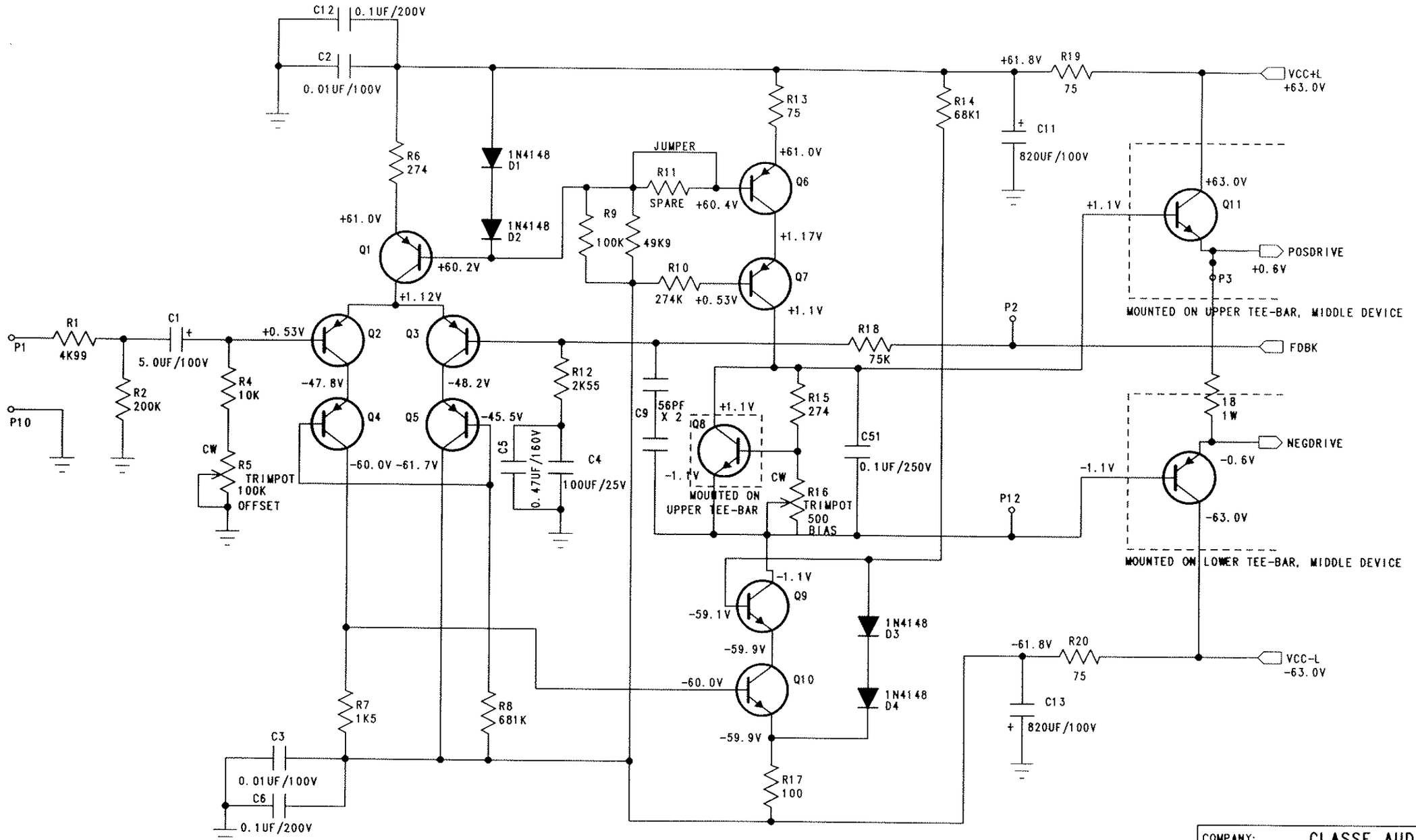
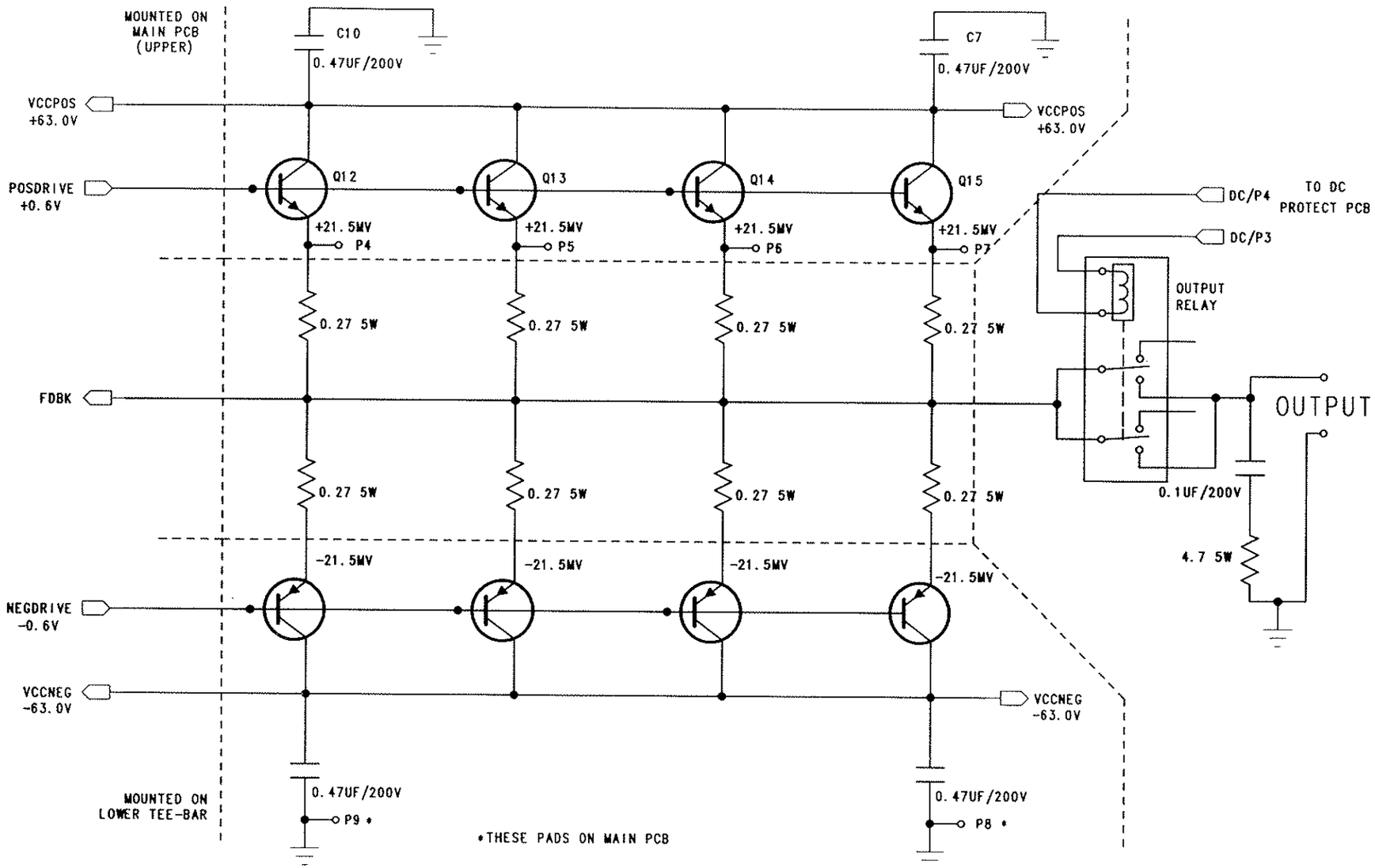


LEFT CHANNEL SHOWN

COMPANY:	CLASSE AUDIO INC.	
TITLE:	DR-15 POWER AMPLIFIER	
DESC:	MAIN PCB	
DRAWING NO:	5011LR2	
DRAWN: DJR	DATE: FEB. 25/91.	SHEET: 1 OF 6

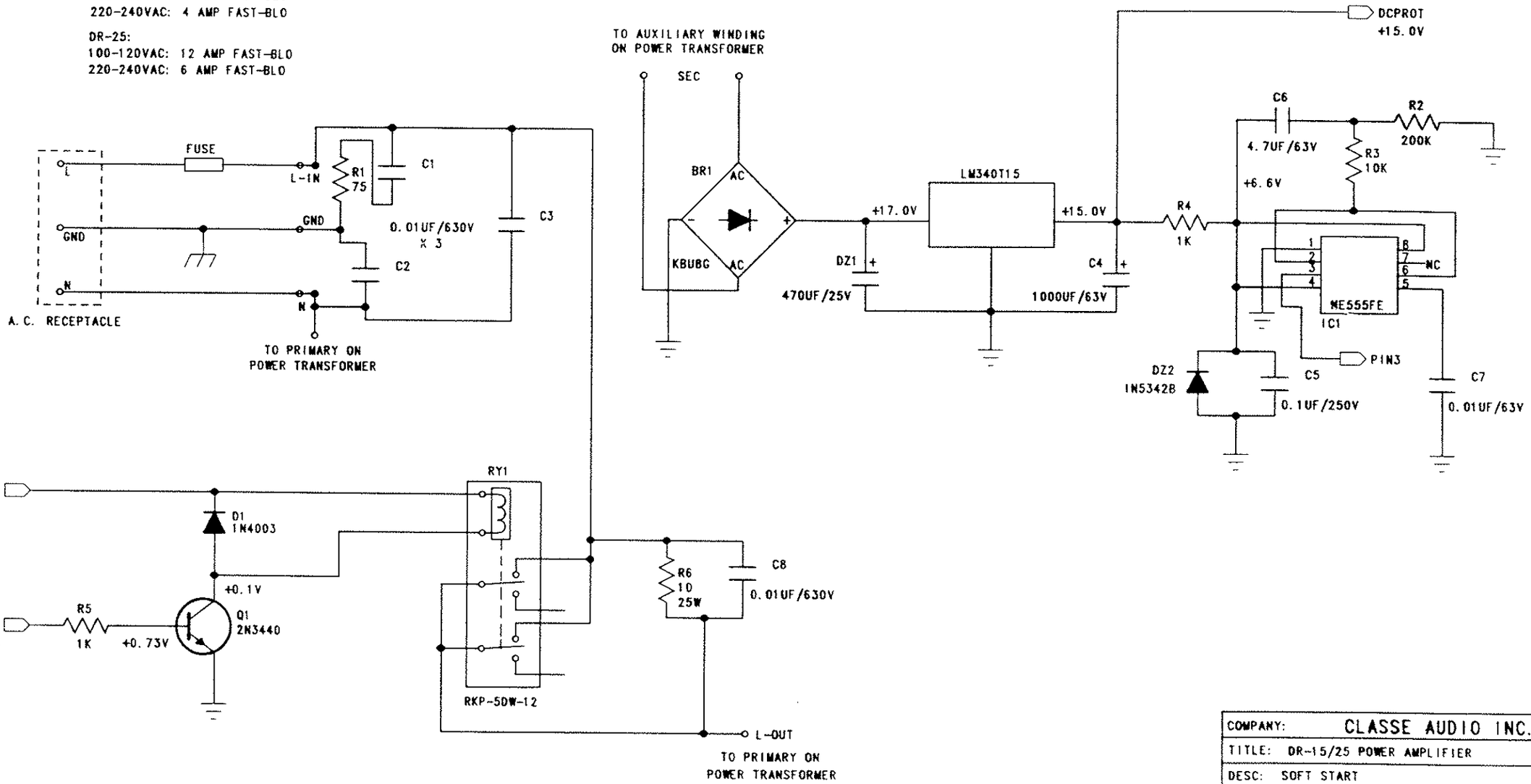


COMPANY:	CLASSE AUDIO INC.	
TITLE:	DR-15 POWER AMPLIFIER	
DESC:	OUTPUT STAGE	
DRAWING NO:	DR-15-2	
DRAWN: DJR	DATE: FEB. 25/91.	SHEET: 2 OF 6

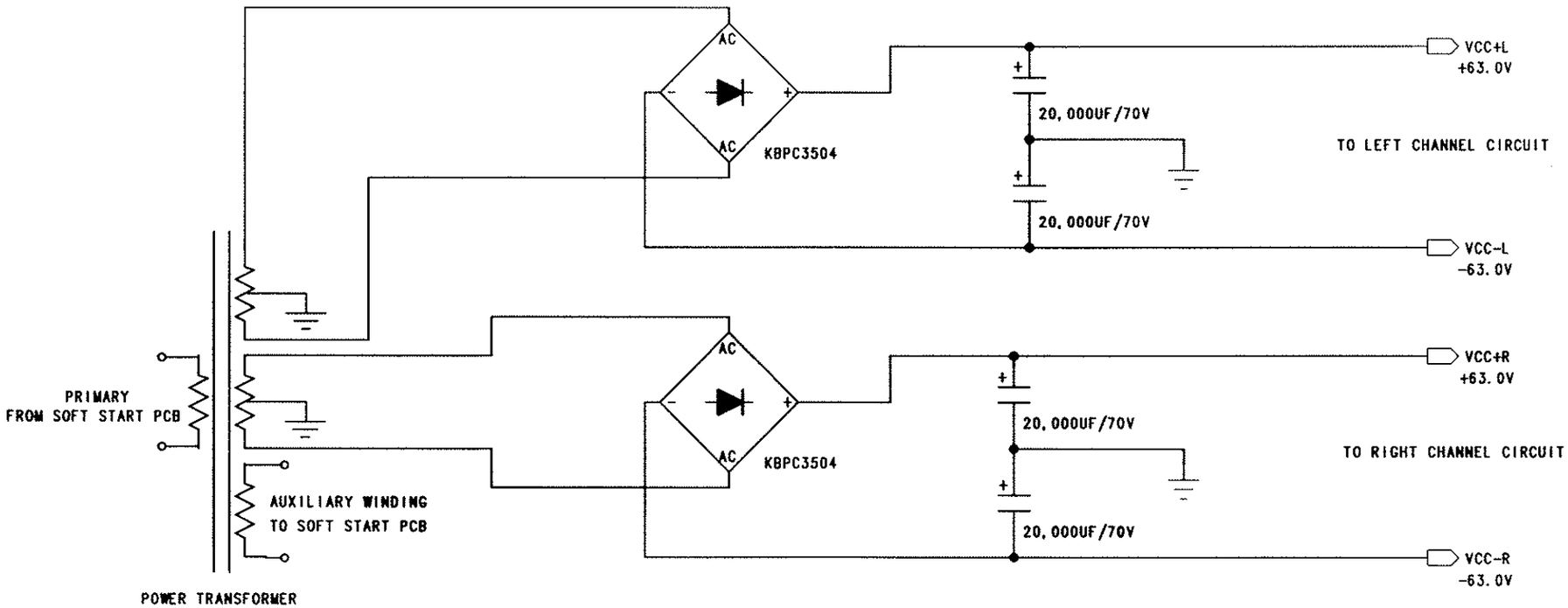
FUSE VALUES:

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

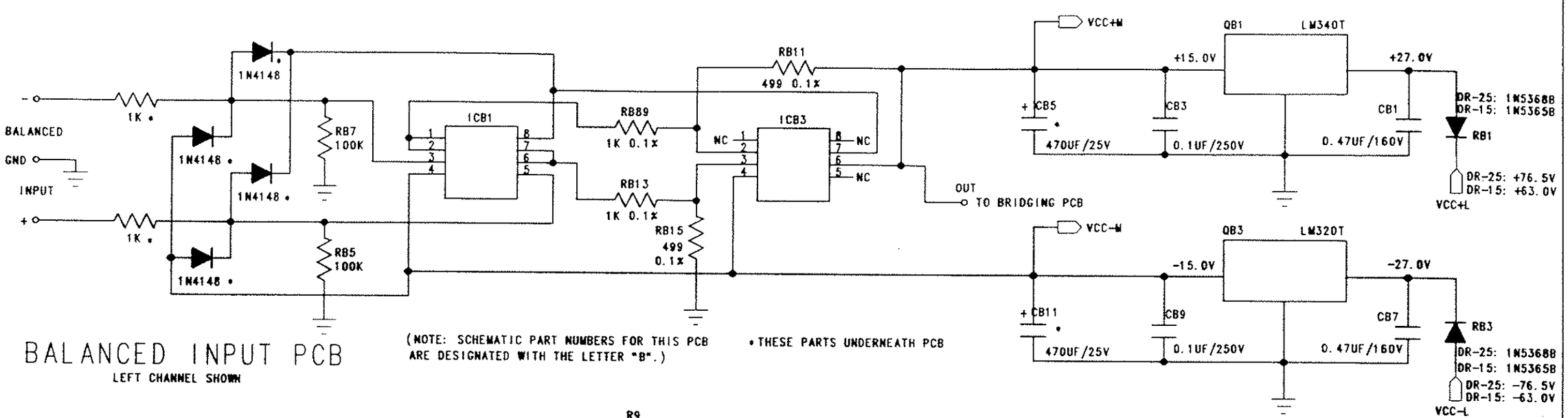
DR-25:
100-120VAC: 12 AMP FAST-BLO
220-240VAC: 6 AMP FAST-BLO



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	

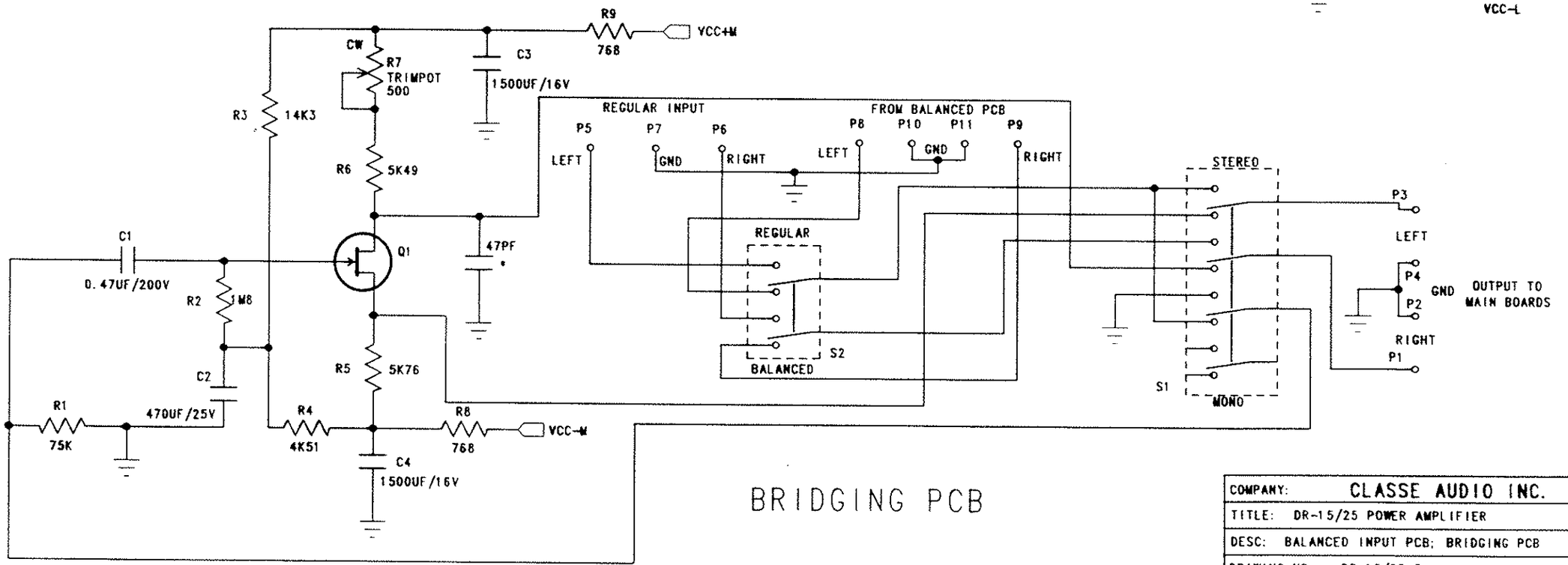


BALANCED INPUT PCB

LEFT CHANNEL SHOWN

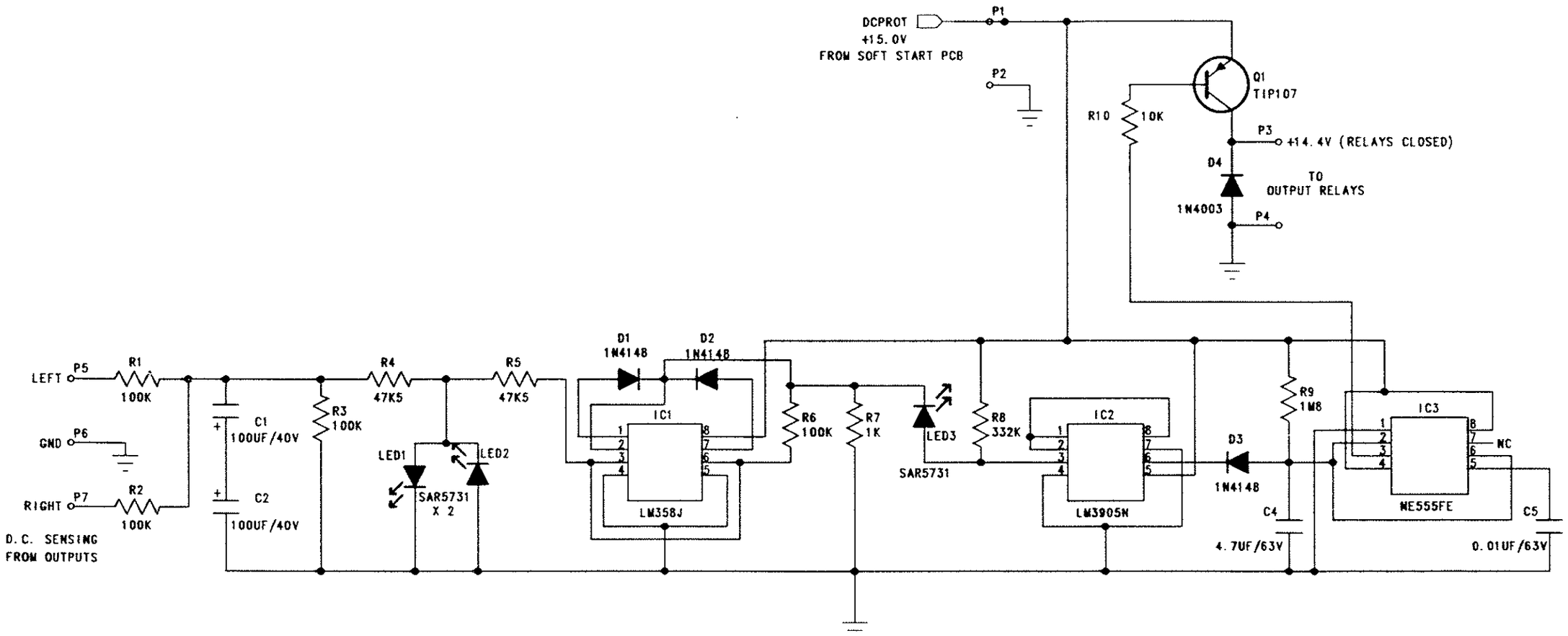
(NOTE: SCHEMATIC PART NUMBERS FOR THIS PCB ARE DESIGNATED WITH THE LETTER "B".)

* 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

DR-15 PARTS

OUTPUTS

MJ15024 (NPN) x 4

MJ15025 (PNP) x 4

DRIVERS

2N3773 (NPN) x 4

2N6609 (PNP) x 4

"BIAS FOR OLD MODELS"

DR 9-8 => 18

DR 10-M10 => 21

DR 15-25-M/S 1000-700 => 22

CLASSE' 70 => 21

FOR ALL MODELS & IF THE PRE-DRIVERS ARE MOUNTED ON HEAT SINK USE THE TOP COVER 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 trimpot 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 8r1 board. Connect scope to left and right coax cables.

3) Turn variac to line voltage. Check :

* Rails _Approx. +/- ~~70~~ 66.5vdc for DR-15; ~~80~~ 86.5vdc for DR-25
* Aux supply 17.5vdc before reg'r; 15vdc after reg'r.
* Supply to 50250R1: Approx. +/- 12.9vdc.
* On DR-9 8R1 board :
  - _ After zener diodes approx. +/- ~~30v~~ 33V 34-33v
  - _ 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 out of phase. 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 dicharge the main supply caps with 10ohm/25w resistor. Discharge caps again with a short.

11) Mark "TESTED" on base.

Date: Jan 15th 1991