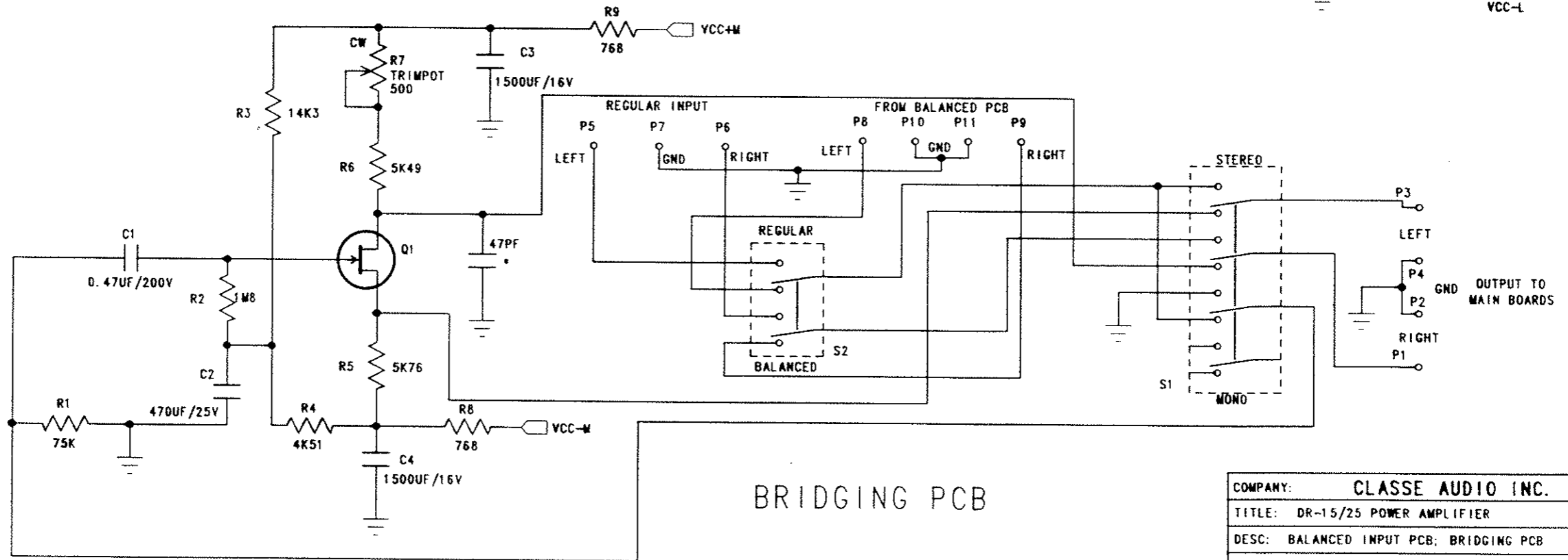


COMPANY:	CLASSE AUDIO INC.		
TITLE:	DR-15 POWER AMPLIFIER		
DESC:	MAIN POWER SUPPLY		
DRAWING NO:	DR-15-4		
DRAWN:	DJR	DATE:	FEB. 20/91 SHEET: 4 OF 6



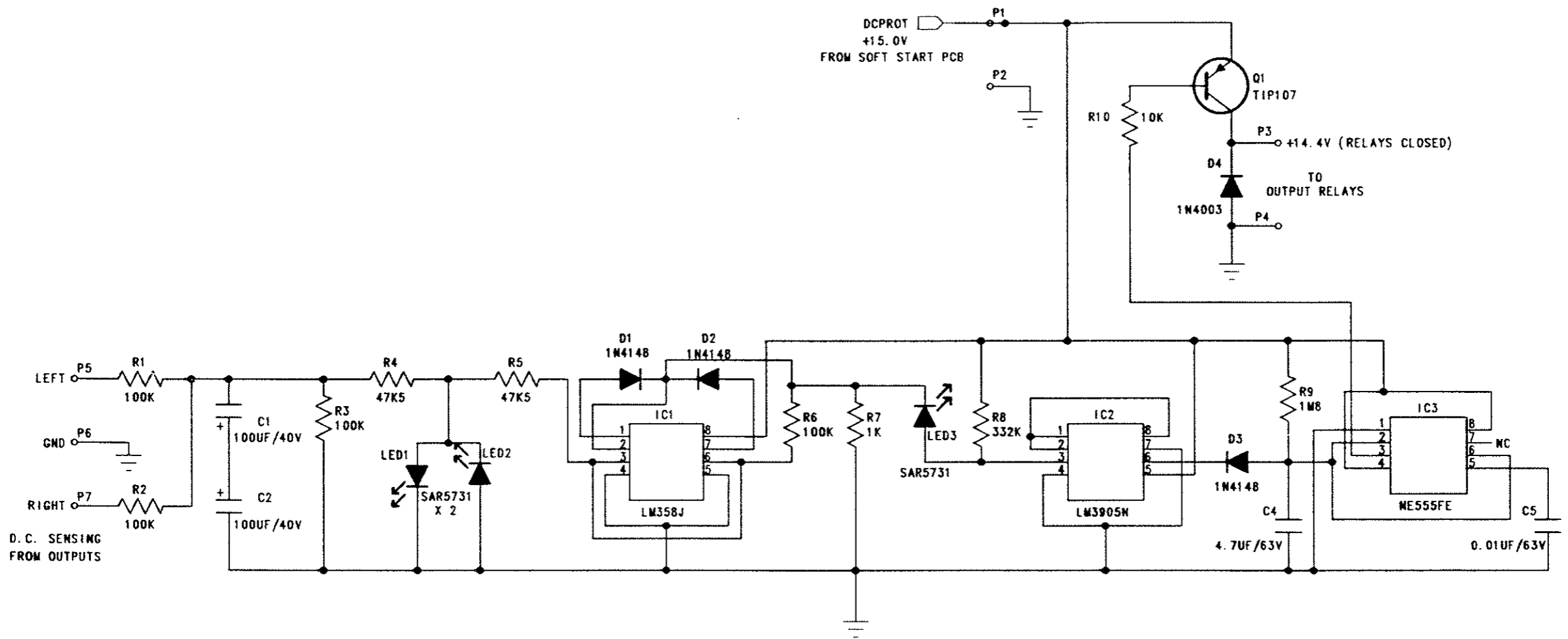
BALANCED INPUT PCB  
LEFT CHANNEL SHOWN

(NOTE: SCHEMATIC PART NUMBERS FOR THIS PCB ARE DESIGNATED WITH THE LETTER "B".) \* THESE PARTS UNDERNEATH PCB



BRIDGING PCB

COMPANY: CLASSE AUDIO INC.		
TITLE: DR-15/25 POWER AMPLIFIER		
DESC: BALANCED INPUT PCB; BRIDGING PCB		
DRAWING NO: DR-15/25-5		
DRAWN: DJR	DATE: FEB. 21/91	SHEET: 5 OF 6



COMPANY: CLASSE AUDIO INC.		
TITLE: DR-15/25 POWER AMPLIFIER		
DESC: D. C. PROTECTION		
DRAWING NO: 50260R1		
DRAWN: DJR	DATE: FEB. 25/91.	SHEET: 6 OF 6

# "BIAS FOR OLD MODELS"

DR 9-8  $\Rightarrow$  18

DR 10-M10  $\Rightarrow$  21

DR 15-25 - 1/5 1000 - 700  $\Rightarrow$  22

CLASSE' 70  $\Rightarrow$  21

FOR ALL MODELS & IF THE PRE-DRIVER  
ARE MOUNTED ON  
HEAT SINK USE THE  
TOP-CORNER TO  
FINAL TEST.  
( TO SET BIAS+OFFSET )

## DR-15/25 PRE-TEST PROCEDURE

### A) MODULE:

#### VISUAL CHECK

- 1) Solder on O/P devices.
- 2) Screws on O/P devices\_ With lockwashers and tightened.  
\_ All nuts are regular #6 except bottom of DR-25.
- 3) Screws on T-bars\_ With #10 int.tooth washer and tightened.
- 4) .27ohm power resistor :\_ Value.  
\_ Solder join.  
\_ Number facing front.
- 5) Screws secure for middle board \_ #6 lockwashers (DR-25 only).
- 6) Wiring.
- 7) Top and side of T-bar are clean.
- 8) Components on board ( polarity of caps, value...etc).

#### ELECTRICAL CHECK

- 1) Turn bias triapot to Min.
- 2) Connect module to one (1) side of pre-tested base.
- 3) Bypass O/P relay with a jumper. Turn unit on. Turn variac slowly up \_ Observe signal.
- 4) Remove signal.
- 5) Set offset <5mv.
- 6) Adjust bias \_ Approx. 74ma/device ( 20mv across .27ohm res; Max different = 6mv )
- 7) Apply signal from FG. Adjust FG level to get Max output.
- 8) Check module under 8ohm, 4ohm load with squarewave at 10hz, 1Khz, 10Khz.
- 9) Turn off test unit. Disconnect all connectors and mark "TESTED" on heatsink.

### B) BASE:

#### VISUAL CHECK

- 1) Check all components on 50250r1 ( bridging ), 50260r1 ( DC detector),DR-9 7r0 ( soft start ), DR-9 8R1 ( balanced ) boards and screws secure them (with #6 lockwashers). Check wiring to those boards.
- 2) Back plate: \_ Handle ( Int.tooth washers and tightened)  
\_ Tie wrap on left input cable.  
\_ Output bolts (shoulder washer from outside in, a shoulder washer from inside out, 1/2" flat washer, 1/2" int. tooth washer, then 1/2" nut).  
\_ Cap + Resistor.  
\_ AC wiring  
\_ Fuseholder.  
\_ Output connections.
- 3) All screws on bottom are tightened and 1/4" painted flat washer on Xfmr bolt.
- 4) Screws for caps' clamps ( with #10 int.tooth washers and tightened.)
- 5) Check value and polarity of main power supply caps ( 20,000uf/70v for DR-15 and 30,000uf/80v for DR-25 ), and tighten all screws on them.
- 6) Rectify bridges : \_ Value ( A3502 )



- \_ Polarity ( +ve facing front ).
  - \_ Wiring ( red for +ve; blue for -ve ).
- 7) Power switch : \_ Cap  
  - \_ Wiring.
- 8) Xfmr and its wiring.
- 9) Set level of regular input signal at 2vrms, 1khz, sinewave .
- 10) Set OSC:
  - \* Time base : .2ms
  - \* Volt/div : .5v/div ( with \*10 probes ); AC
  - \* Trigger : CH1
  - \* Vertical mode : BOTH ; CHOP

#### ELECTRICAL CHECK

- 1) Insert fuse ( all fuses are fas-blo ):
  - 12a/250v for 100v/120v DR-25
  - 6a/250v for 220v/240v DR-25
  - 8a/250v for 100v/120v DR-15
  - 4a/250v for 220v/240v DR-15
- 2) Set base at MONO/REGULAR. Feed single ended signal to left input. Turn variac to 5VAC, check rail and polarity of supply to DR-9 BR1 board. Connect scope to left and right coax cables.
- 3) Turn variac to line voltage. Check :
  - \* Rails Approx. +/- ~~66.5~~ <sup>81.5</sup> 70Vdc for DR-15; 80Vdc for DR-25
  - \* Aux supply 17.5vdc before reg'r; 15vdc after reg'r.
  - \* Supply to 50250R1: Approx. +/- 12.9vdc.
  - \* On DR-9 BR1 board :
    - \_ After zener diodes approx. +/- ~~30v~~ <sup>33v</sup> 30-33v
    - \_ After regulators approx. +/- 15v
    - \_ O/P offset of TL072 <= /10/mv
    - \_ O/P offset of OP27 <= /10/mv
- 4) Turn base off and then turn it on with full line voltage. Count 2 seconds for soft start relay to close and approx 10 seconds for O/P relays to close. Signals should appear and approx 10 seconds for O/P relays to close. Signals should appear and approx 10 seconds for O/P relays to close. Signals should appear and approx 10 seconds for O/P relays to close. Check clipping of signals. Adjust level of the right channel by the trimpot on 50250r1 PCB.
- 5) Feed balanced signal to balanced input of left channel, check output signals. Switch to STEREO. Feed balanced signal to right input; Check left and right; Check phase. Compare level of the two (balanced and regular ); should be equal.
- 6) Check DC detector CCT by applying DC ( +ve and -ve) to input of 6R0 board one channel at the time.
- 8) Check contacts of O/P relays.
- 10) Turn switch and variac off. Pull out line cord. Then discharge the main supply caps with 10ohm/25w resistor. Discharge caps again with a short.
- 11) Mark "TESTED" on base.

Date: Jan 15th 1991