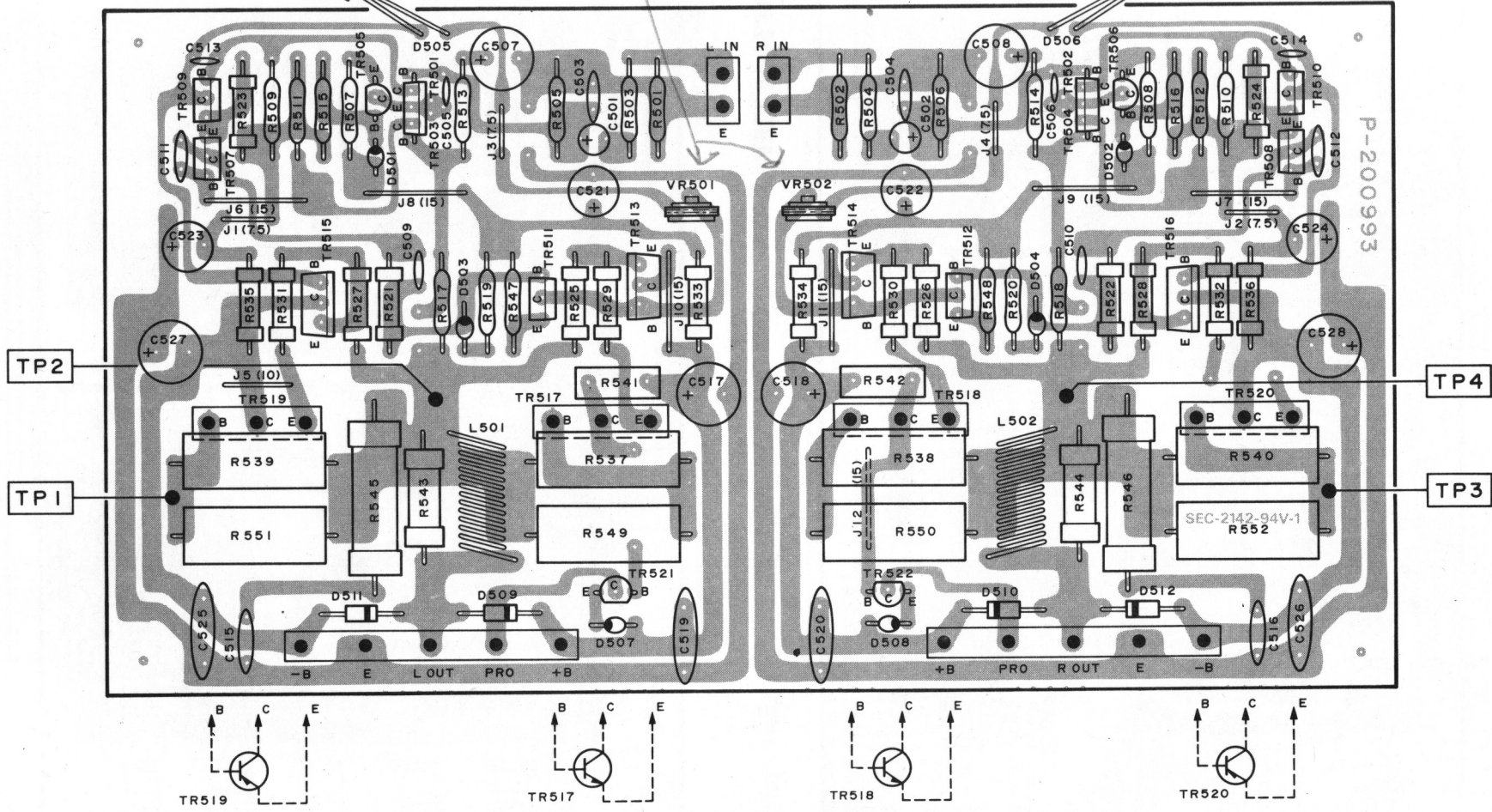


19. MAIN AMP P.C.B. (TOP & BOTTOM VIEWS)

TOP VIEW



REPLACED
BOTH LOW
OUTPUT.

REPLACED POTS
UNSTABLE BIAS
RUNS HOT.
C502, 501
INPUT CAP
BAD CAUSING
LOW VOLUME WITH
NO BASS - input

10. ALIGNMENT INSTRUCTIONS

AUDIO CIRCUIT ADJUSTMENT/CHECK

EQUIPMENT REQUIRED

NOTE:

1. DC Voltmeter
 2. Audio Oscillator
 3. Oscilloscope
 4. AC Voltmeter
- Maintain voltage at 120 volts, 60 Hz AC. (UL, C.S.A.) (240 V AC, 50 Hz for Australia & 220/240 V AC, 50 Hz for Europe)
 - Set SELECTOR switch to AUX.
 - Set Mode switch to Stereo.
 - See P.C.B. illustration for alignment points/adjustments.

For location of connection points and trimmer resistors, see P.C.B. view.

MAIN AMP ADJUSTMENT/CHECK

STEP	ADJUSTMENT	EQUIPMENT	CONNECTION	AUDIO FREQ.	LEVEL	ADJUSTMENT
1	Check balance by measuring DC voltage across Output terminal of L and R channel.	DC voltmeter	See Fig. 1	No signal	DC voltage should be within ± 30 mV	—
2	Idling current adjustment	DC voltmeter	See Fig. 2	No signal	Adjust voltage between TP1 and TP2 (L ch) and TP3 and TP4 (R ch) to be $10 \text{ mV} \pm 2 \text{ mV}$ (8 ohm load)	VR501 (L ch) VR502 (R ch)

For location of connection points and trimmer resistors, see P.C.B. view.

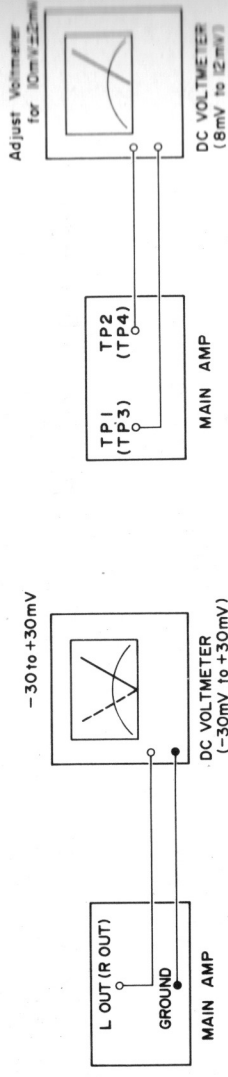


Figure 1

PROTECTOR CIRCUIT CHECK

STEP	ADJUSTMENT	EQUIPMENT	CONNECTION	AUDIO FREQUENCY	SETTING	LEVEL
1		Audio Osc. AC Voltmeter Oscilloscope	Fig. 3	1000 Hz	VOLUME: max. BASS, MID & TREBLE: center	Adjust input to AUX to get output level of 2 volts (8 ohm load).
2	Check if protector circuit is functioning	Same as STEP 1	Fig. 3	1000 Hz	Same as STEP 1	No output signal after output terminal is shorted. (Fig. 4)
3	Check for normal output	Same equipment as STEP 1. output load: 4 ohm	Fig. 3	1000 Hz	Same as STEP 1	Normal output after output signal is driven into clipping at 4 ohm load.

Figure 2

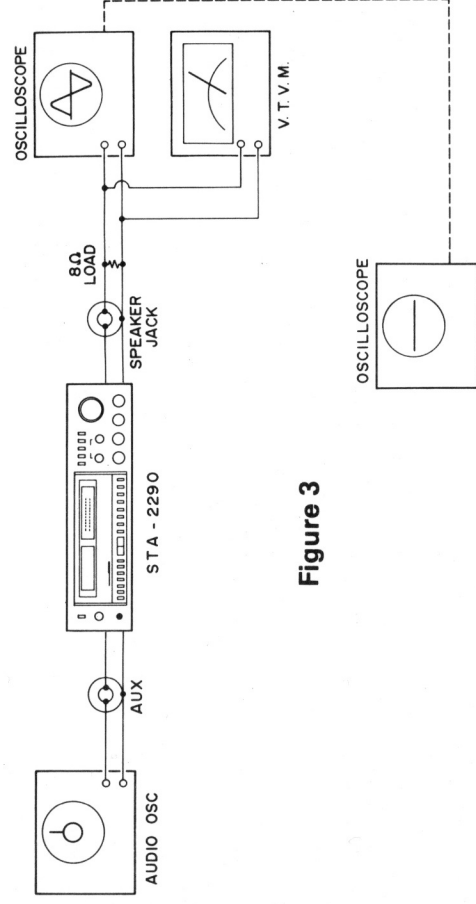
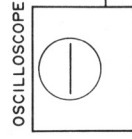


Figure 3

Figure 4

(When protector circuit is activated)



POWER METER ADJUSTMENT

STEP	ADJUSTMENT	EQUIPMENT	CONNECTION	AUDIO FREQ.	SETTING	LEVEL	ADJUSTMENT
1	Power Meter level adjustment Power Meter SW: Low position SPEAKERS Switch A:	Audio Osc. VTVM Oscilloscope	See Fig. 5	1000 Hz	VOLUME: max. BASS, TREBLE BALANCE: center	Adjust input to AUX to get output level of 3.5V (1.5W) (8 Ω load).	VR701 (L ch) VR702 (R ch) so the power Meters indicate 1.5W
2	Check the Power Meter level Power Meter SW: High position SPEAKERS Switch B:	Same as above	See Fig. 5.	1000 Hz	Same as above	Adjust input to AUX to get output level of 34.6V (150W) (no load)	Check to see if Power Meters indicate 150W.

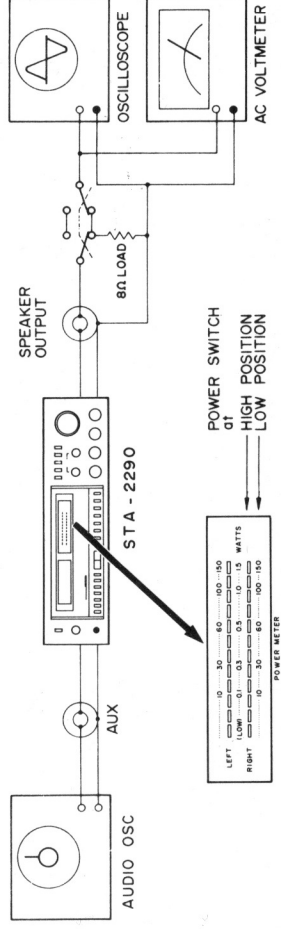
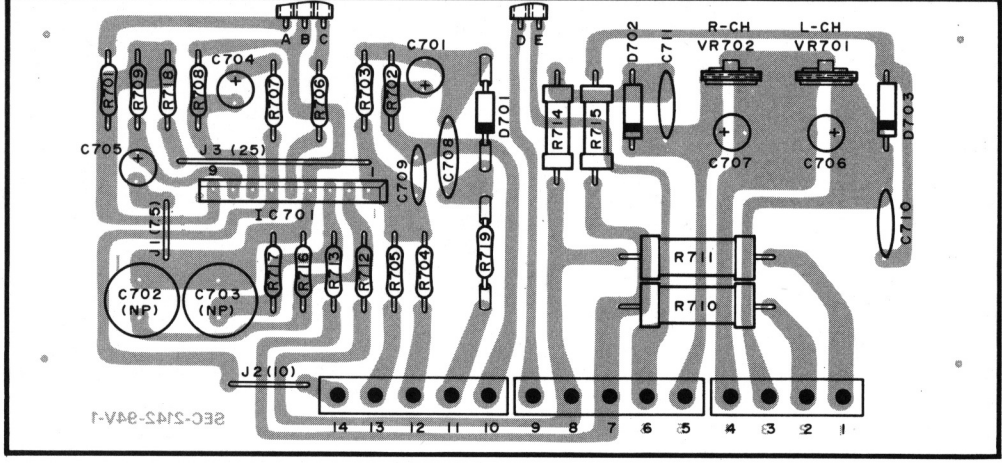


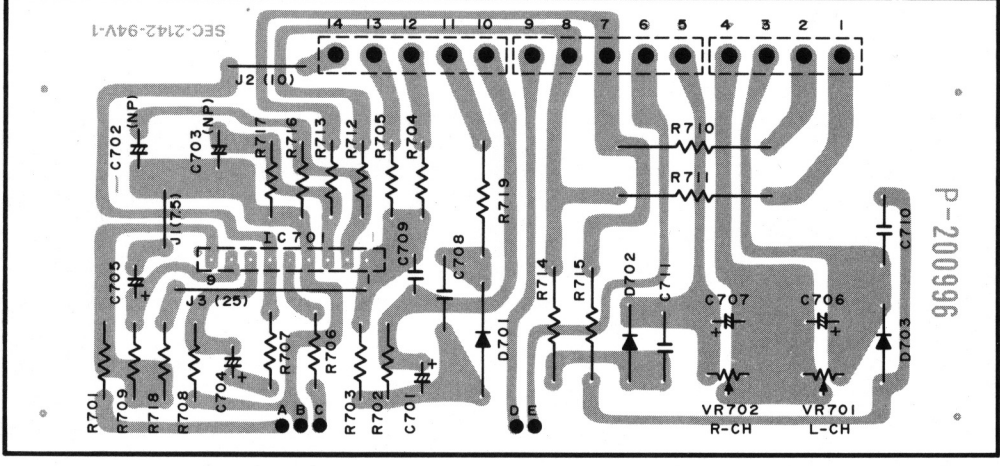
Figure 5

22. PROTECTOR P.C.B. (TOP & BOTTOM VIEWS)

TOP VIEW



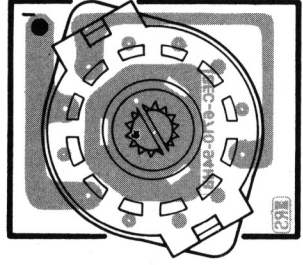
BOTTOM VIEW



P-200996

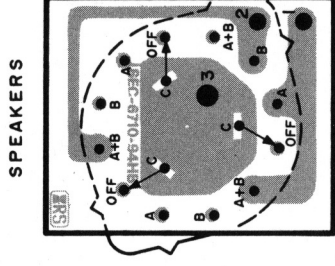
23. SPEAKER SELECTOR P.C.B. (TOP & BOTTOM VIEWS)

TOP VIEW



SPEAKERS

BOTTOM VIEW



SPEAKERS