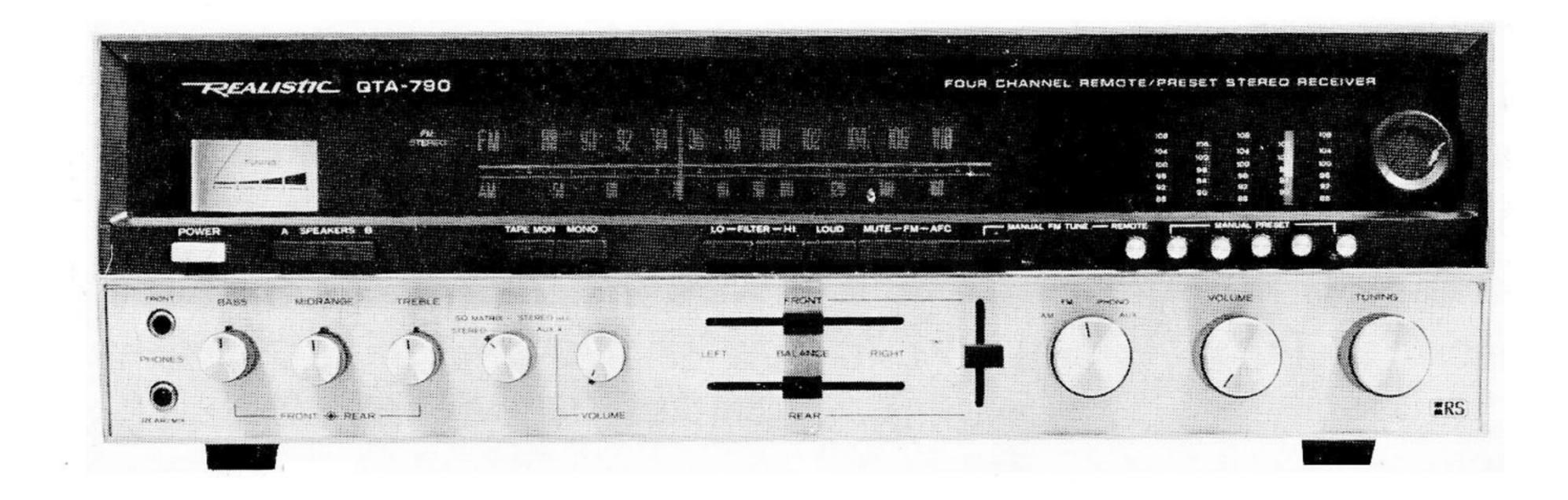
SERVICE MANUAL

FREALISTIC

Model QTA-790 4CHANNEL/STEREOPHONIC AM-FM SOLID STATE RECEIVER with Remote Control

Cat. No. 31-4010



CUSTOM MANUFACTURED FOR
RADIO SHACK A TANDY CORPORATION COMPANY

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SPECIFICATIONS

FM TUNER SECTION

Description	Condition	Nominal Spec.	Limit Spec.
(MONO)			>
Antenna Impedance	Balanced : (Unbalanced)		300/(75) ohms
Frequency Range		88MHz~108MHz	88 MHz ~ 108 MHz
IHF Usable Sensitivity	98 MHz, 100% Mod. with 400 Hz	2 µ V	$<$ 4 μ \vee
(3% Distortion)	90 MHz, 106 MHz	2 μ∨	
Full Limiting	98 MHz 100% Mod3 dB		< 4 μV
Signal to Noise Ratio	98 MHz, 100% Mod. 1 mV Input	60 dB	>55 dB
Image Rejection	106 MHz	75 dB	>40 dB
I. F. Rejection	98 MHz	80 dB	> 70 dB
Harmonic Spurious Response	98 MHz, 1 mV Input	100 dB	>70 dB
Alt. Channel Selectivity	98 MHz, ±400 kHz, 100 μV Input	55 dB	>40 dB
A. M. Suppression	98 MHz, 1 mV Input	45 dB	>40 dB
Capture Ratio	98 MHz, 1 mV Input	2 dB	< 4 dB
Total Harmonic Distortion	400 Hz, 100% Mod. 1 mV Input	0.3%	< 1.0%
Frequency Response	at 30 Hz	-1.0 dB	-2 ±2 dB
(Difference from 75 µ	100 Hz to 5 kHz	±0.5 dB	$0 \pm \frac{1}{2} dB$
de-emphasis Curve)	at 10 kHz	-1.0 dB	-2 ±2 dB
Output Voltage	400 Hz, 100% Mod. 1 mV Input	1.0 V ±2 dB	1.0 V ±2 dB
Frequency Drift	Between +10°C and +40°C	±50 kHz	AFC ON: ±100 kHz
		±100 kHz	OFF: ±250 kHz
Discriminator Bandwidth	peak-to-peak	400 kHz	
IF Bandwidth	at -6 dB down	400 kHz	
(STEREO)			
Total Harmonic Distortion	(L + R)		
	400 Hz, 90% Mod. 1 mV Input	1.0%	< 2.0%
Output Voltage	400 Hz, 90% Mod. 1 mV Input	0.8 V ±2 dB	0.8 V ±2 dB
Pilot Mod.		5%	< 7%
Channel Separation	100 Hz, 90% Mod. 1 mV Input	30 dB	> 20 dB
	1 kHz, 90% Mod. 1 mV Input	32 dB	> 26 dB
	8 kHz, 90% Mod. 1 mV Input	20 dB	> 18 dB
38 kHz Suppression		45 dB	>35 dB
19 kHz Suppression		45 dB	>35 dB
S. C. A. Rejection	at 67 kHz	55 dB	>50 dB
	67 kHz, 10% Mod. Main and Sub: Off		
	with 15 kHz Low Pass Filter		
Accessory Circuits:			
A. F. C. Holding Range	98 MHz 1 mV Input -2 dB Output	±300 kHz	±370 kHz ±100 kHz
Muting Sensitivity	98 MHz —3 dB Output	10 μV	<15 µV
	Output at Input 2 μ V	-70 dB	<-40 dB
	∵ 0 dB : Output at 1 mV Input		

AM TUNER SECTION

Description	Condition	Nominal Spec.	Limit Spec.
Frequency Range		520kHz~1620kHz	530 kHz ~ 1620 kHz
Usable Sensitivity for S/N 20 dB	1000 kHz, 30% Mod. with 400 Hz	7 μ∨	< 50 μV
Signal to Noise Ratio	1000 kHz, 30% Mod. 1000 μV Input-	50 dB	> 40 dB
Image Rejection	1000 kHz	45 dB	>30 dB

Description	Condition	Nominal Spec.	Limit Spec.
I. F. Rejection	1000 kHz	40 dB	>30 dB
Selectivity	1000 kHz, 20 dB S/N Input	25 dB	>20 dB
Total Harmonic Distortion	400 Hz, 30% Mod. 1000 μV Input	1%	< 3%
Frequency Response	at 100 Hz 0 dB at 400 Hz	-2 dB	$-3 dB \pm_4^3 dB$
	at 5 kHz	-9 dB	-10 dB ±4 dB
Output Voltage	400 Hz, 30% Mod. 1000 μV Input	0.3 V ±2 dB	0.3 V ±2 dB
AM Tweet	5 mV Input 2 IF	4%	< 10%
	3 1F	3%	< 10%
Meter Sensitivity (FM)	98 MHz 1 mV Input	4.7	4.5
(AM)	1000 kHz Input 1000 μV	4.0	3.5

SQ SECTION

Description	Condition	Nominal Spec.	Limit Spec.
10% ~ 40% Blend		-	
Matrix Circuit		-	
Frequency Response	50 Hz ~ 20 kHz	-0.5 dB	+2 dB 0 dB -4 dB
	1 kHz : 0 dB		
Matrix Response	Main Volume Max. LF to RF		3 dB ±2 dB
	at 1 kHz LR to RR		3 dB ±2 dB
	LF: Lch Front LR: Lch Rear		
	RF: Rch Front RR: Rch Rear		
	LT Input LF to LR		$-4 dB \pm 2 dB$
	L F to R R		$-4 dB \pm 2 dB$
	RT Input RF to RR		-4 dB ±2 dB
	R _F to L _R		-4 dB ±2 dB
	LT: Lch Encoded Input		
	Rт: Rch Encoded Input		
Channel Separation	Main Volume Max. LF to RF		20 dB ±7 dB
	at 1 kHz La to Ra		8 dB ±4 dB

REMOTE CONTROL SECTION

Description	Condition	Nominal Spec.	Limit Spec.
Frequency Range	Tuning 40.0 kHz	40.0 kHz	40.0 kHz ±0.2 kHz
Remote Controller			
(Transmitting Section)	Volume Increase 39.2 kHz		39.170 kHz ±0.4 kHz
	Decrease 40.8 kHz		40.760 kHz ±0.4 kHz
Sensitivity	Tuning Operating Point	10 yrds.	8 yrds.
Remote Controller			
Receiving Section	Volume Operating Point	8 yrds.	6.5 yrds.
	: Receiving Element		
	Transmitting Element		

Description		Condition	Nominal Spec.	Limit Spec.
Response Receiver	Tuning	more than 8.5 V Operating Pulse Non Operating Pulse Operating Cycle Starting Point	200 ms 50 ms 200 ms 250 ms	> 200 ms < 50 ms > 200 ms < 250 ms

AUDIO SECTION

Description	Condition	Nominal Spec.	Limit Spec.
RMS Output Power	1000 Hz		
One Channel Op.	8 Ω Load, 0.8% THD	36 W/Ch	32 W/Ch
	1000 Hz		
4 Channel Op.	8 Ω Load, 0.8% THD	26 W/Ch	22 W/Ch
Distortion	at 32 W Output		
	100 Hz	0.5%	
	1 kHz	0.5%	
	10 kHz	0.5%	
Low Level Harmonic Distortion	1000 Hz, 0.1 W 8 Ω Load, Each Ch Op.	0.2%	0.4%
Intermodulation Distortion	70 Hz: 7000 Hz; 4:1	28W	25 W
	Output Power at 1% IM		
	8 Ω Load Each Ch Op.		
Power Bandwidth	0.8% THD, -3 dB	20 Hz ~ 40 kHz	25 Hz to
	8 Ω Load Each Ch Op.		30 kHz
Frequency Response	0 dB at 1000 Hz, Volume; –30 dB		
	25 Hz to 30 kHz	_2 dB	$\pm \frac{1}{3}$ dB
	8 Ω Load Each Ch Op.		3
	at 20 watts 20 Hz ~ 30 kHz	±2 dB	
Channel Separation	400 Hz, Input : Aux. 4	50 dB	45 dB
	Aux. 2	50 dB	45 dB
	10,000 Hz, Input: Aux. 4	38 dB	35 dB
	Aux. 2	33 dB	30 dB
	Opposite Ch Input is shorted.		
Hum and Noise (S/N)			
Below Rated Output			
"PHONO"	Input Terminal is shorted	65 dB	60 dB
"TAPE IN"	(Tape in Volume Max.)	70 dB	65 dB
"AUX"		70 dB	65 dB
Input Sensitivity	8 Ω Each Ch Op. 32 W		
"PHONO" (HIGH)		2.5 mV	2.5 mV ±3 dB
"PHONO" (LOW)		5.0 mV	5.0 mV ±3 dB
"TAPE IN"	Tape in Volume Max./Min.	200 mV	200 mV/2 V ±2 dB
"AUX"	Tapo na voidino ivida./iviiii.	200 mV	200 mV ±2 aB
"AUX 4"		200 mV	200 mV ±2 dB
Maximum Input Signal		200 1117	200 111 V -2 UL
"PHONO" (HIGH)	120 Hz at 10/ TUD	25 mV	20 m\/
THONG (IIIGH)	120 Hz at 1% THD	25 mV	20 mV
	1000 Hz at 1% THD	100 mV	90 mV
	10,000 Hz at 1% THD	500 mV	400 mV

Description	Condition	Nominal Spec.	Limit Spec.
Equalization Characteristics			-
"PHONO"	RIAA (30 Hz to 10 kHz)	±2 dB	±2 dB
Tone Control	0 dB at 1000 Hz		
"BASS" Max. to Min.	100 Hz	±12 dB ±2 dB	±12 dB ±2 dB
"MID" Max. to Min.	1500 Hz	± 6 dB ±2 dB	± 6 dB ±2 dB
"TREBLE" Max. to Min.	10,000 Hz	±12 dB ±2 dB	±12 dB ±2 dB
Loudness Compensation	100 Hz, volume: -30dB	+ 9 dB ± 2 dB	+ 9 dB ±2 dB
	10,000 Hz, volume:-30dB,0 dB 1000 Hz	+4.5 dB±2 dB	+ 5 dB ±2 dB
High Filter	10 kHz	-6 dB ±2 dВ	-6 dB ±3 dB
Low Filter	20 Hz	−9 dB ±2 dB	−9 dB ±3 dB
Residual Hum and Noise	8 Ω Load	2.0 mV	2.5 mV
	Mode : SQ Matrix	3.0 mV	4.0 mV
Tape Out Level			
"PHONO"		160 mV	160 mV ±2 dB
"AUX"		150 mV	150 mV ±2 dB
Phones Power	8 Ω Load 1 kHz (SP Load 32 W/8 Ω)	10 mW	10 mW ±3 dB
Input Impedance	PHONO	50 K ohms	
	AUX	50 K ohms	

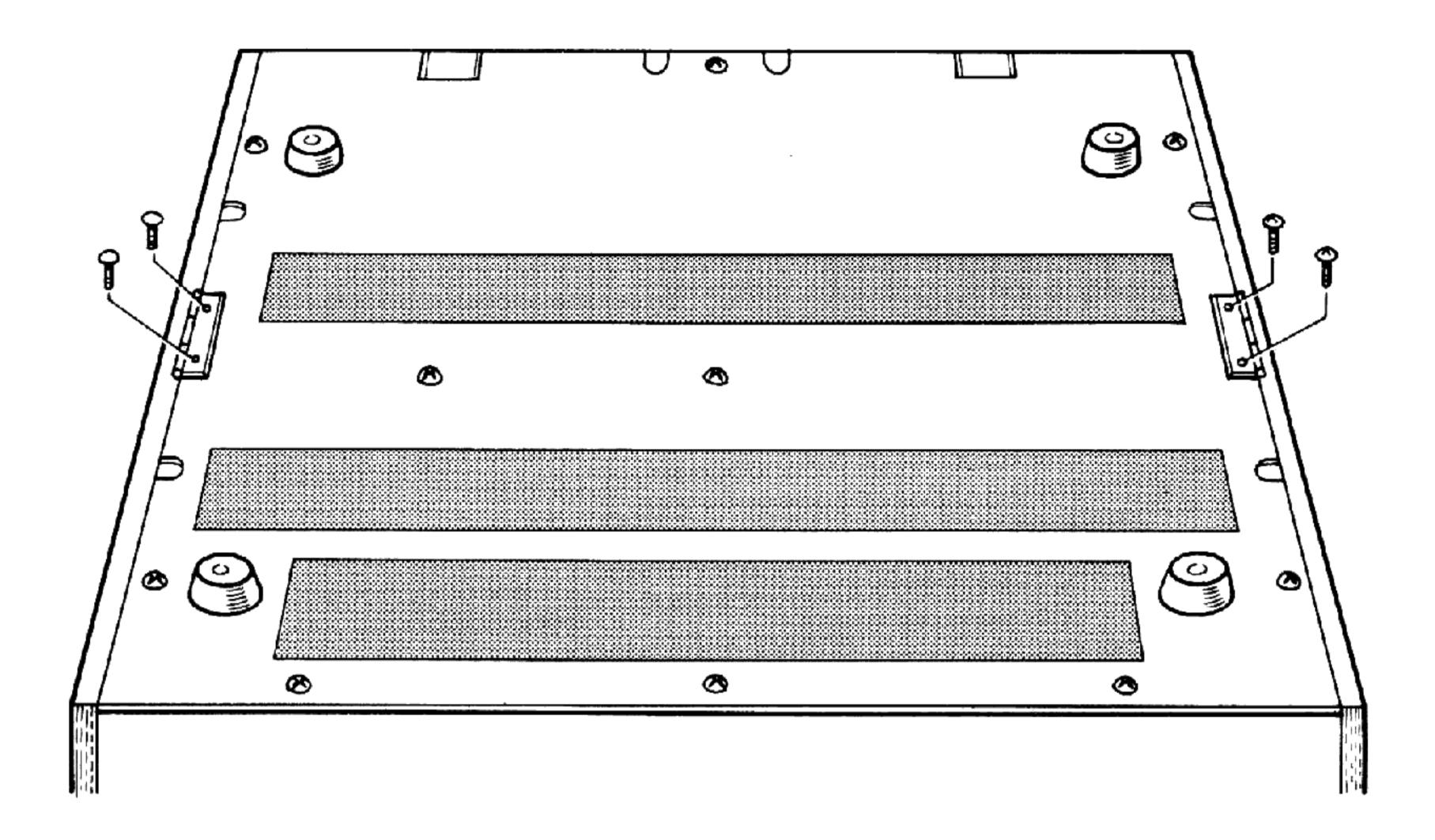
OTHER ITEM

Description	Condition	Nominal Spec.	Limit Spec.
Power Consumption Transistors and Diodes Used		AC 120 V, 60 Hz	AC 120V, 50/60 Hz 35 Watts at no Signal 400 Watts at Full Power (4Ω Load) 2FET, 4IC, 108 Transistors and 74 Diodes
Dimensions			(Including front end unit) Width: 18-7/8 inches (48.0 cm) Height: 5-3/4 inches (14.5 cm)
Weight			Depth: 16 inches (41.0 cm) 33 Lbs. (15 kg)
		•	

BEFORE ADJUSTMENT

How to Remove Cabinet

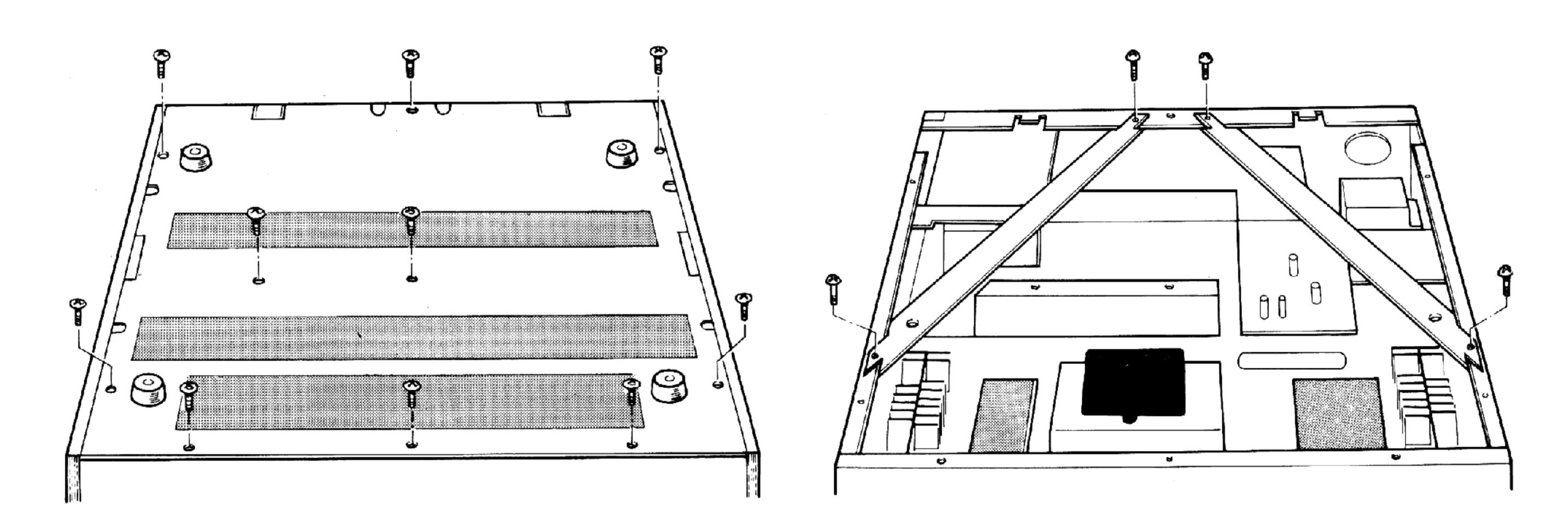
- 1. Remove 4 screws holding cabinet.
- 2. Remove 4 screws holding hinge on bottom plate.
- 3. Remove cabinet.



■ How to Remove Bottom Plate

- 1. Remove 10 screws from bottom plate.
- 2. Remove bottom plate.

NOTE: If you can't service easily, remove chassis reinforcing hardware.

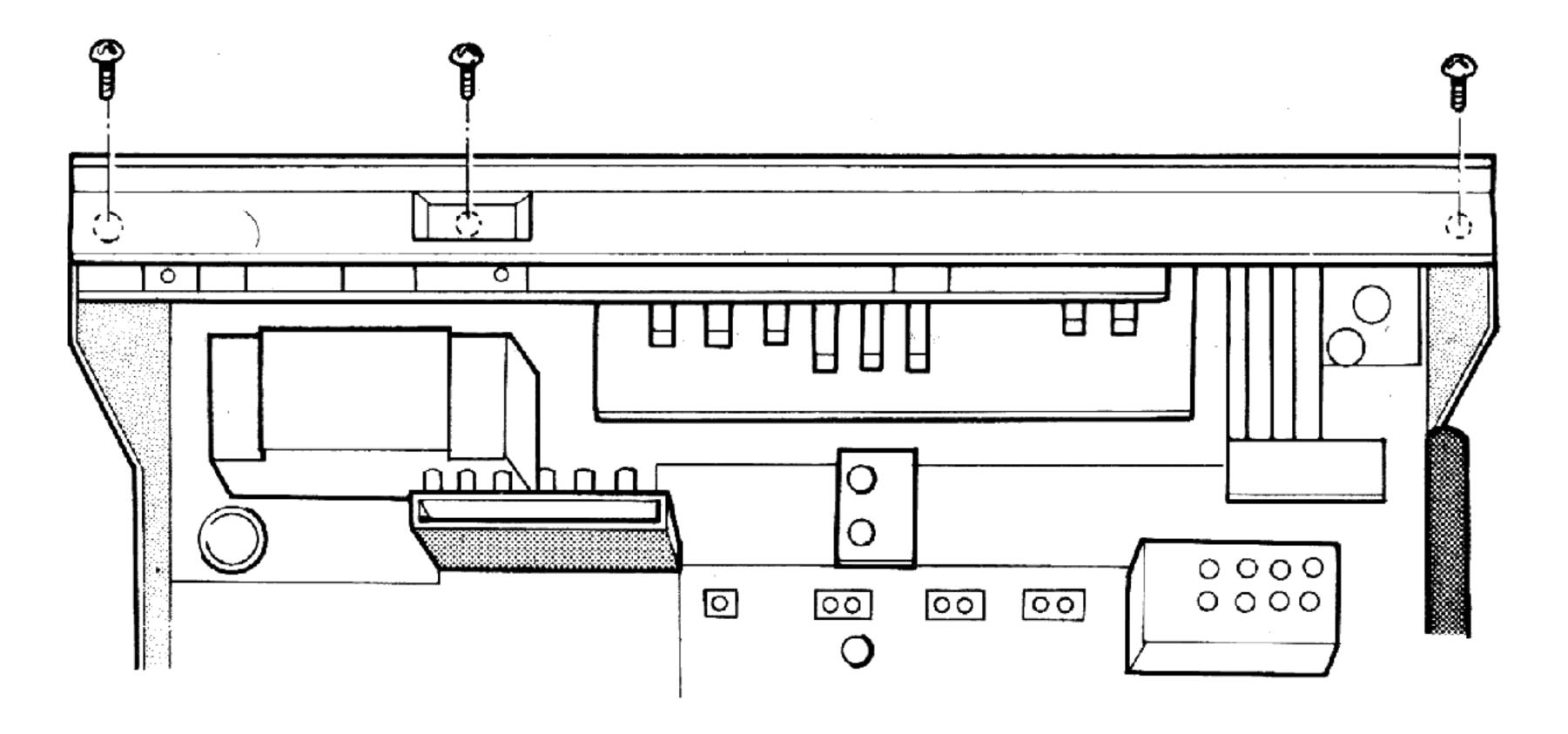


How to Remove Panel

1. Pull off all knobs except pushbutton and preset.

NOTE: Front tone knobs are fixed with set-screws.

- 2. Remove 3 screws holding dial cover.
- 3. Remove TUNING, SELECTOR and MODE control nuts.
- 4. Pull out panel.



■ How to Remove Potentiometer (VOLUME)

- 1. Remove 2 screws holding potentiometer mounting hardware.
- 2. Loosen pulley set-screw and remove pulley.
- 3. Remove potentiometer nut and pull out potentiometer.

How to Remove PC board

Tone Amp Unit

- 1. Remove cabinet, bottom plate and panel.
- 2. Remove 2 screws holding L shaped hardware. (Refer to figure)
- 3. Pull out connector with L shaped hardware.
- 4. Remove nut of potentiometer.
- 5. Pull out tone amp unit.

Pushbutton Switch Unit

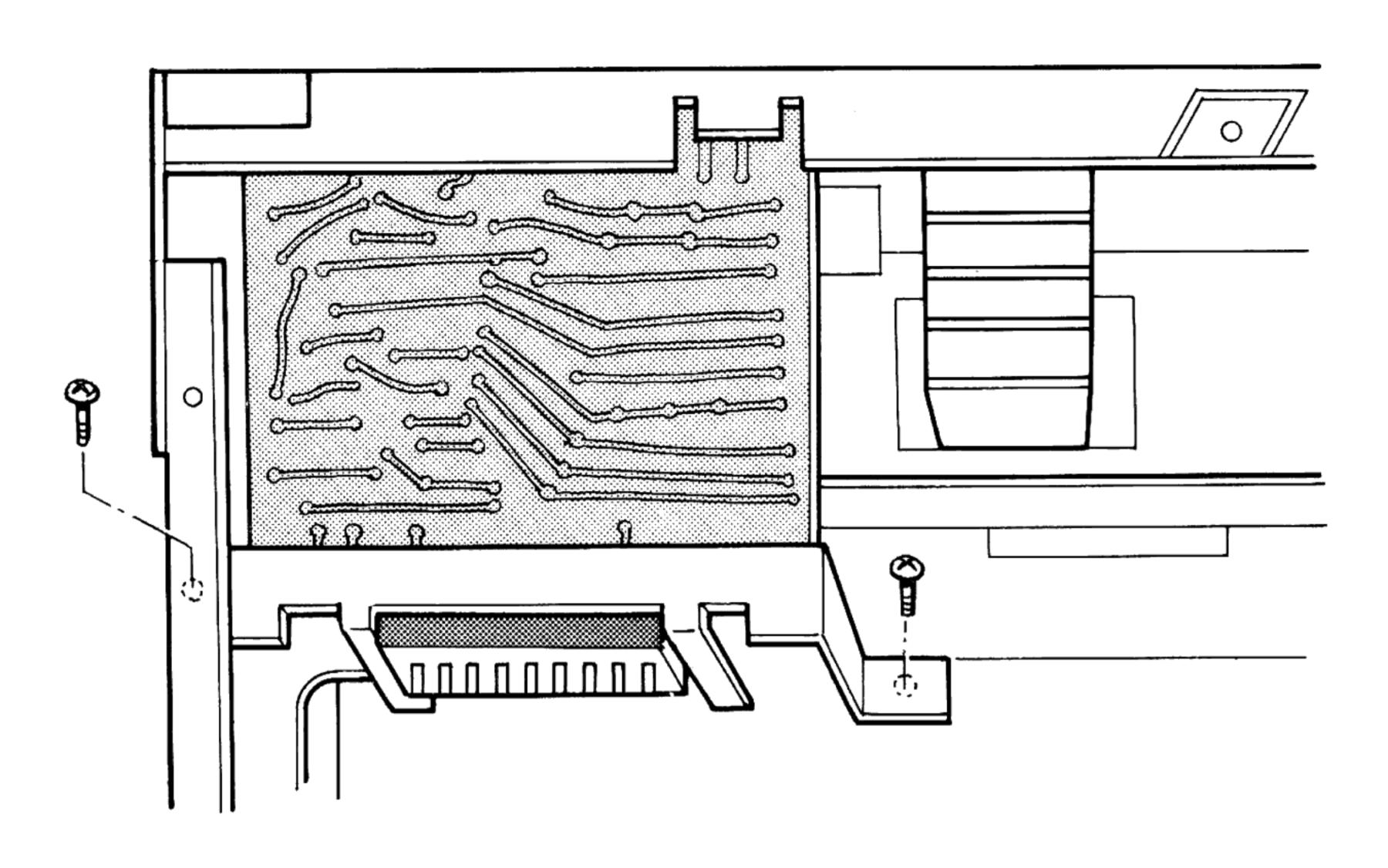
- 1. Remove screws holding pushbutton switch unit.
- 2. Pull out unit.

NOTE: To repair 8-pushbutton unit remove preamp unit and pointer unit before adjustment.

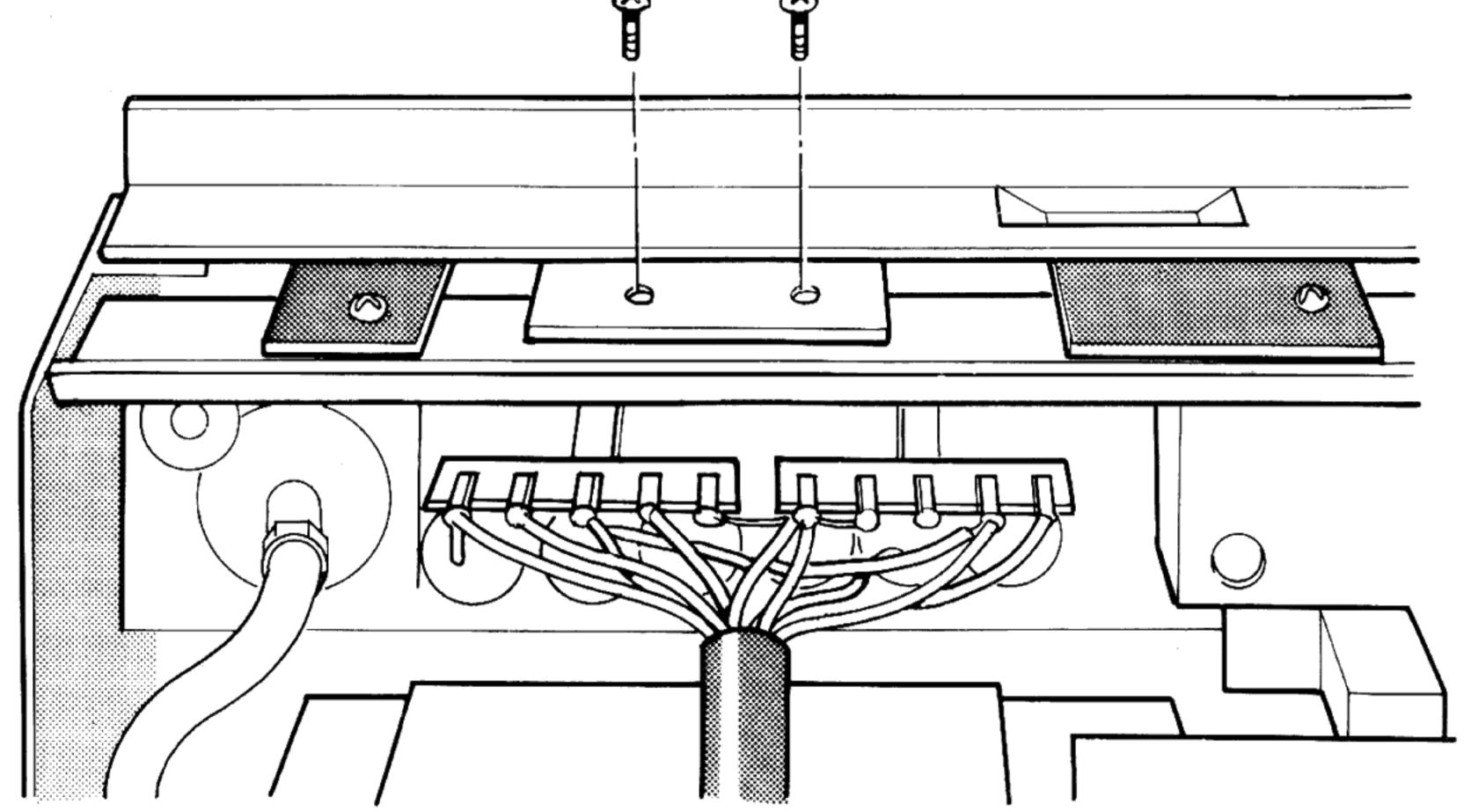
Preset Unit

- 1. Remove 2 screws holding lug type terminal. (Refer to figure)
- 2. Remove 4 screws holding motor and push it down. (Refer to figure)
- 3. Remove 2 screws holding preset unit and pull it out.

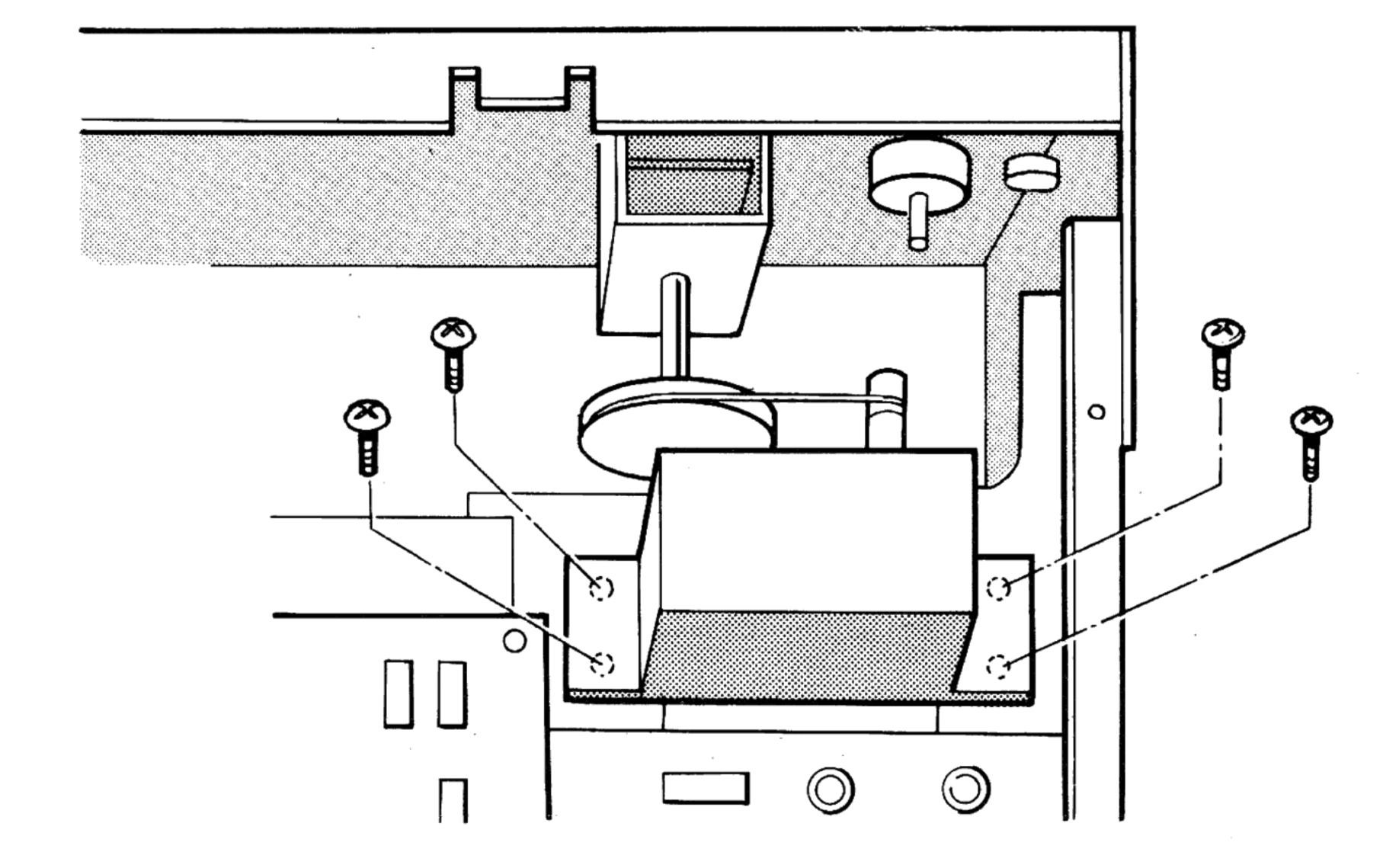
◀ TONE AMP PC BOARD



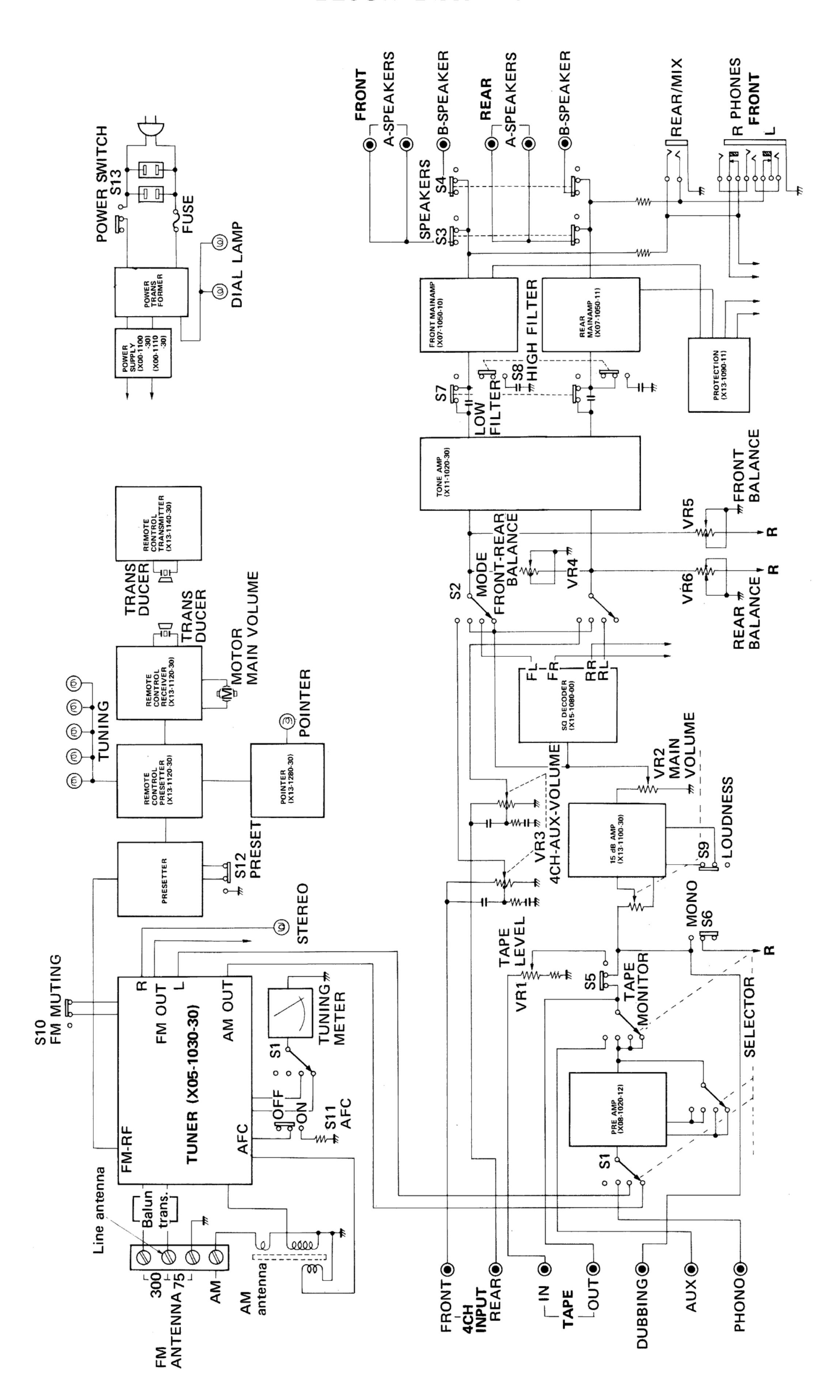




■ MOTOR



BLOCK DIAGRAM



ADJUSTMENT

AM SECTION

Don't attempt alignment unless the following test equipment is available. NOTE: Test points are shown in schematic diagram and on p. c. board illustrations.

- Test equipment 1. Signal generator (AM/EM)
 - 2. Oscilloscope (Scope).
 - 3. VTVM (AC)
 - 4. VTVM (DC)
- 5. Audio generator (AG)
- 6. Sweep generator (SSG)
- 7. Stereo signal generator
- 8. Frequency counter

Always maintain as low an input signal as possible and still obtain a usable output.

Cton	Signal generator		Selector	Tuning dial	Output	Λ dit	Remarks	
Step	Connection	Frequency	switch	setting	indicator	Adjust	Memarks	
1 a	AM antenna terminal	455 kHz (400 Hz 30% Mod)	AM	Any non- inter- ference position	VTVM & Scope at TAPE REC jack	(X05-1030-30) Tg2, 4, 6	Maximum deflection	
	Follov	v 1b if you use	a sweep ger	erator that pro	vides 455 kHz cen	ter frequency.		
1b	AM antenna terminal	455 kHz (Sweep)	AM	Any non- inter- ference position	VTVM & Scope at TAPE REC jack	(X05-1030-30) Tg2, 4, 6	Maximum deflection	
2	AM antenna terminal	600 kHz (400 Hz 30% Mod)	AM	600 kHz	VTVM & Scope at TAPE REC jack	(X05-1030-30) Tg8 and FERRITE ANT.	Maximum deflection	
3	AM antenna terminal	1,400 kHz (400 Hz 30% Mod)	AM	1,400 kHz	VTVM & Scope at TAPE REC jack	(X05-1030-30) CTg1, 2	Maximum deflection	
4	Repea	it steps 2 and 3	3 until no fu	urther improve	ment is possible.		,	
5*	AM antenna terminal	1,000 kHz (400 Hz 30% Mod)	AM	1,000 kHz	VTVM & Scope at TAPE REC jack	(X05-1030-30) VRg5	Output level is 0.3 volts	
6*	AM antenna terminal	1,000 kHz (400 Hz 30% Mod)	AM	1,000 kHz	Tuning	(X05-1030-30) VRg3	Tuning meter indicates	

^{*} In step 5, ferrite antenna input 1000 μ V.

In step 6, ferrite antenna input 5 μ V.

FM SECTION

Always maintain as low an input signal as possible and still obtain a usable output.

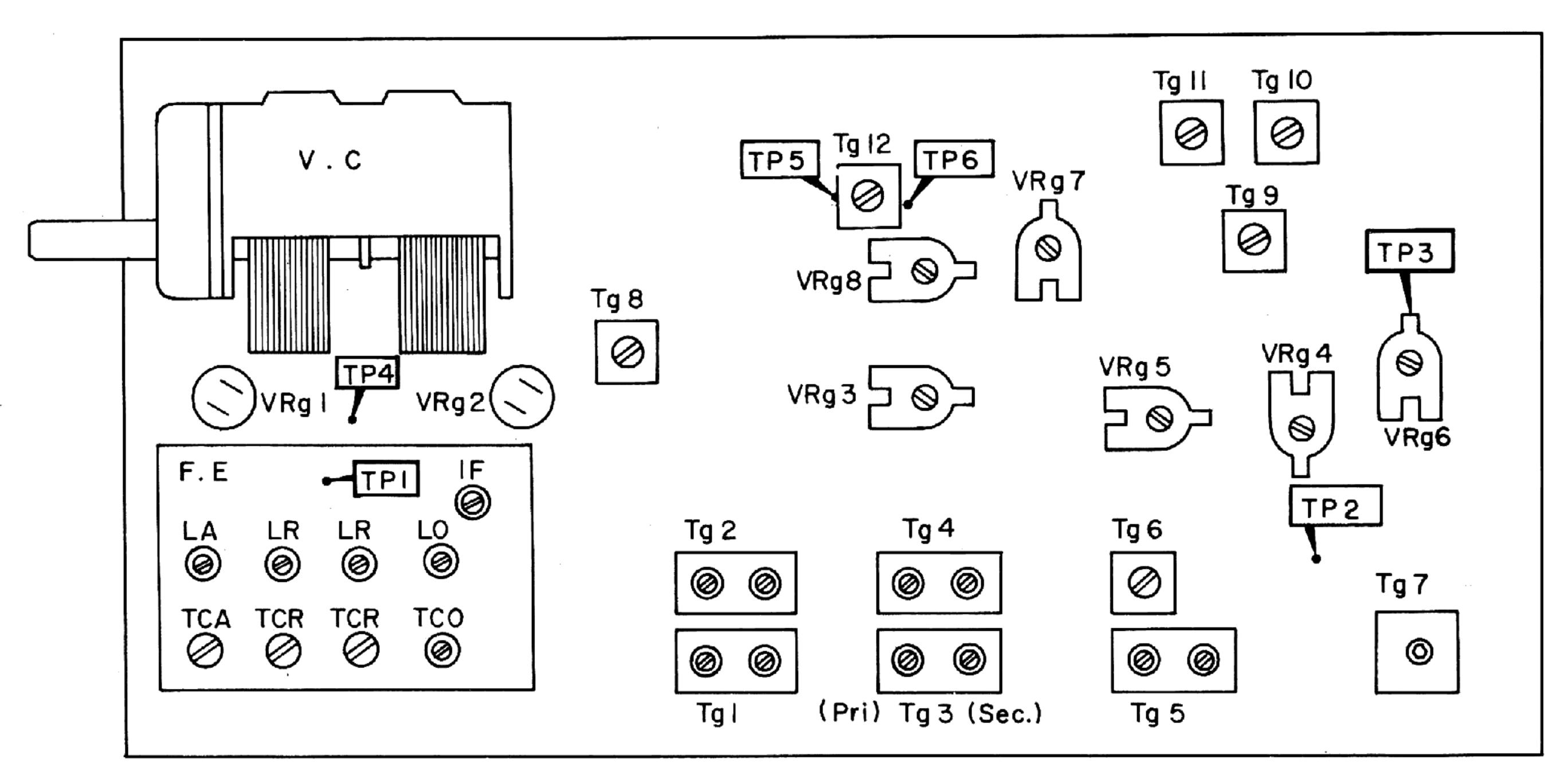
Ston	Alian	Dummy	FM SG or SWEEP		Tuning dial	Output	Adime	Damanla
Step	Align	antenna	Connection	Input signal	setting	indicator	Adjust	Remarks
1	IFT		Test point 1 through a capacitor 10~20pF	through apacitor (Unmod)	Any non- inter- ference position	VTVM & Scope at test point 2	(X05-1030-30) Tg 3 (Pri) Tg 1, IF	Maximum deflection
2		Increase s	weep generato	r output.				
3	IFT		Test point 1 through a capacitor 10~20pF	Sweep 10.7 MHz (Unmod)	Any non- inter- ference position	VTVM & Scope at test point 3	(X05-1030-30) Tg 3 (sec.) Tg 5	Maximum deflection
4	Discrim- inator		Test point 1 through a capacitor 10~20pF	Sweep 10.7 MHz (Unmod)	Any non- inter- ference position	VTVM & Scope at test point 3	(X05-1030-30) Tg 7	Maximum deflection
5	RF	Yes	FM antenna terminal	SSG 90 MHz 400 Hz (Mod) 100% (Dev) 1mV(Input)	90 MHz	Tuning meter	(X05-1030-30) VRg2	Maximum deflection
6	RF	Yes	FM antenna terminal	SSG106MHz 400 Hz (Mod) 100% (Dev) 1mV(Input)	106 MHz	Tuning meter	(X05-1030-30) VRg1	Maximum deflection
7		Repeat st	ep 5 and 6 ur	itil no further in	nprovement is	s possible.		
8*	RF	Yes	FM antenna terminal	SSG 90 MHz 400 Hz (Mod) 100% (Dev) 10µV(Input)	90 MHz	Tuning meter	(X05-1030-30) LO LA, LR LR	Maximum deflection
9*	RF	Yes	FM antenna terminal	SSG 106 MHz 400 Hz (Mod) 10µV (Input)	106 MHz	Tuning meter	(X05-1030-30) TCO TCA TCR, TCR	Maximum deflection
10	Out- put	Yes	FM antenna terminal	SSG 98 MHz 400 Hz(Mod) 100% (Dev) 1mV(Input)	98 MHz	VTVM & Scope at TAPE REC jack	(X05-1030-30) VRg6	Output level is 1 volt
11	METER	Yes	FM antenna terminal	SSG 98 MHz 400 Hz (Mod) 100% (Dev) 1mV (Input)	98 MHz	Tuning	(X05-1030-30) VRg4	Tuning meter indicates 4.8

^{*} In step 8, connect the VTVM to test point 4 and turn the tuning knob so that the VTVM reads 3.88 volts.

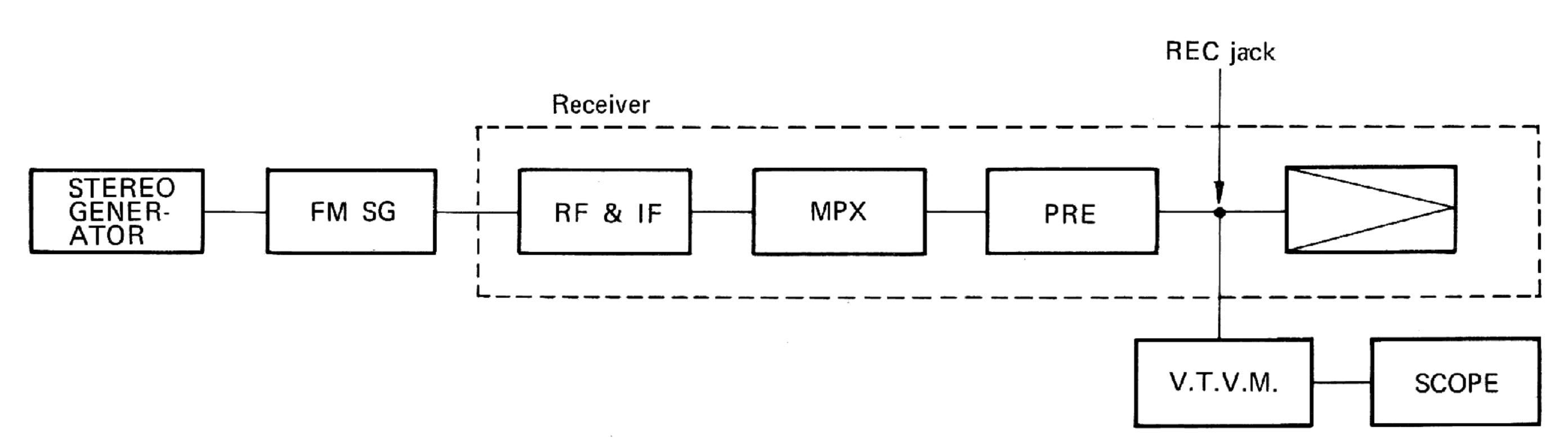
^{*} In step 9, connect the VTVM to test point 4 and turn the tuning knob so that the VTVM reads 17.86 volts.

SCA FILTER

Step	Audio signal generator connection	Audio signal generator frequency	AC VTVM & Scope connection	Adjust	Remarks
1	Test point 3.	66 kHz	Test point 5.	(X05-1030-30) Tg10	Minimum deflection
2	Test point 3.	72 kHz	Test point 5.	(X05-1030-30) Tg11	Minimum deflection



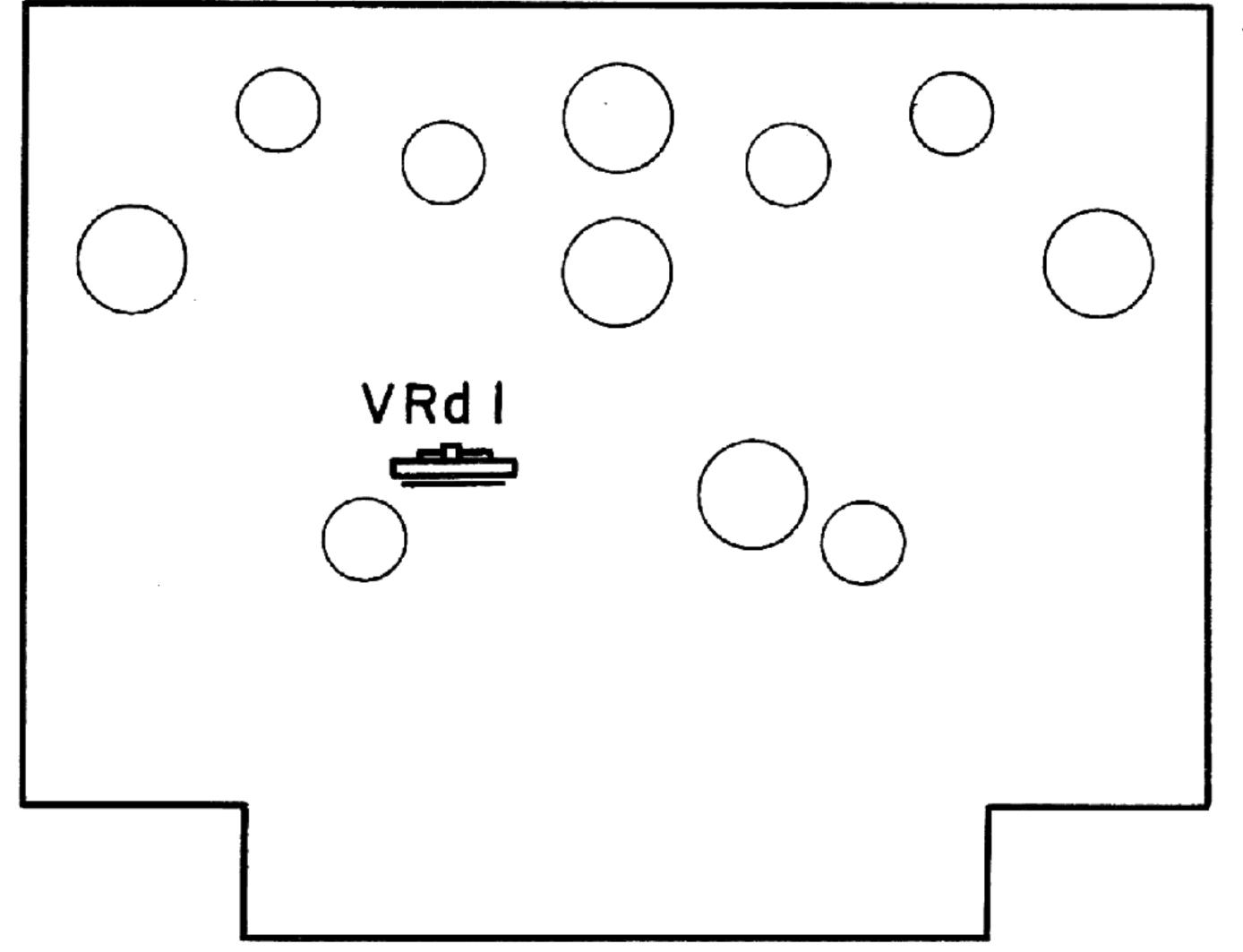
▲ TUNER PC BOARD (X05-1030-30)



▲ CONNECTION OF TEST EQUIPMENT

Step	FM stereo signal generator			19 kHz pilot	VTVM &				
	Connection	Modulation frequency	Input selector	carrier	Scope	Adjust	Remarks		
1*	FM-SSG EXT jack			6 %	Test point 6	(X05-1030- 30) Tg 9, 12	Maximum deflection		
2*	FM-SSG EXT jack	400 Hz	A — B	8 %	TAPE REC jack	(X05-1030- 30) Tg12, Tg 9	Maximum deflection		
3	Repeat step 2 until no further improvement is possible.								
4	FM-SSG EXT jack	400 Hz	A + B	6 %		VRg8	Stereo indicator is on the threshold of lighting off.		
5*	FM-SSG EXT jack	400 Hz	A + B	8 %		VRg7	Stereo indicator lights.		
6	FM-SSG EXT jack	1 kHz	A (R)	8 %	Left TAPE REC jack	VRd1	Minimum		
7	FM-SSG EXT jack	1 kHz	B (L)	8 %	Right TAPE REC jack	V.Rd1	Minimum		

^{*} In step 1, set potentiometers VRg7, 8 to max.



◄ PREAMP PC BOARD (X08-1020-12)

In step 2, adjust Tg12 in a clockwise direction.

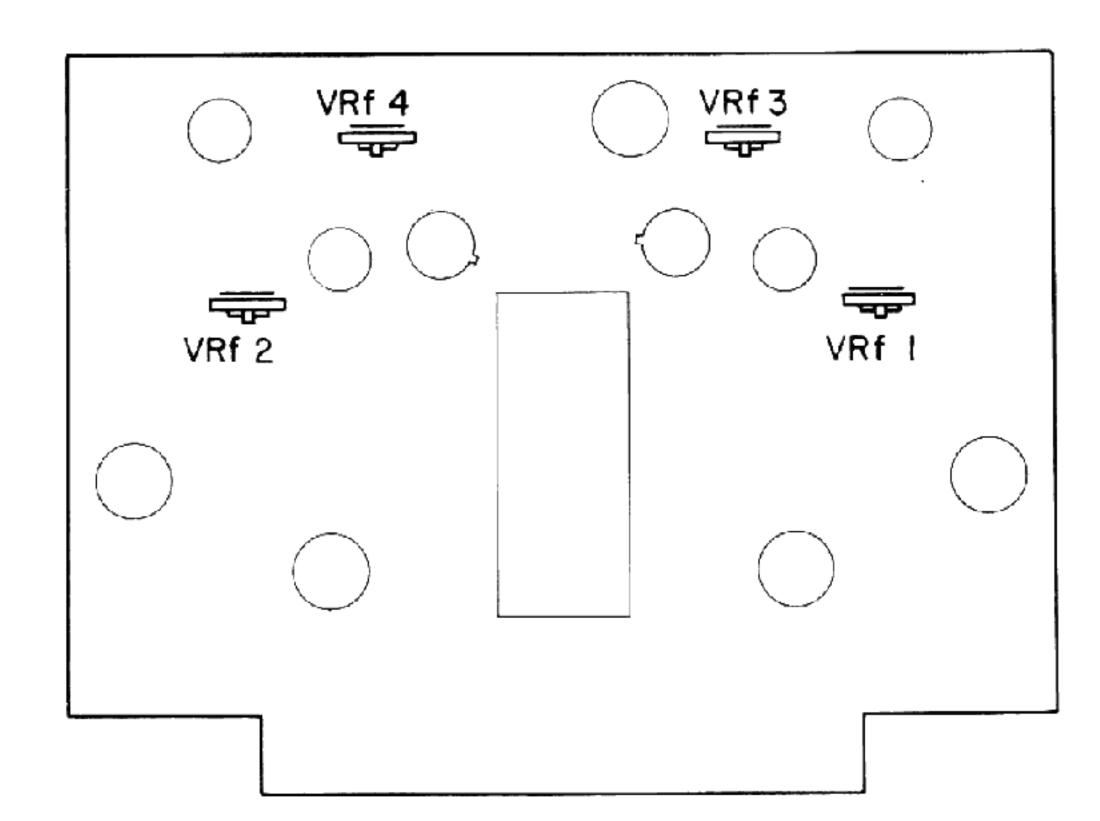
In step 5, antenna input 5 \sim 15 μ V, should provide a tuning meter reading of about 1/2 full scale.

AUDIO SECTION

BIAS ADJUSTMENT

• FRONT MAIN AMP (X07-1050-10)

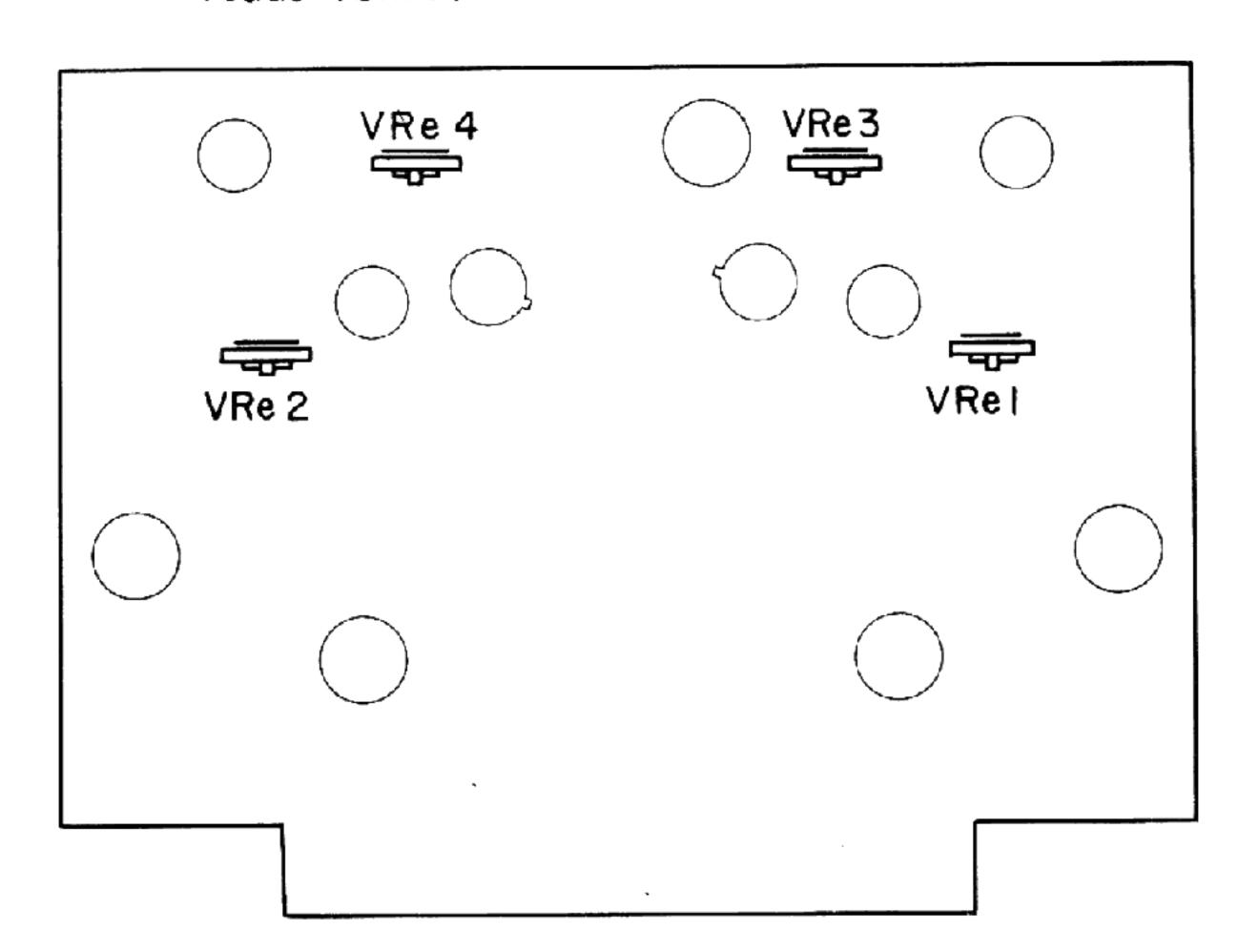
- 1. Set VOLUME to minimum and TONE controls to center.
- 2. Set potentiometers VRf3 (VRf4) to minimum and VRf1 (VRf2) to center.
- 3. Switch POWER on.
- 4. Connect VTVM (DC) to terminal No. 4 (15), and adjust potentiometers VRe1 (VRe2) so the voltmeter reads 32V.
- 5. Connect VTVM (DC) across emitter resistors R305 (R404) of power transistors, and adjust potentiometer VRf3 (VRf4) so the voltmeter reads 15mV.



◆ FRONT MAIN AMP
PC BOARD (X07-1050-10)

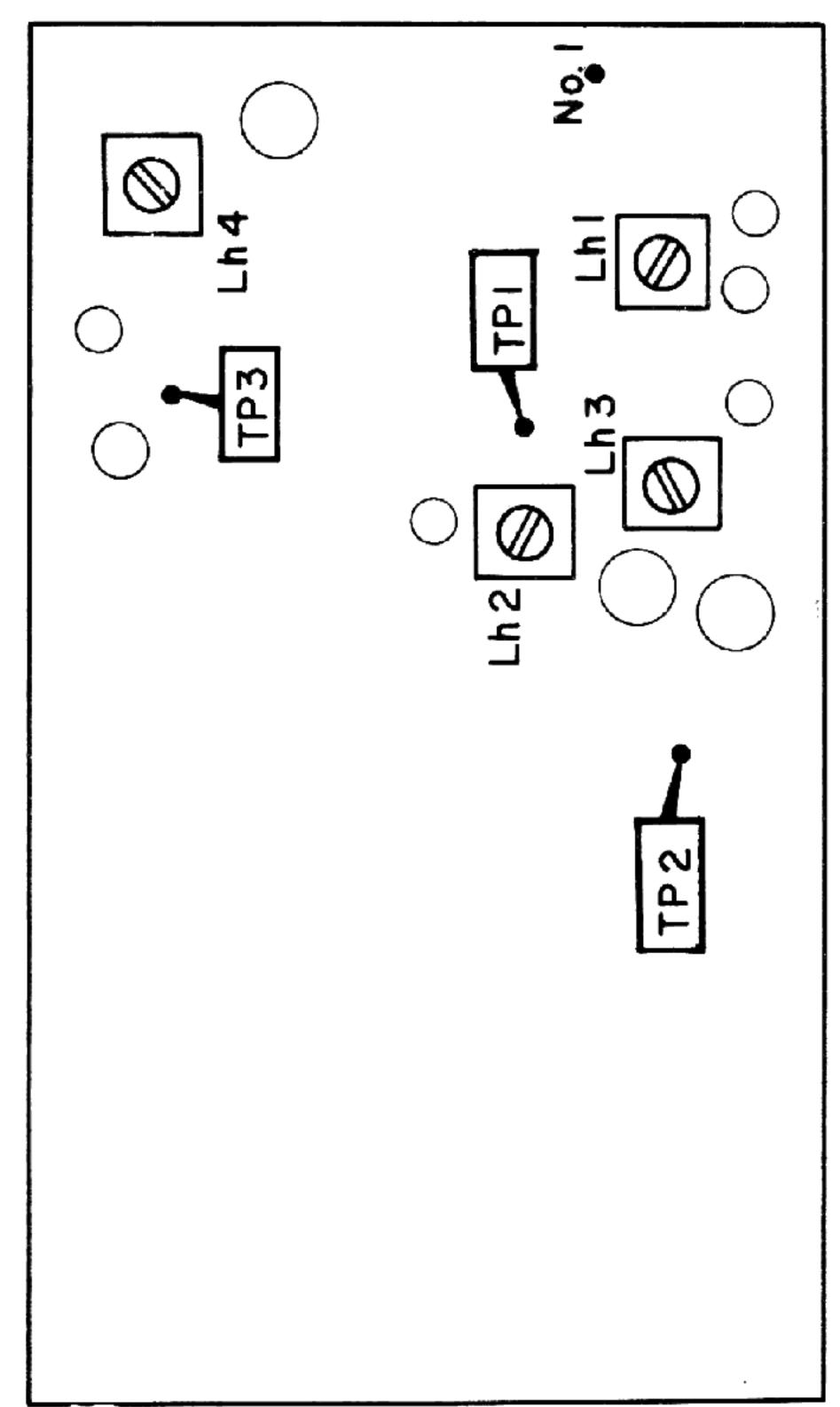
REAR MAIN AMP (X07-1050-11)

- 1. Set VOLUME to minimum and TONE controls to center.
- 2. Set potentiometers VRe3 (VRe4) to minimum and VRe1 (VRe2) to center.
- 3. Switch POWER on.
- 4. Connect VTVM (DC) to terminal No. 4 (15), and adjust potentiometers VRf1 (VRf2) so the voltmeter reads 32V.
- 5. Connect VTVM (DC) across emitter resistors R115 (R214) of power transistors, and adjust potentiometer VRe3 (VRe4) so the voltmeter reads 15mV.



◆ REAR MAIN AMP
PC BOARD (X07-1050-11)

▼ REMOTE CONTROL RECEIVER PC BOARD (X13-1130-30)



REMOTE SECTION

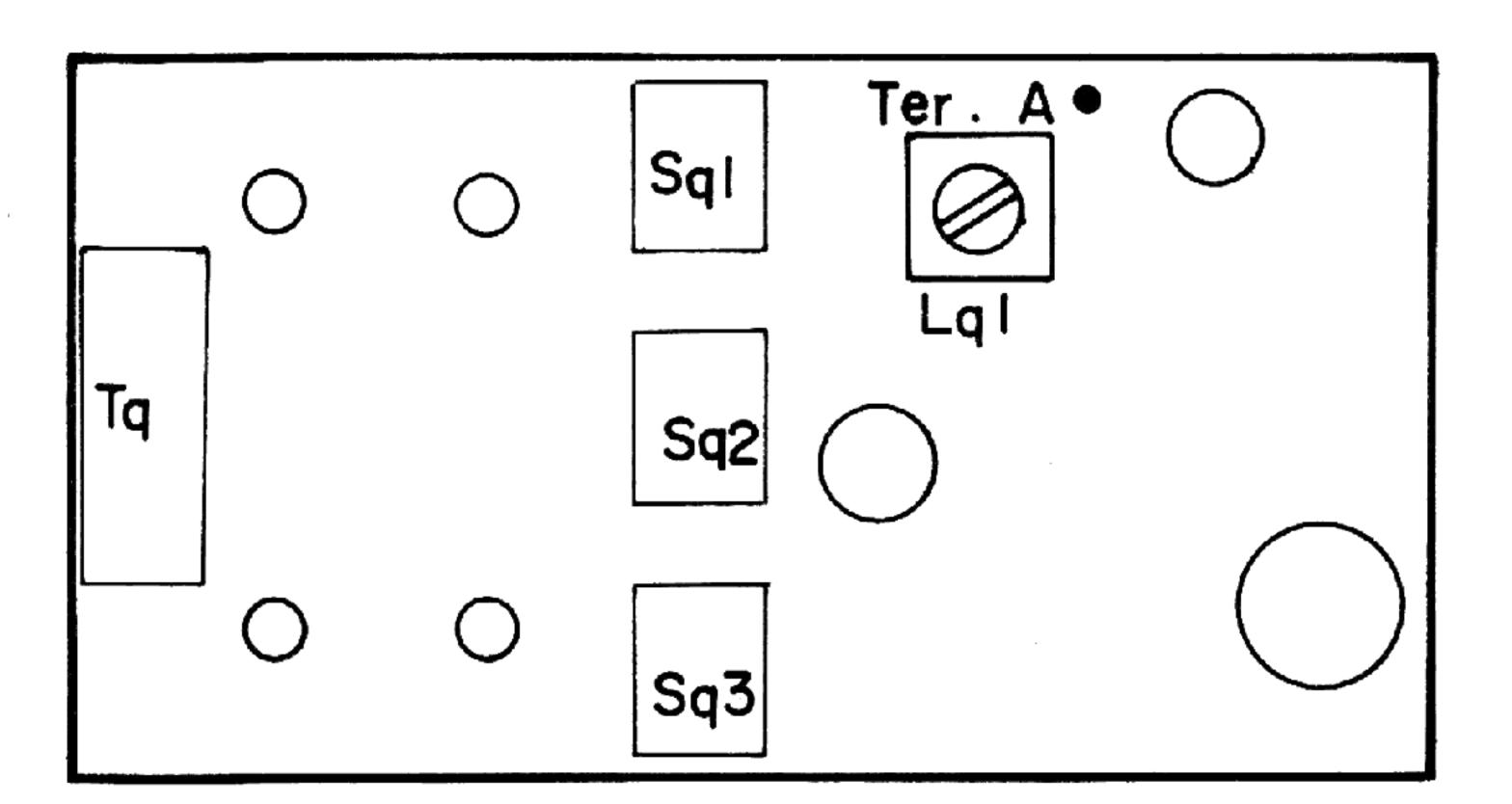
REMOTE CONTROL RECEIVER (X13-1130-30)

- 1. Check that the supply voltage is 13.5V.
- 2. Connect a 0.22µF capacitor and a 1,000-ohms resistor in series to audio generator output.
- 3. Connect the audio generator (40 kHz ±20 Hz) to terminal No. 1.
- 4. Connect VTVM (AC) to TP1.
- 5. Adjust coils Lh1, 2 so that the voltmeter reading is max.
- 6. Connect VTVM (DC) to TP3.
- 7. Adjust coil Lh4 so that the voltmeter reading is max.
- 8. Remove VTVM (DC) to TP2.
- 9. Adjust coil Lh3 so that the voltmeter reads $0 \pm 0.2V$ (Input level at TP 1 is 3V).

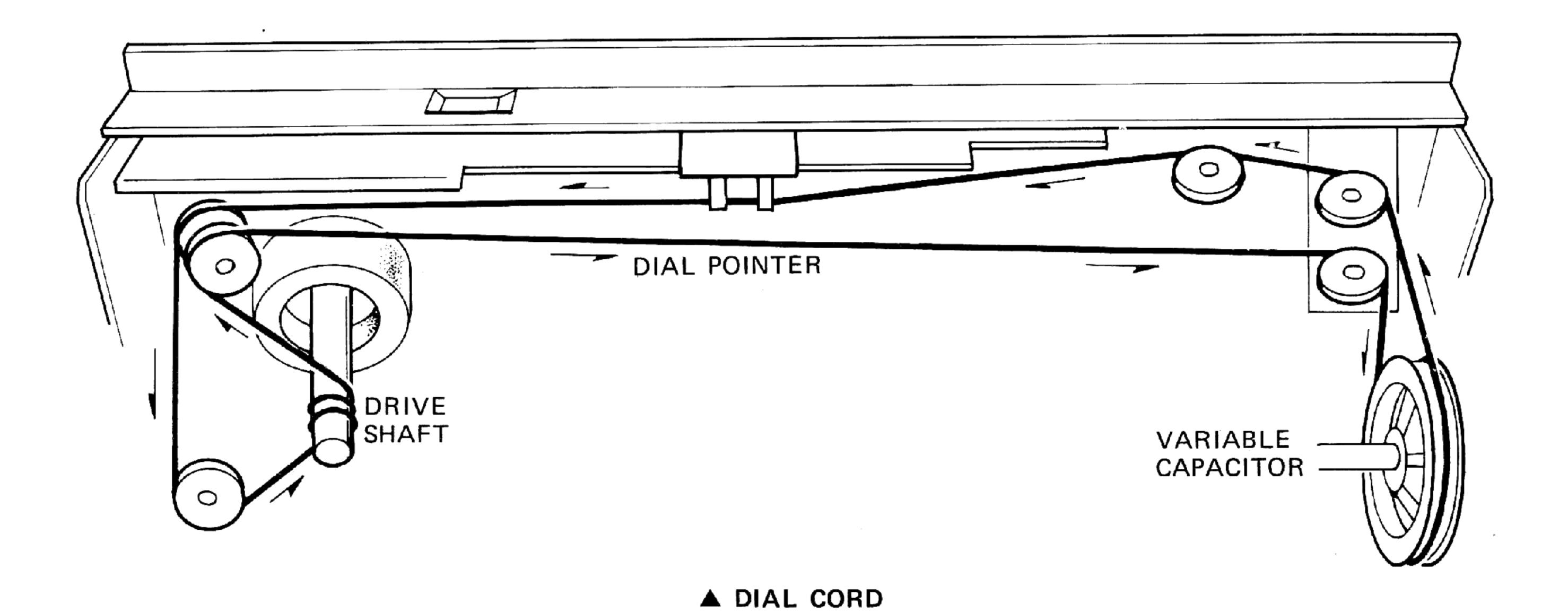
REMOTE CONTROL TRANSMITTER (X13-1140-30)

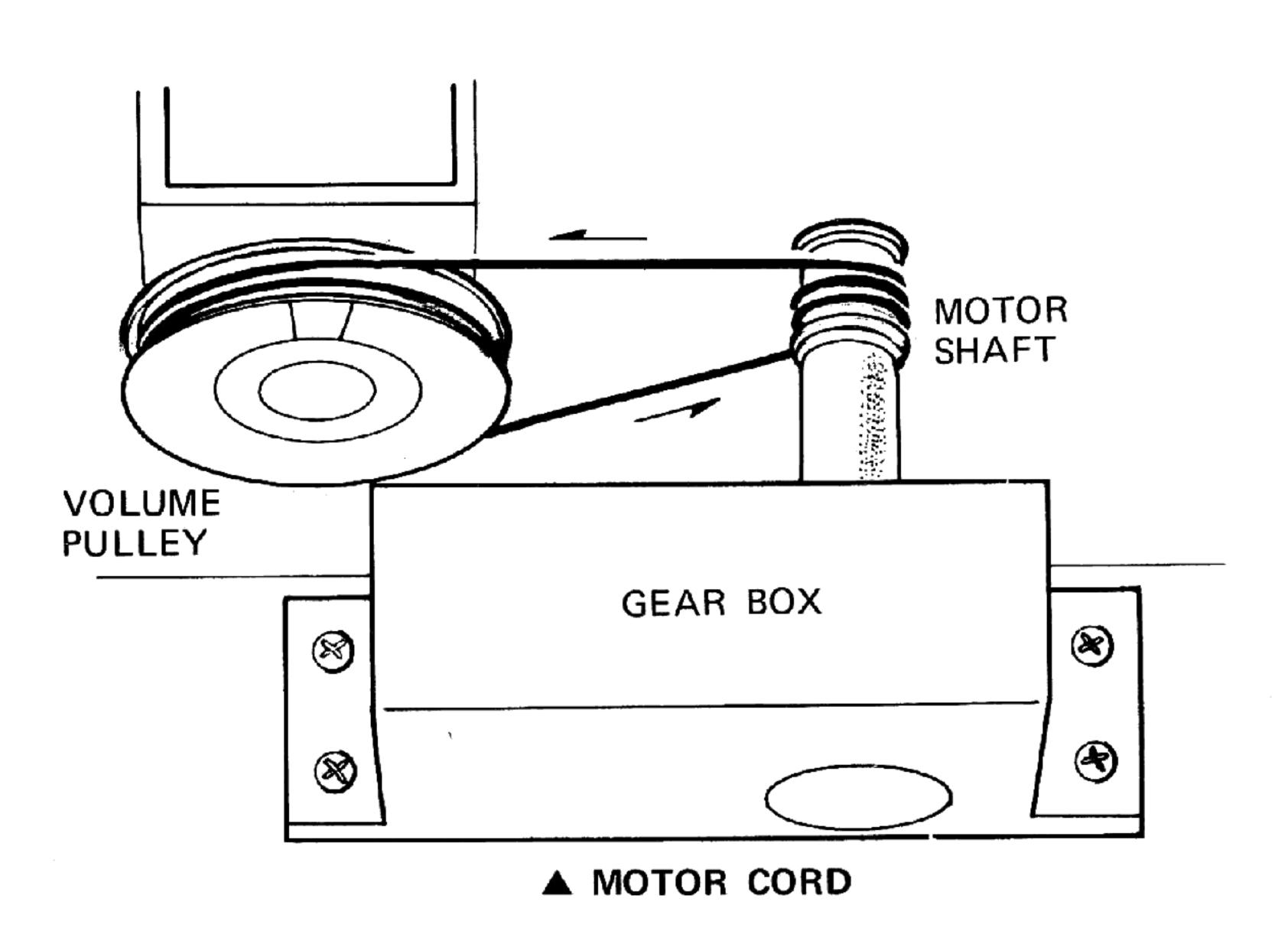
- 1. Connect the frequency counter to output terminal (A).
- 2. Push the SELECTOR button.
- 3. Adjust coil Lq1 so that the counter reads 40 kHz ± 20 Hz.

REMOTE CONTROL TRANSMITTER ► PC BOARD (X13-1140-30)

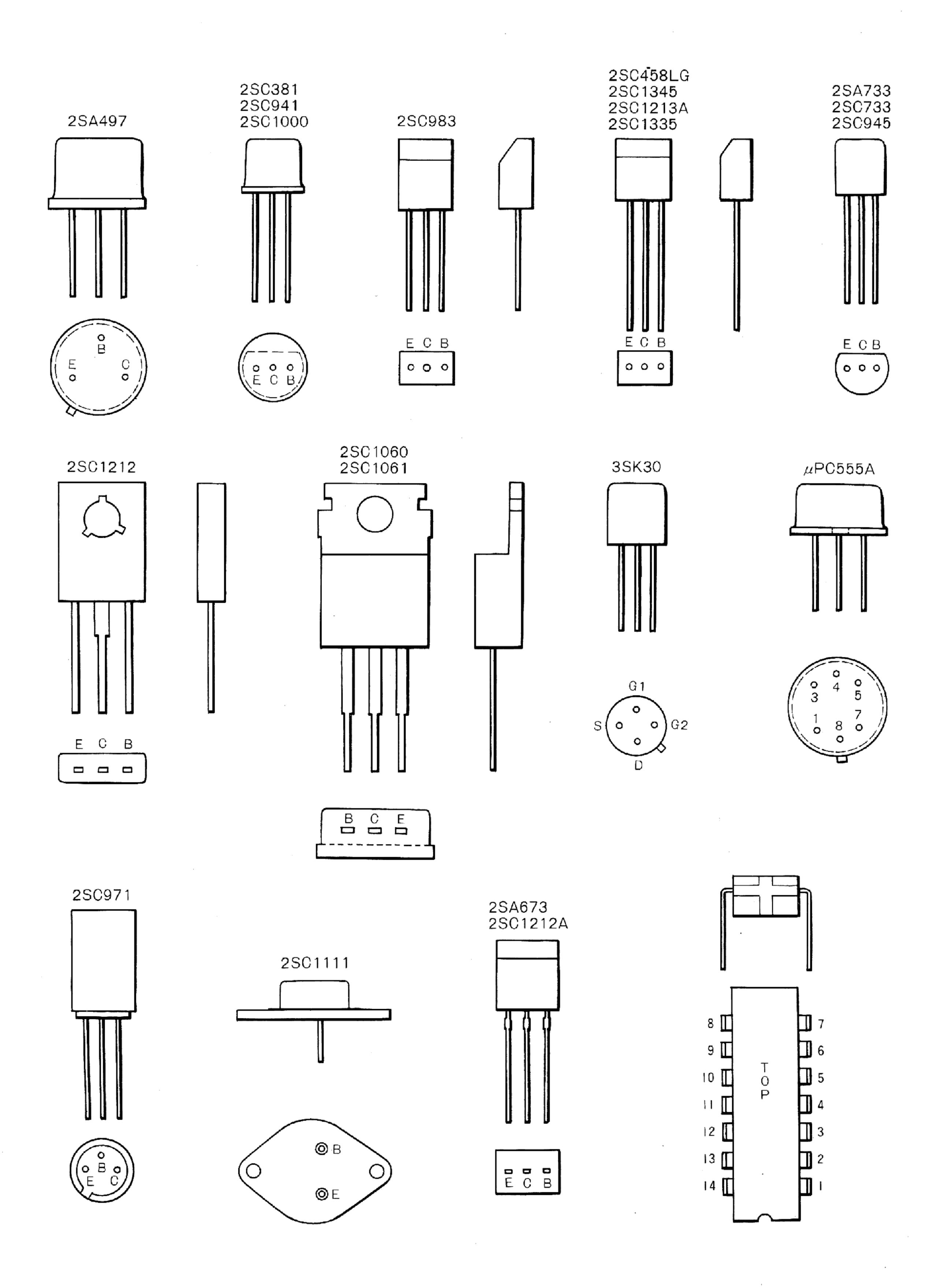


CORD STRINGING

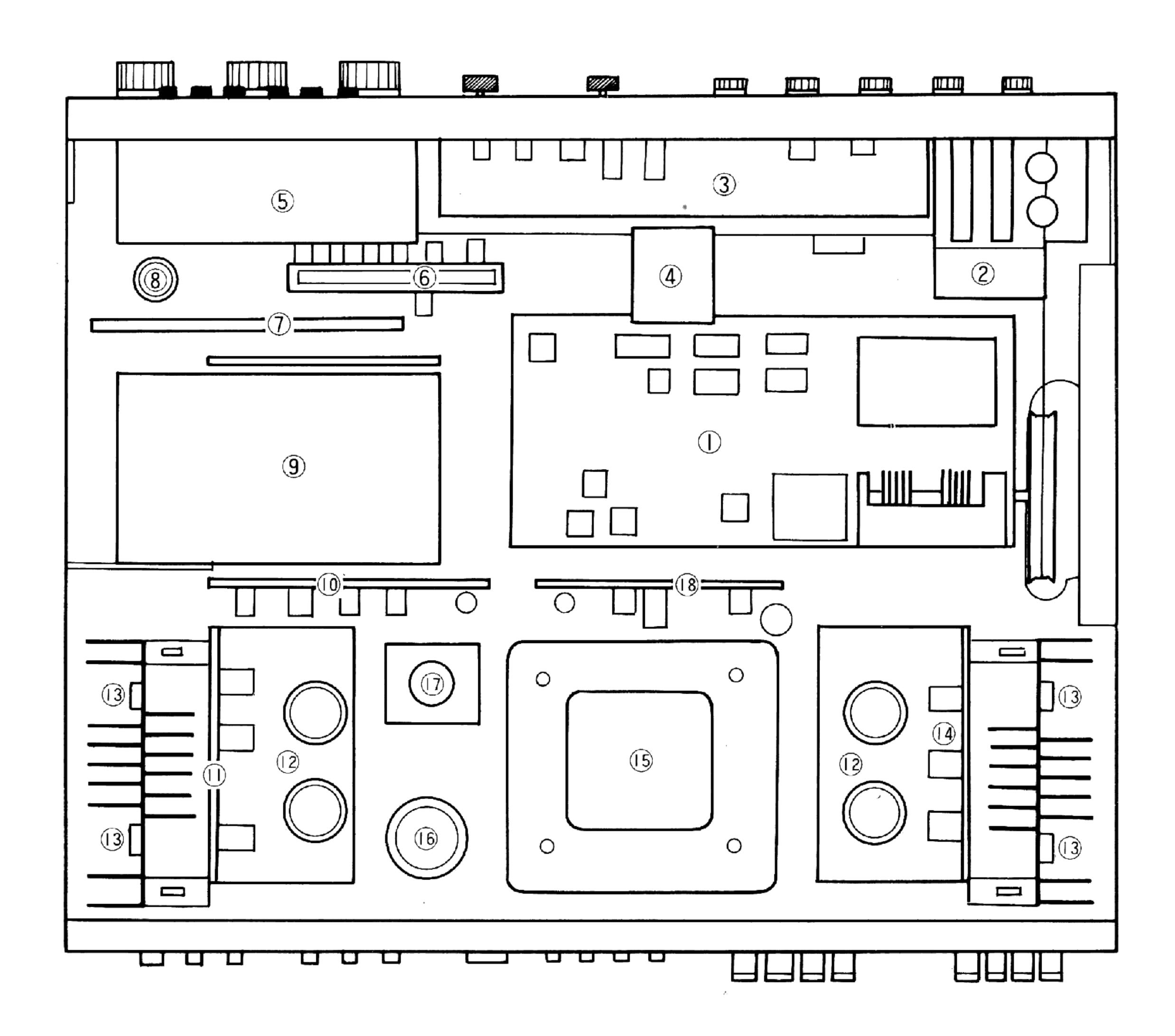




SEMICONDUCTOR LEAD IDENTIFICATION



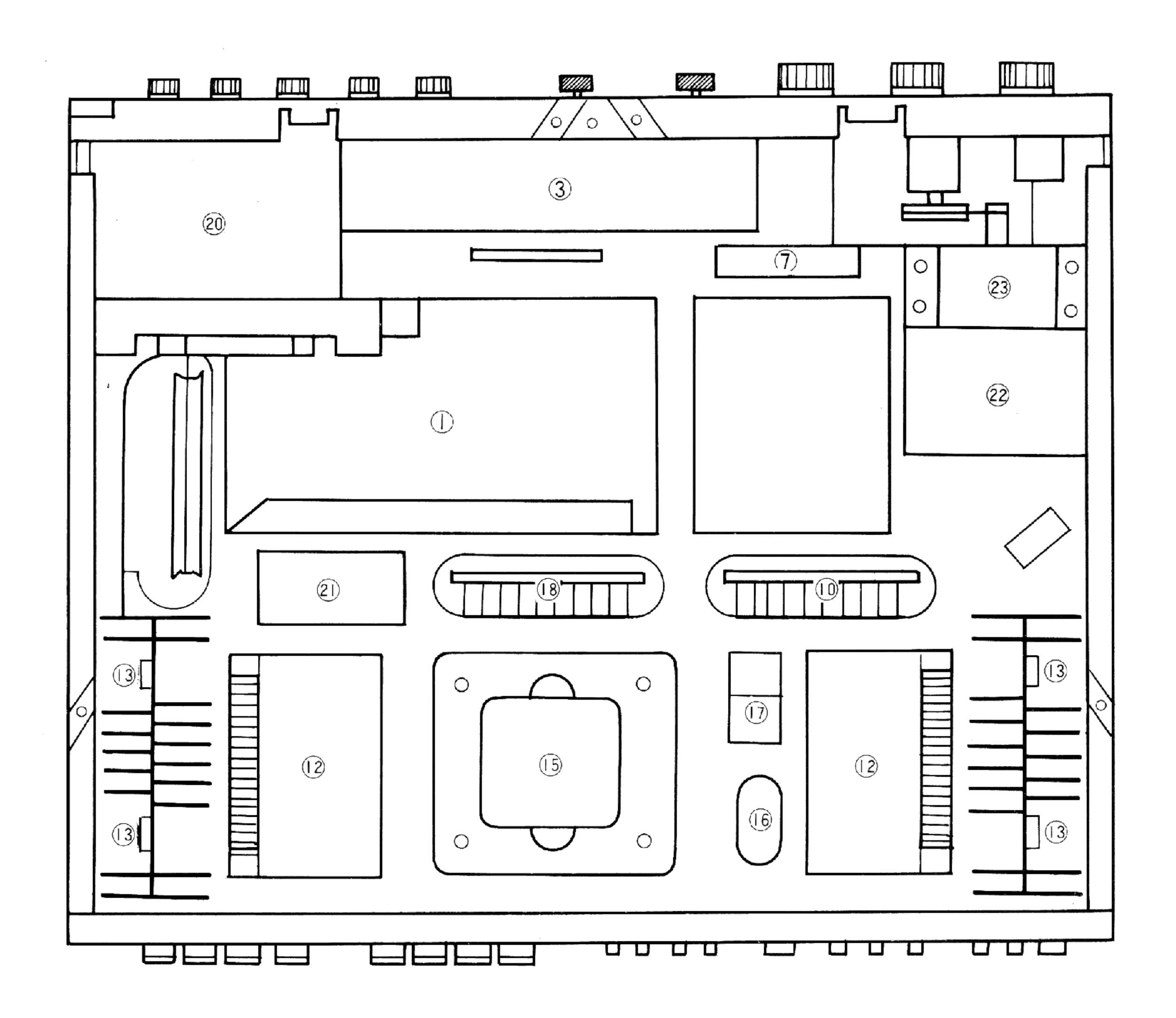
TOP CHASSIS VIEW



- 1. TUNER PC BOARD
- 2. SPEAKER SELECTOR PC BOARD
- 3. PUSHBUTTON SWITCH PC BOARD
- 4. POINTER PC BOARD
- 5. PRESET UNIT
- 6. PREAMP PC BOARD
- 7. REMOTE CONTROL PRESETTER PC BOARD
- 8. MOTOR
- 9. REMOTE CONTROL RECEIVER PC BOARD

- 10. POWER SUPPLY PC BOARD
- 11. MAIN AMP PC BOARD
- 12. OUTPUT PC BOARD
- 13. POWER TRANSISTORS
- 14. MAIN AMP PC BOARD
- 15. POWER TRANSFORMER
- 16. ELECTROLYTIC CAPACITOR
- 17. RECTIFIER DIODE
- 18. POWER SUPPLY PC BOARD

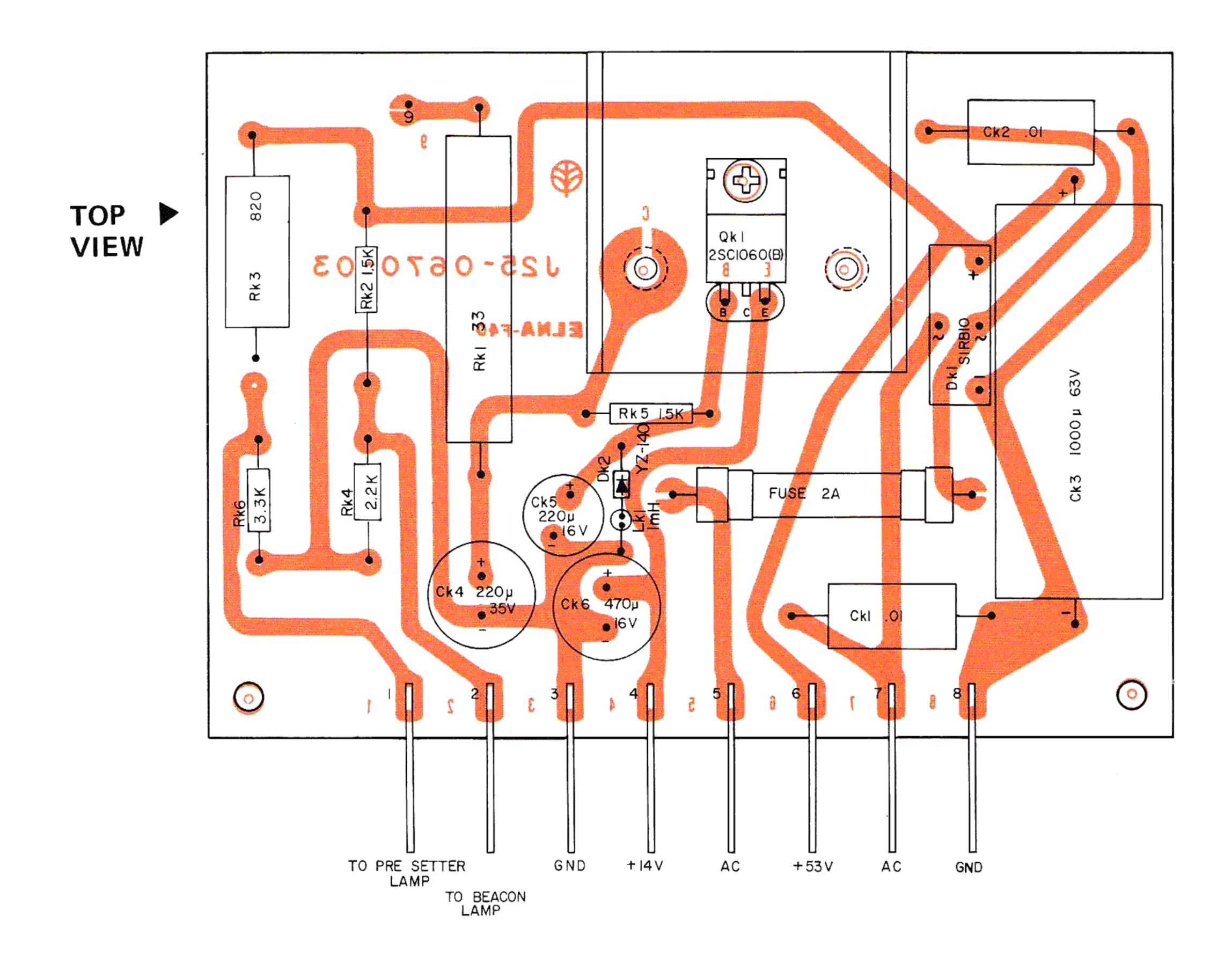
BOTTOM CHASSIS VIEW

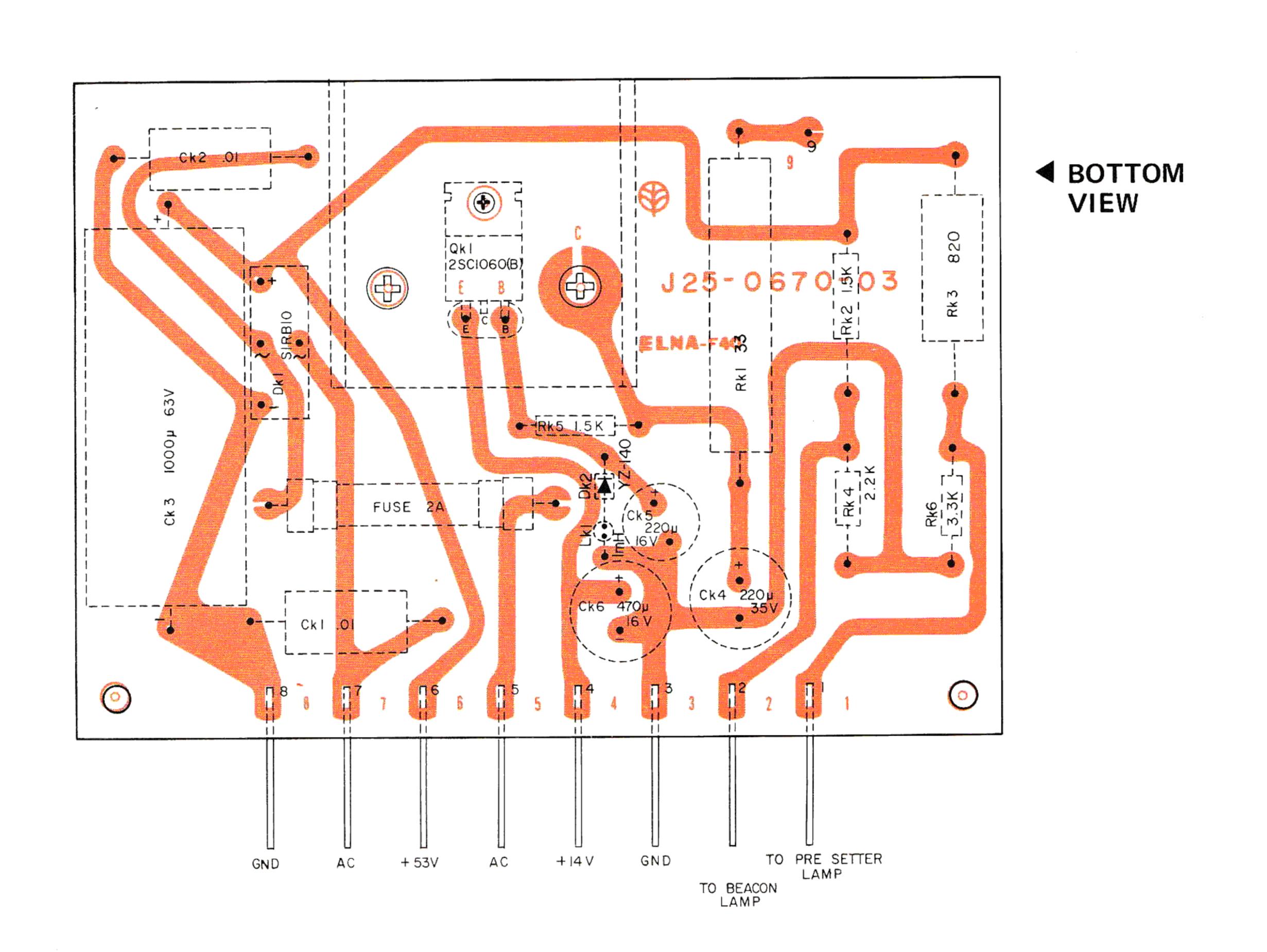


- 20. TONE AMP PC BOARD
- 21. PROTECTION PC BOARD
- 22. 15 dB AMP PC BOARD
- 23. GEAR BOX UNIT

PC BOARD

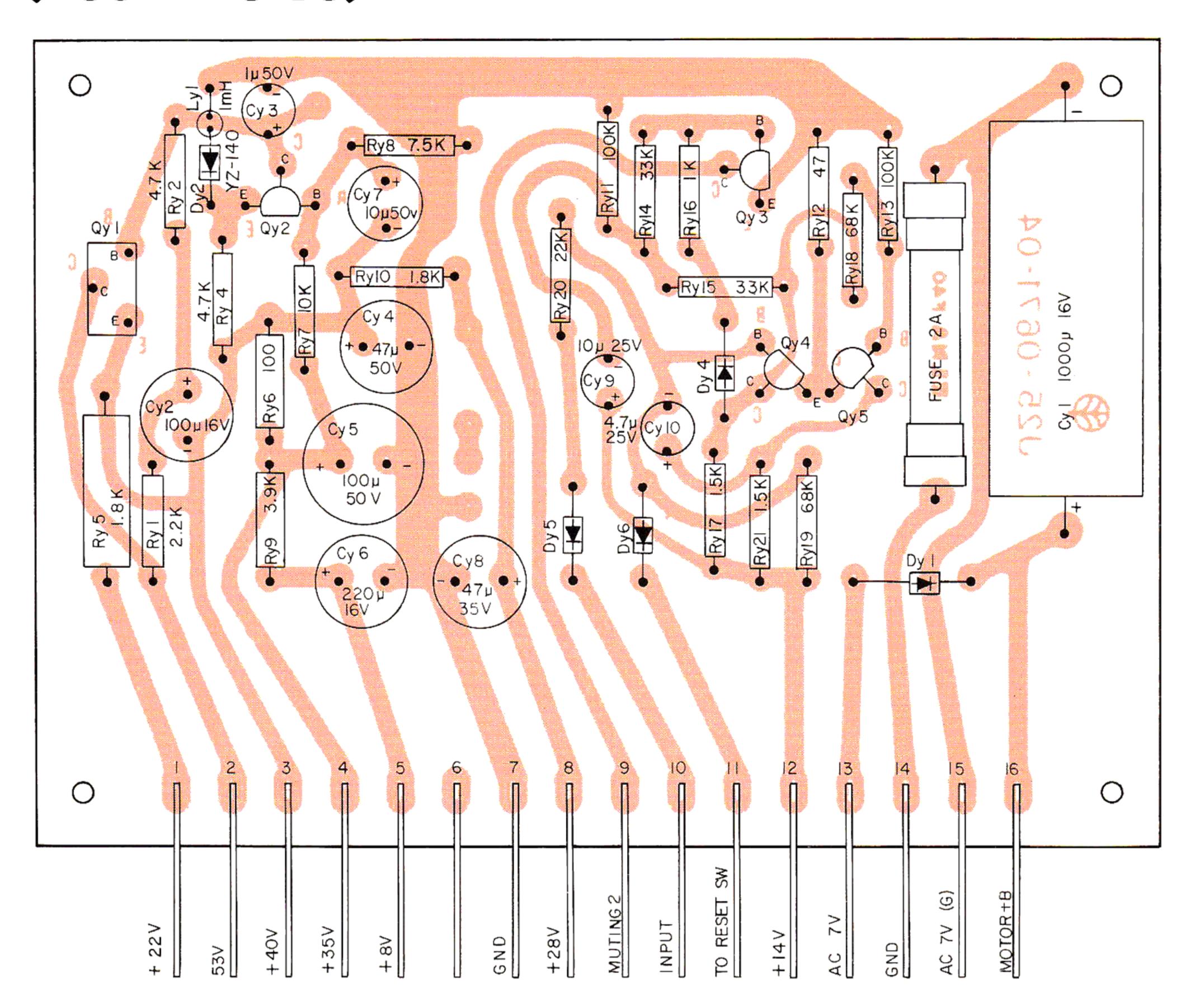
POWER SUPPLY UNIT(X00-1100-30)

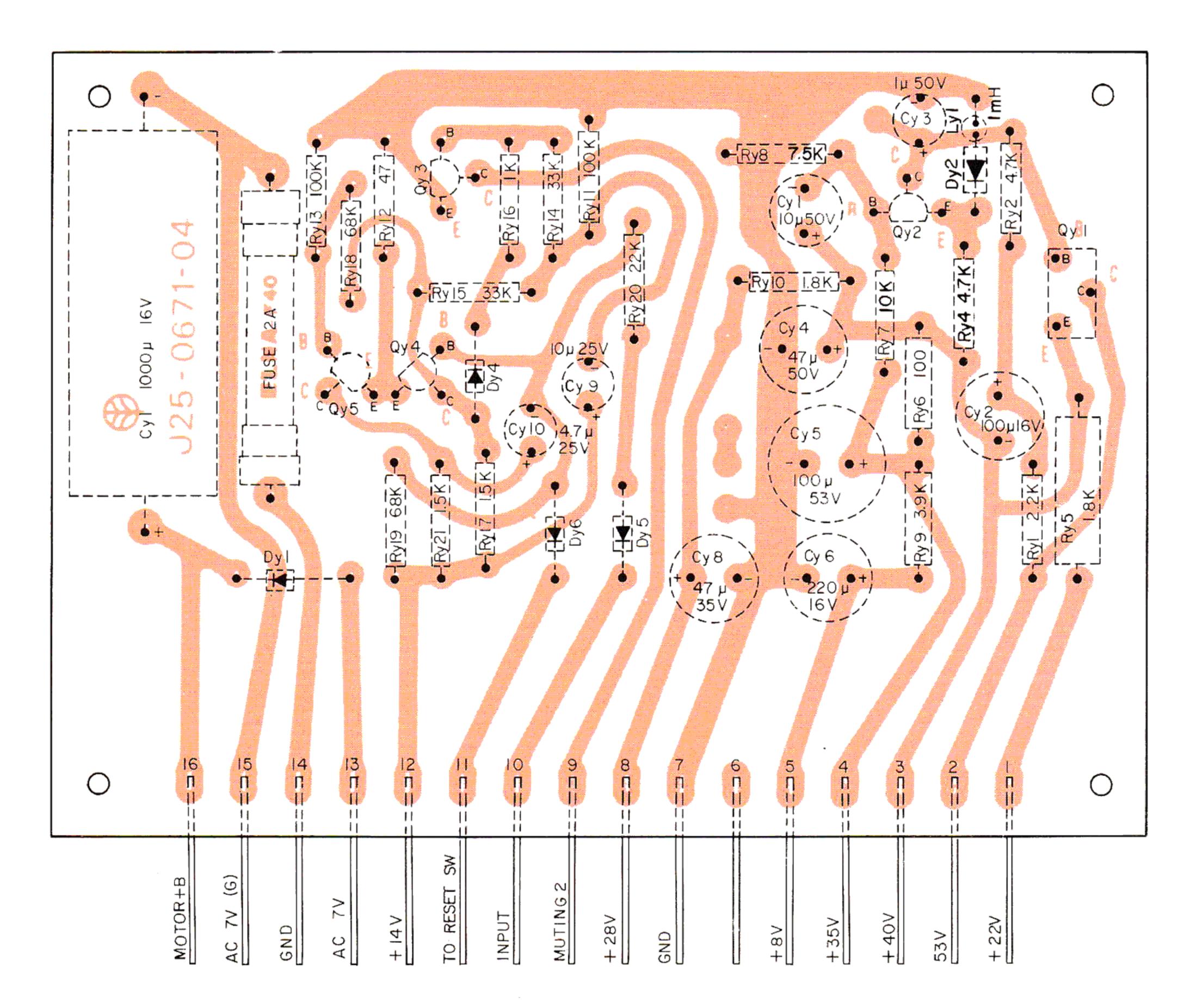




POWER SUPPLY UNIT(X00-1110-30)

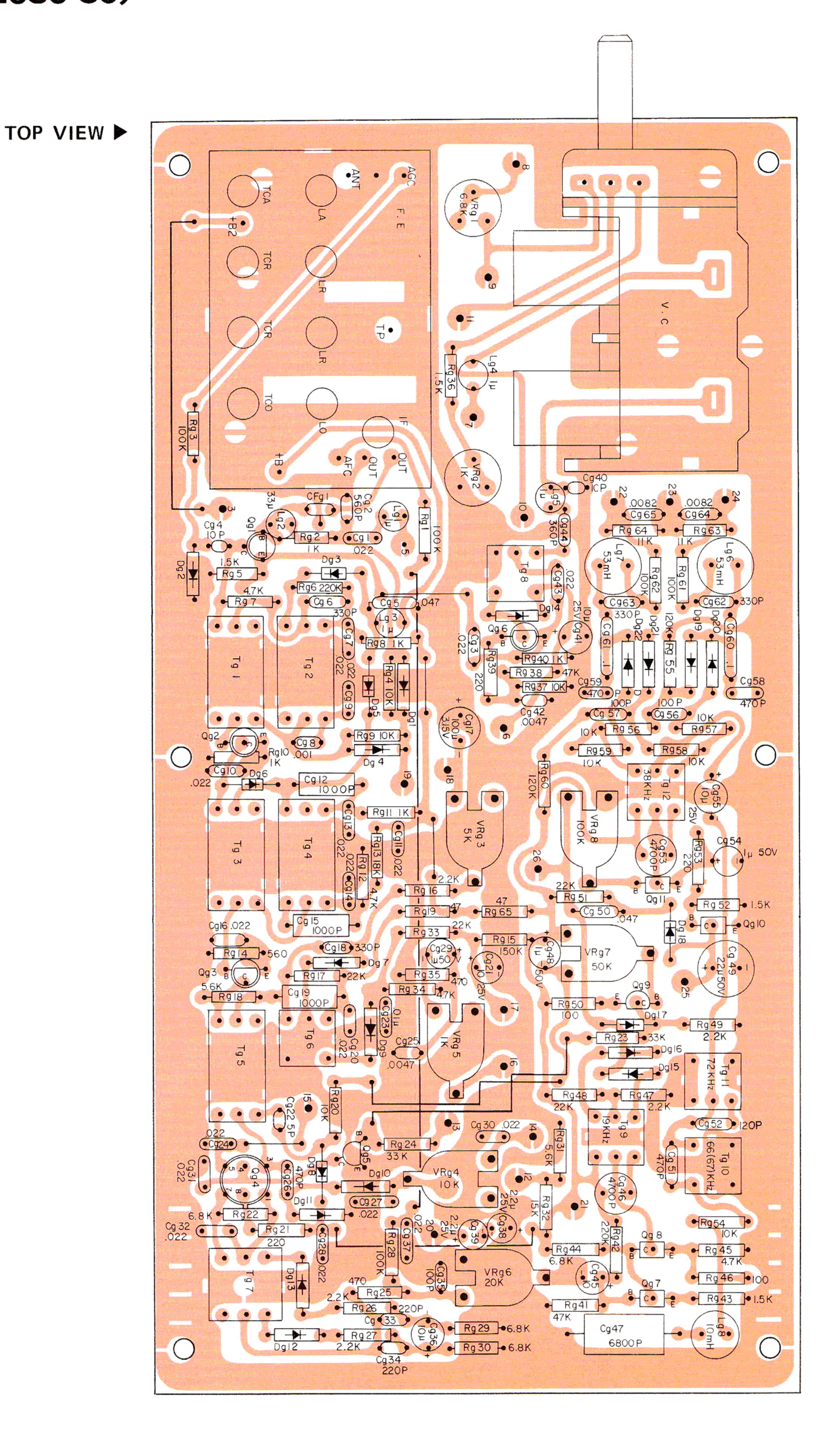
TOP VIEW



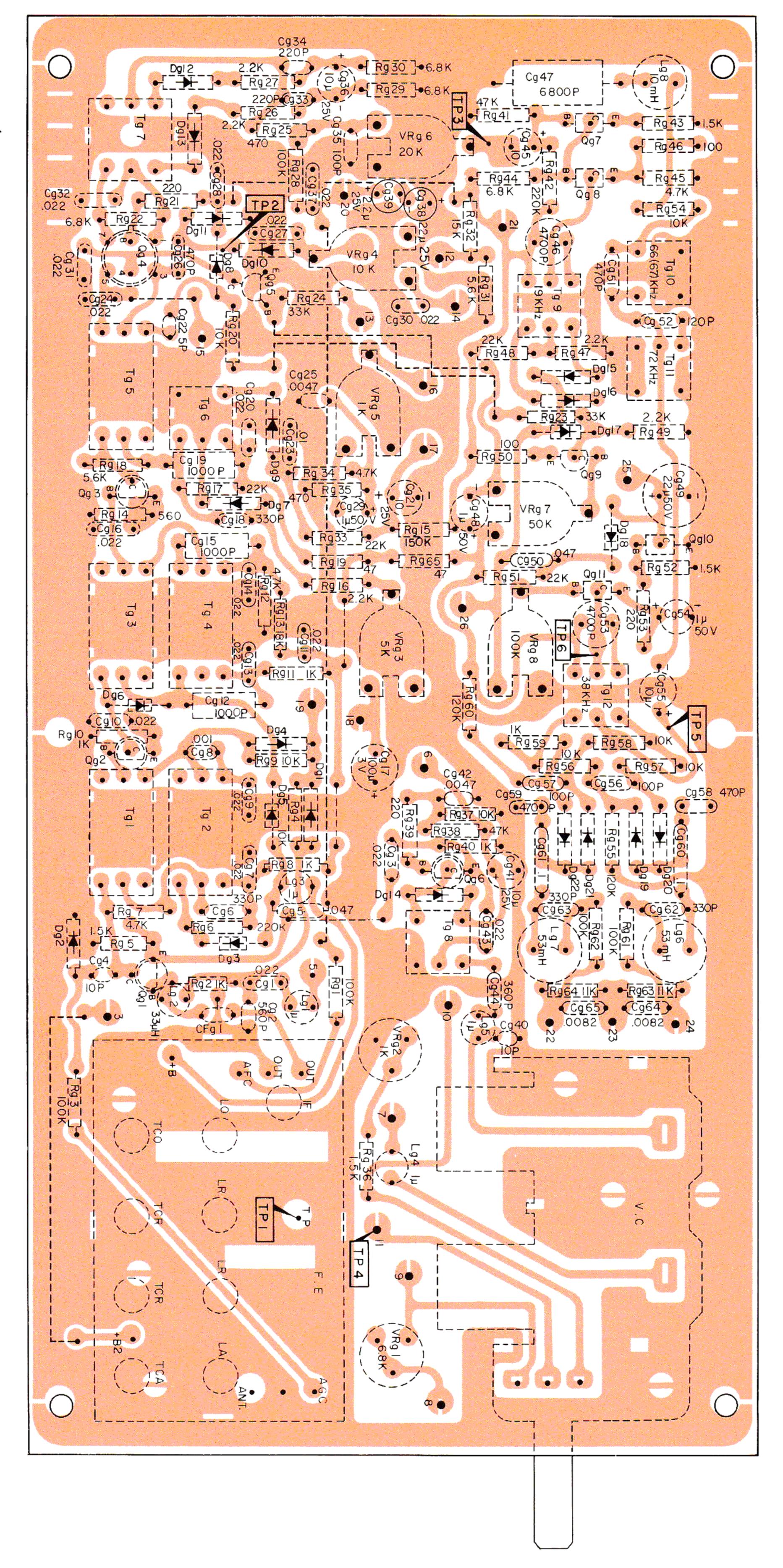


4 BOTTOM VIEW

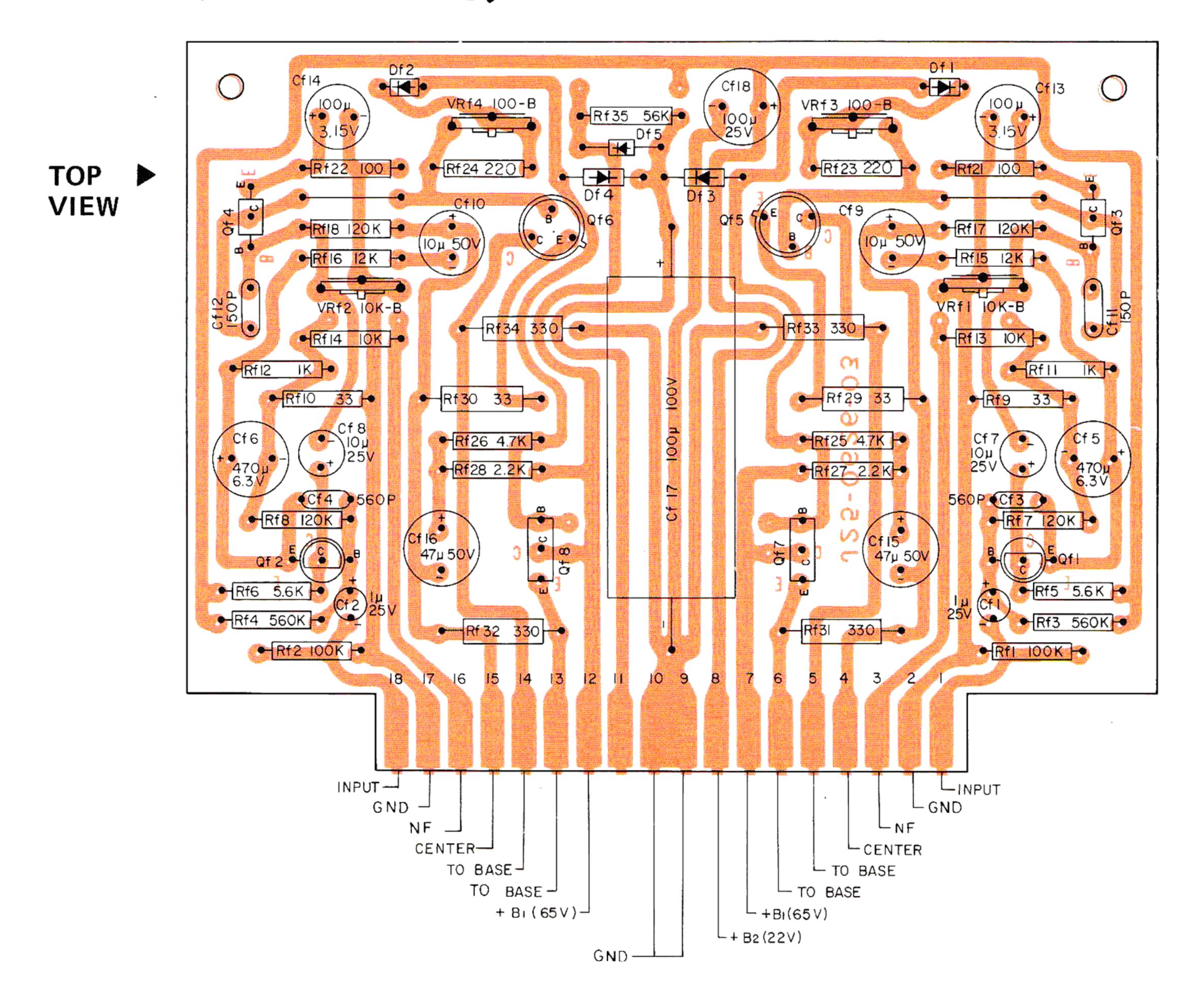
TUNER UNIT(X05-1030-30)

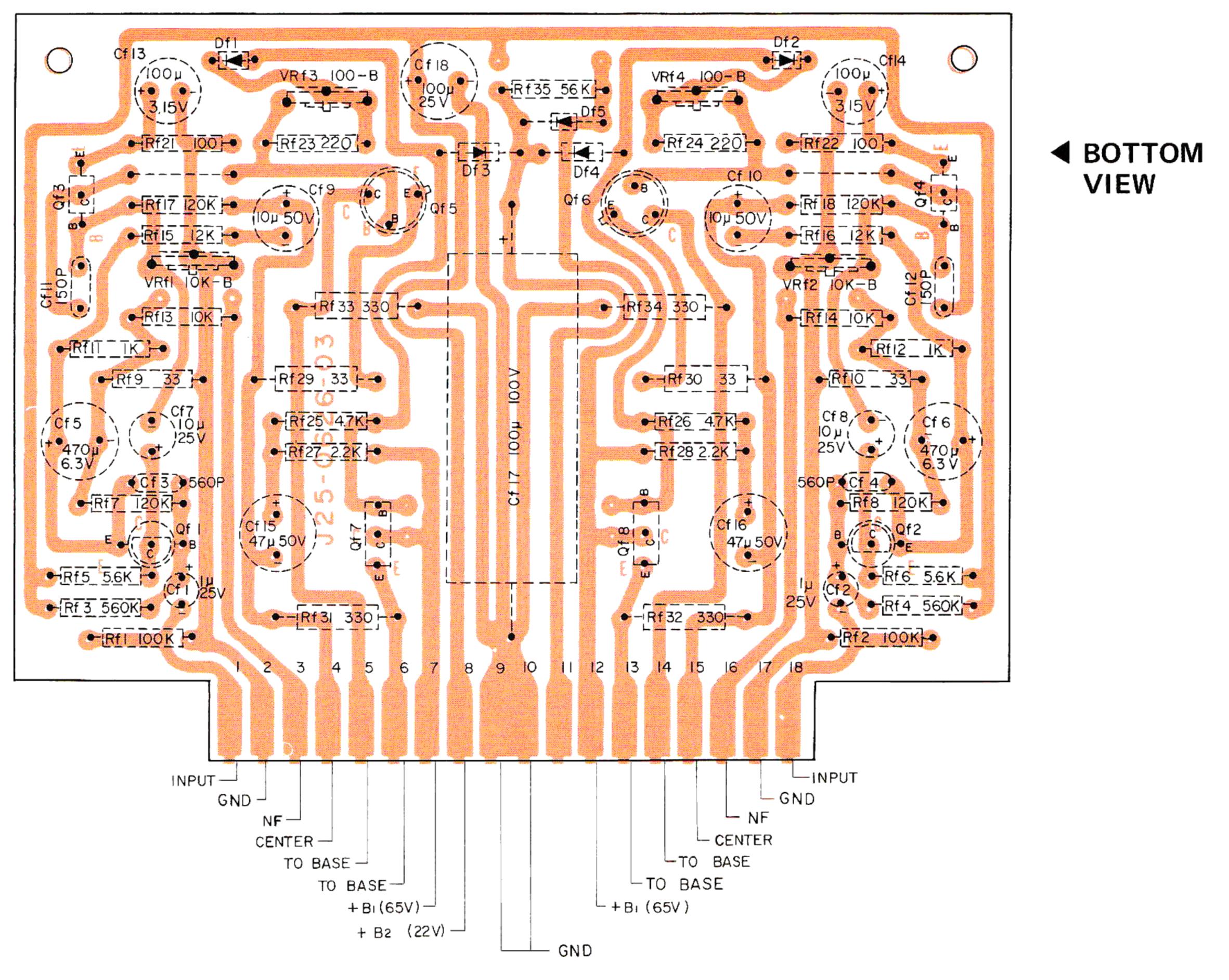


BOTTOM ► VIEW

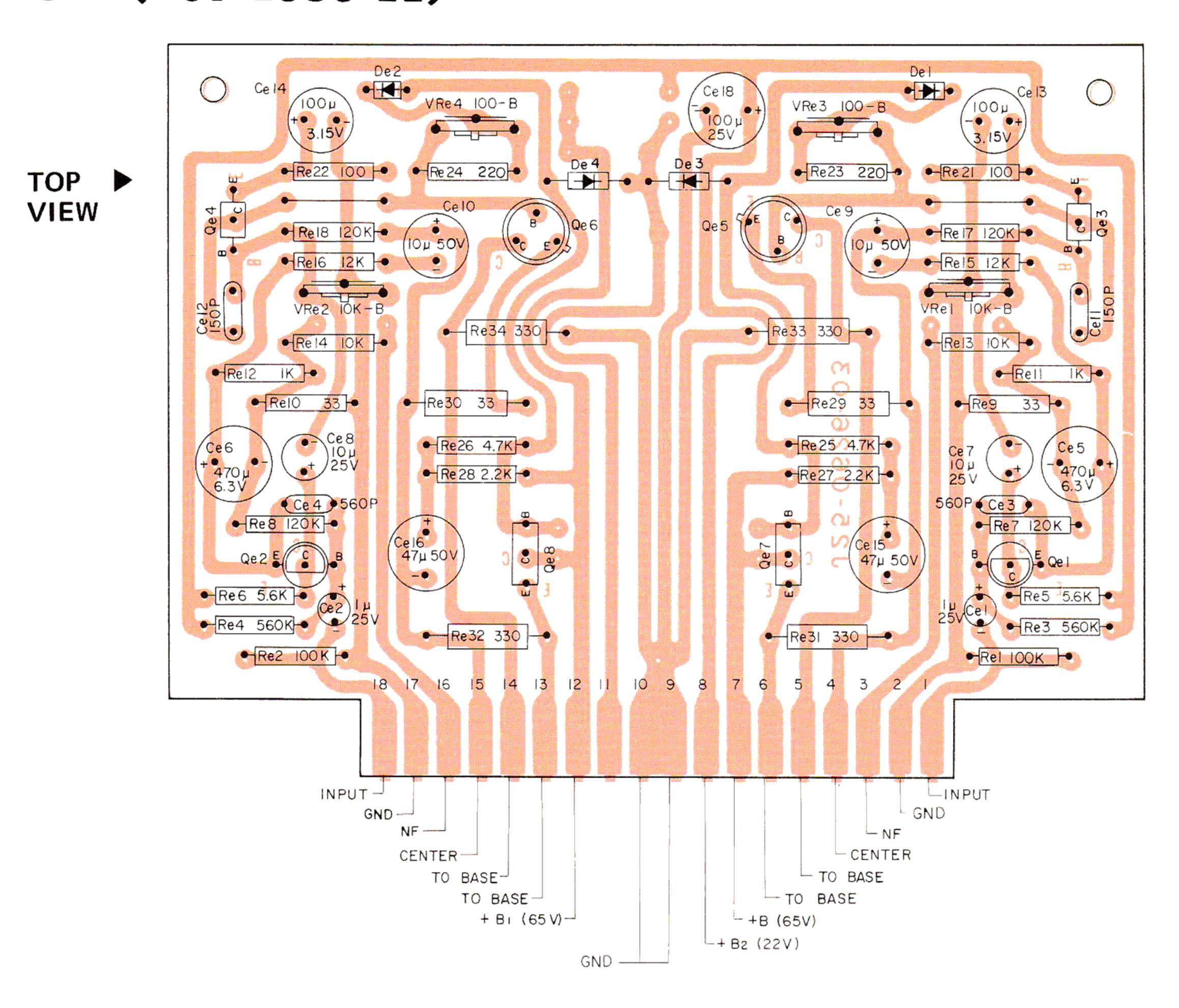


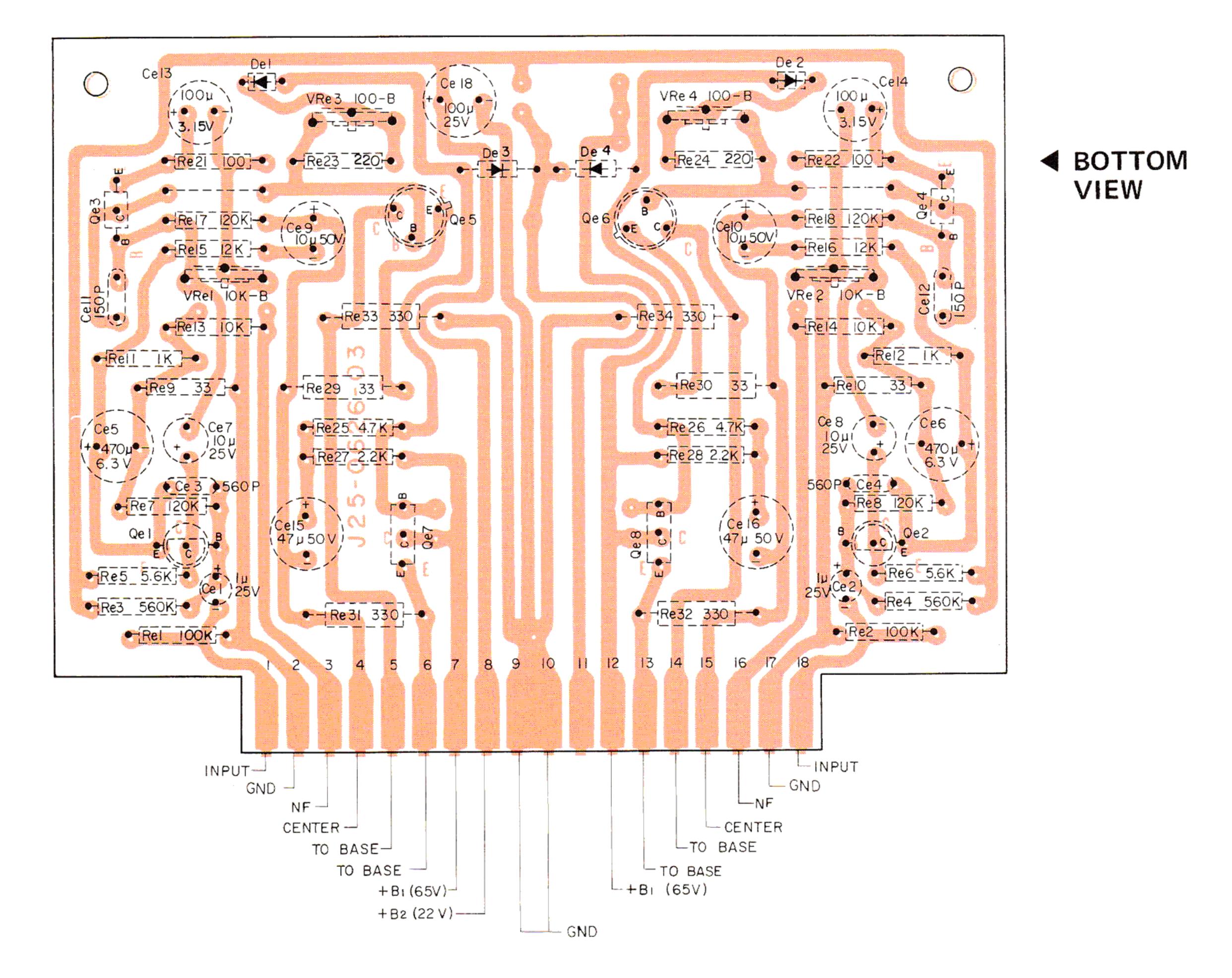
FRONT MAIN AMP UNIT(X07-1050-10)



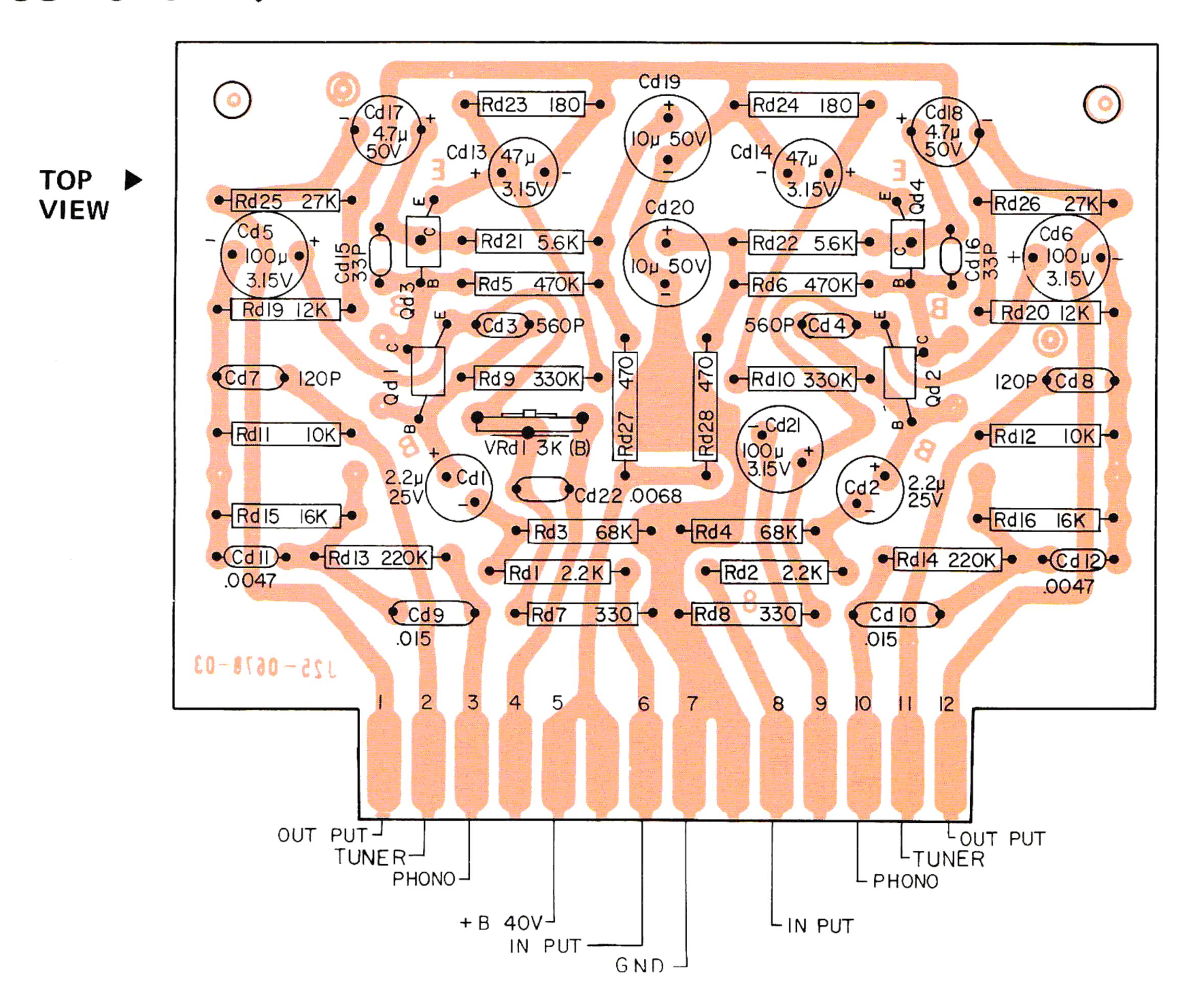


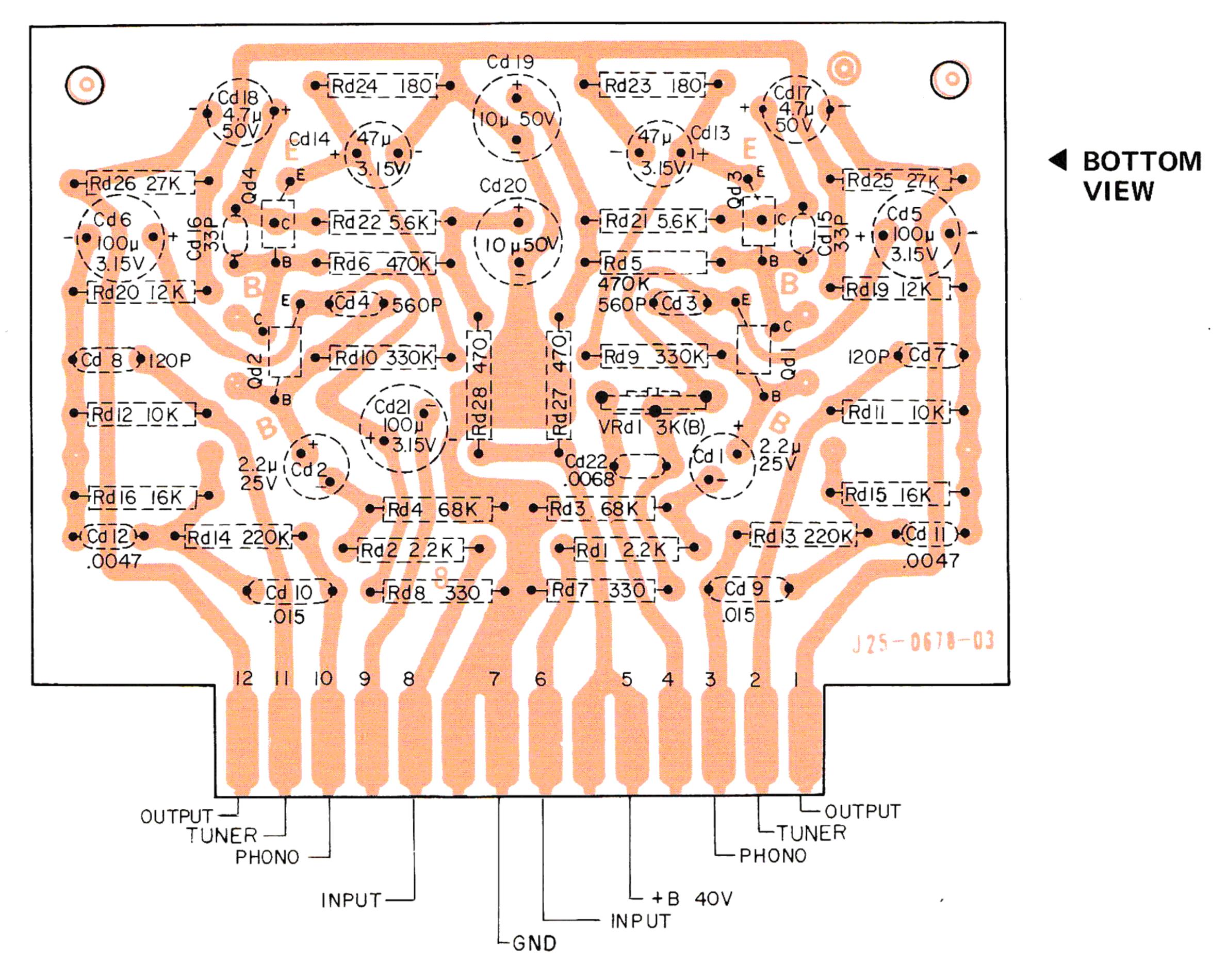
REAR MAIN AMP UNIT(X07-1050-11)



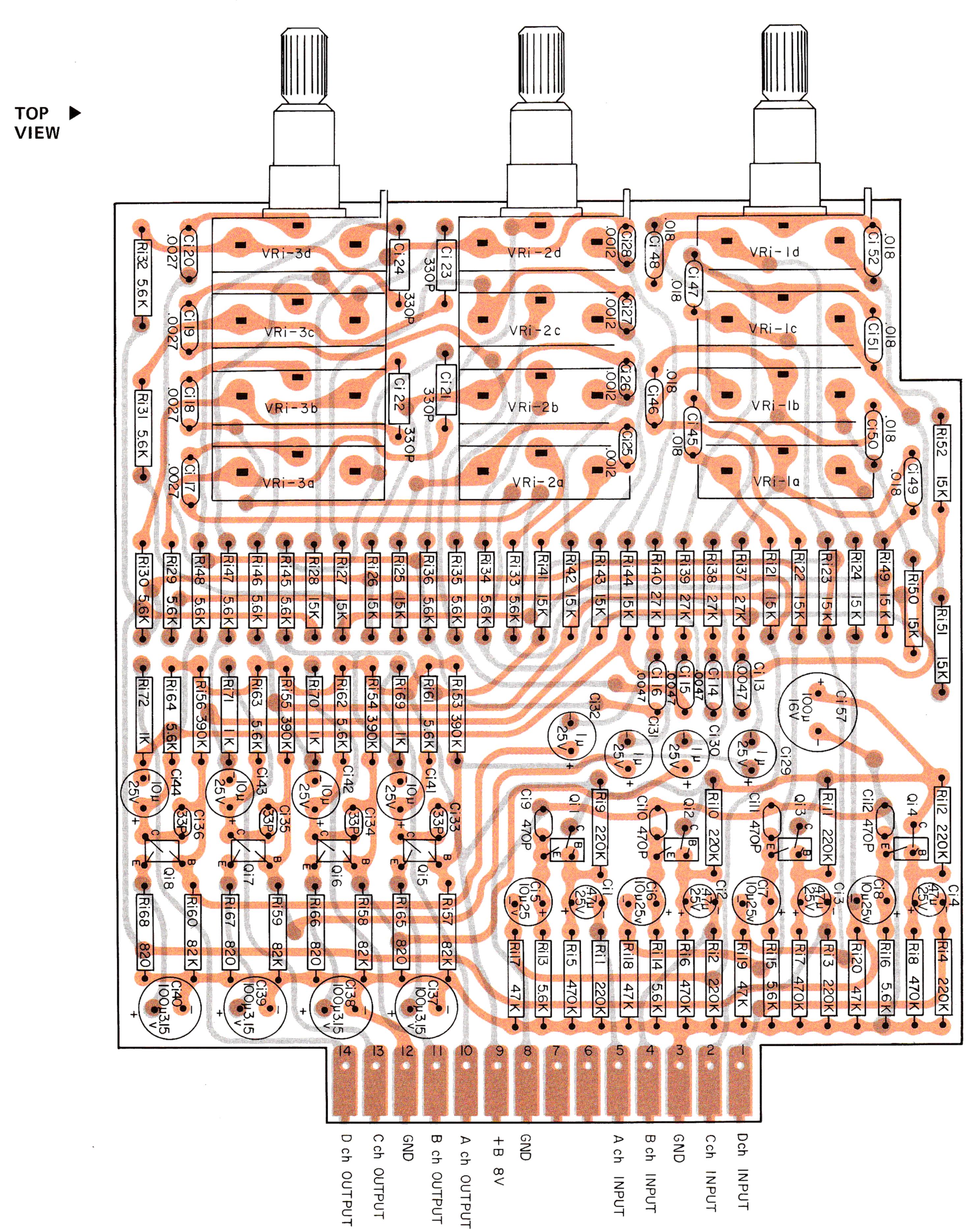


PREAMP UNIT(X08-1020-12)



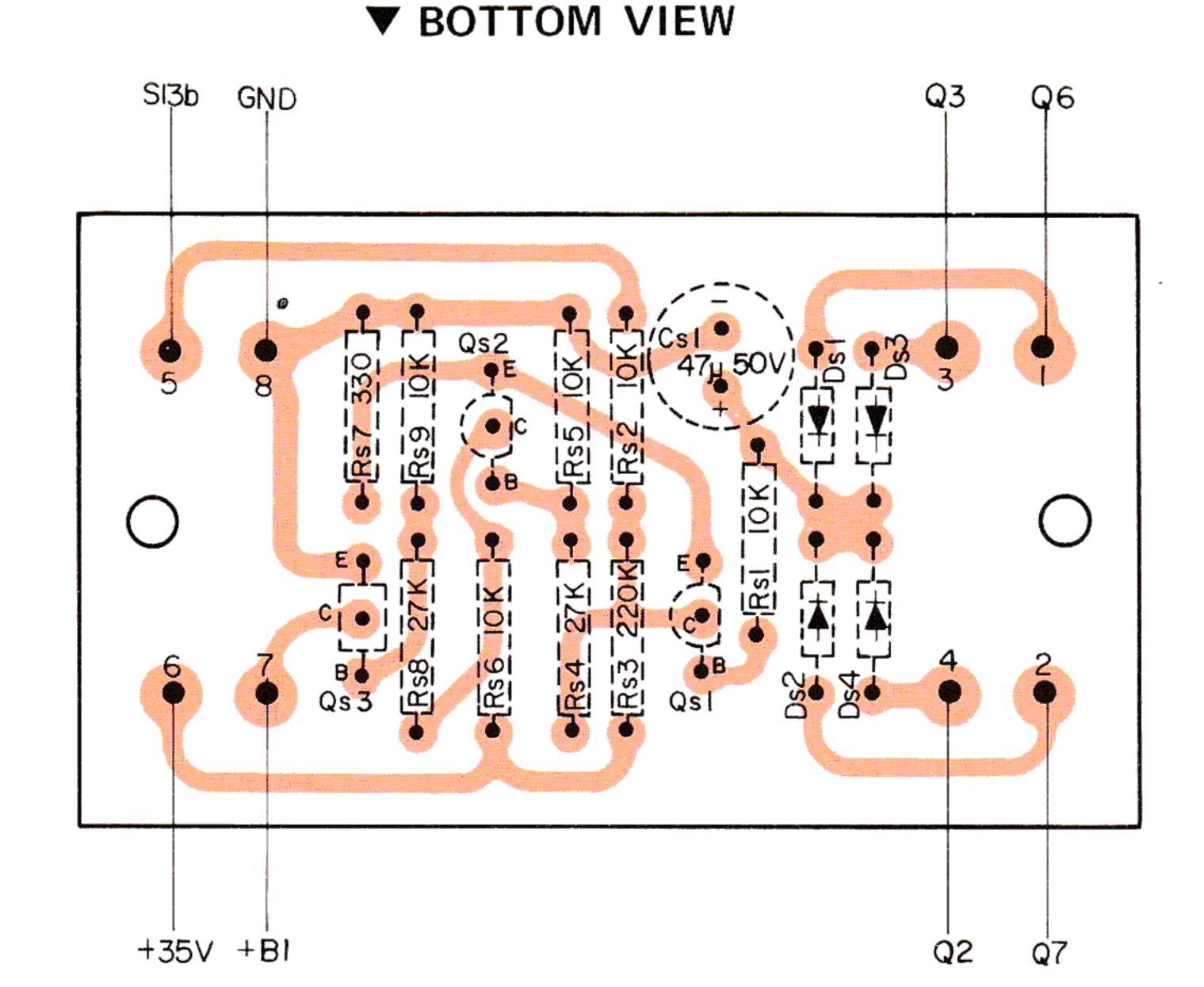


TONE AMP UNIT(X11-1020-30)



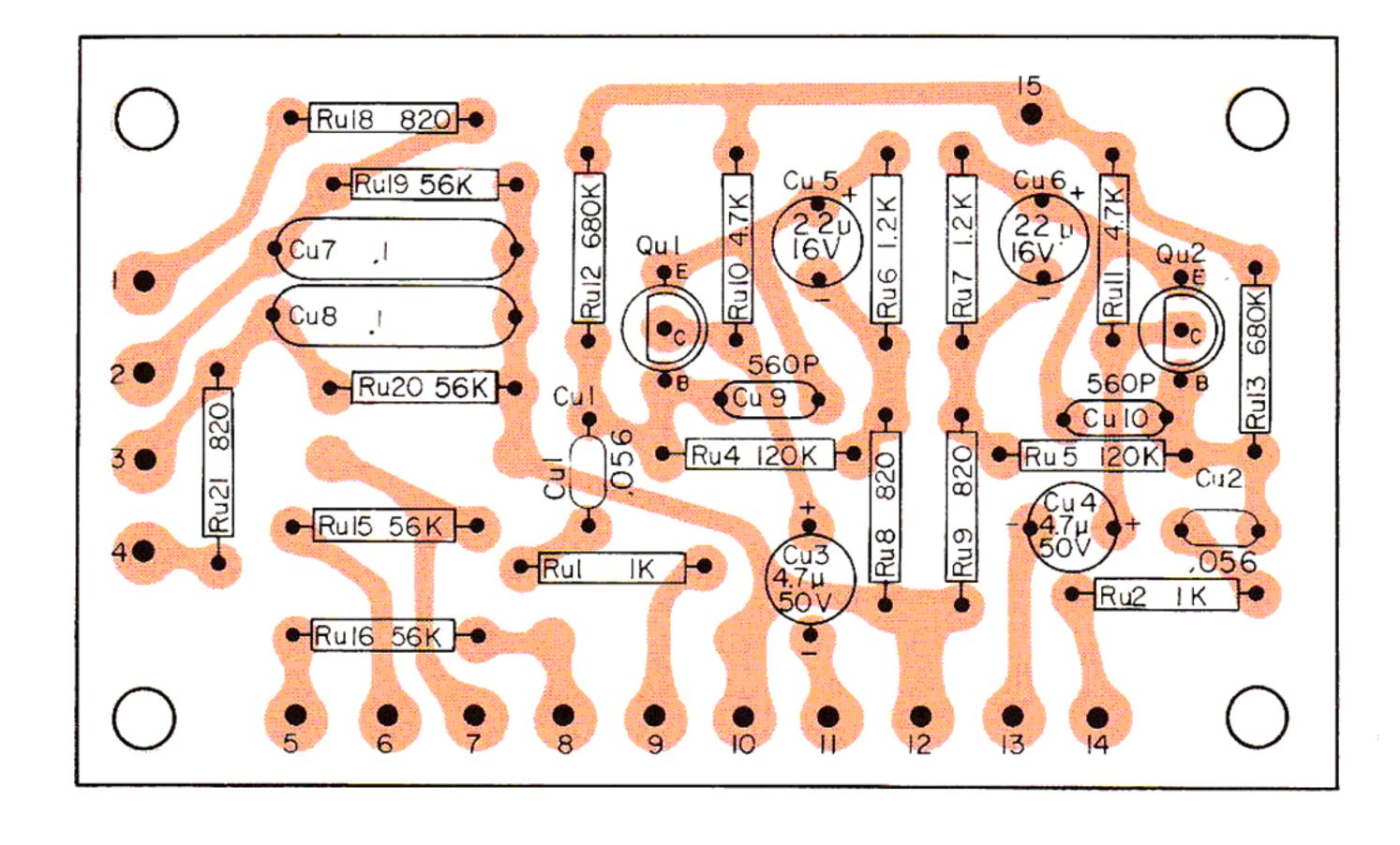
BOTTOM ▶ **VIEW** Ri32 5.6K VRi-Id VRI-2d VRi-3d VKi-2c VRi-Ic VRI-3c 0027 1022 330P -[Ri3] 5.6K] VRi-lb VRi-2L VRi-3b (<u>(</u>) |4 |0 |2 |0 |0 |0 (Ci25) .018 Ci.50 Ci 17 VÆi 018 VF.i-21 VRi-3a D LSK7 5.6K 5.6K 5.6K LSK. 5.6 FREO ISK Ri29 [R 47 - FR 49 <u>Ri28</u> (Ri45 R 46 R 35 전 8 [RI27 R 36 Ci 16 ... 5.6 K 390 K 5.6K 5.6K 390k Ri55 <u>Ri69</u> RIE4 [R] [7] Ri63 Ri62 Ci29 1 12 470P 250 -220KJ 470P -[Ri 10 220K] 50i4 Rill QiS <u>ල</u> Ci6 10u25vi BZKJ BZKJ 82K 820] 82'K1 820] <u>82K</u>] [Ri67 820] Ri66 820 -[Ri65 RIE8 -[Ri57] Ri60 -Ri 59 220K7 220K 5.6K -<u>Rie</u> RIS <u>R</u>13 -Ri8 8 9 ch OUT GN[Z D ch OUT OUT Och C chBch A ch ch Ach

PROTECTION UNIT(X13-1090-11)

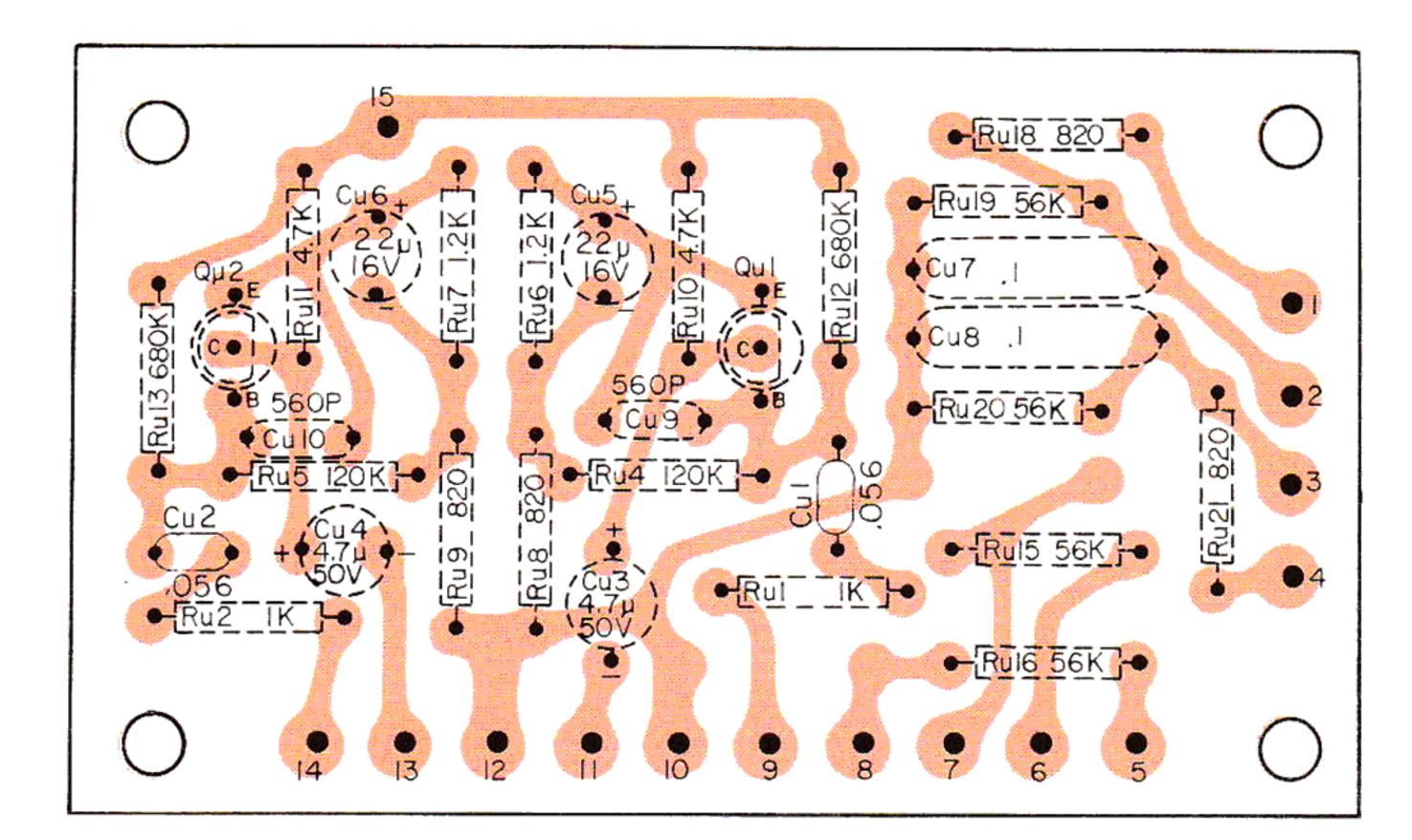


15dB AMP UNIT(X13-1100-30)

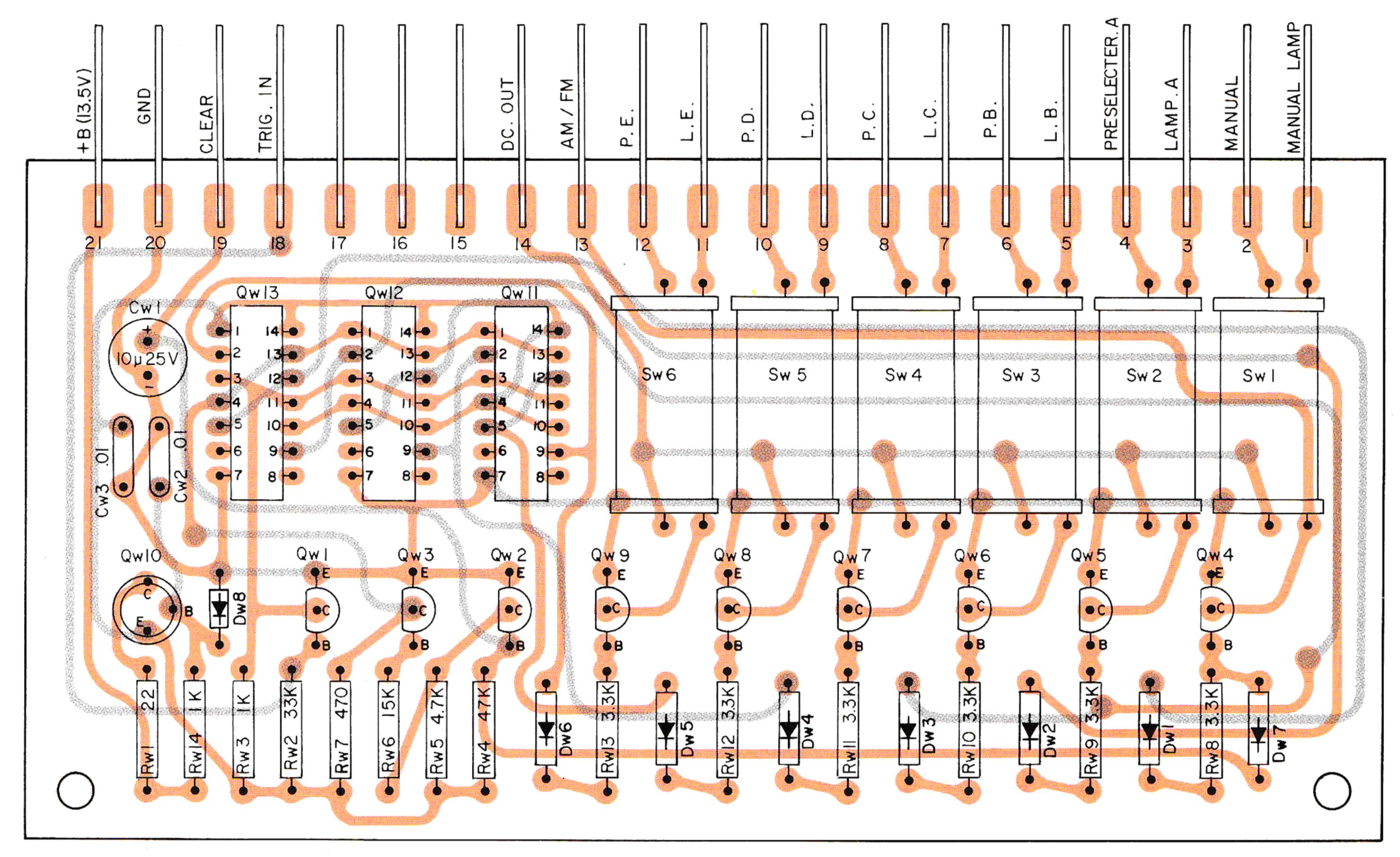
▼ TOP VIEW



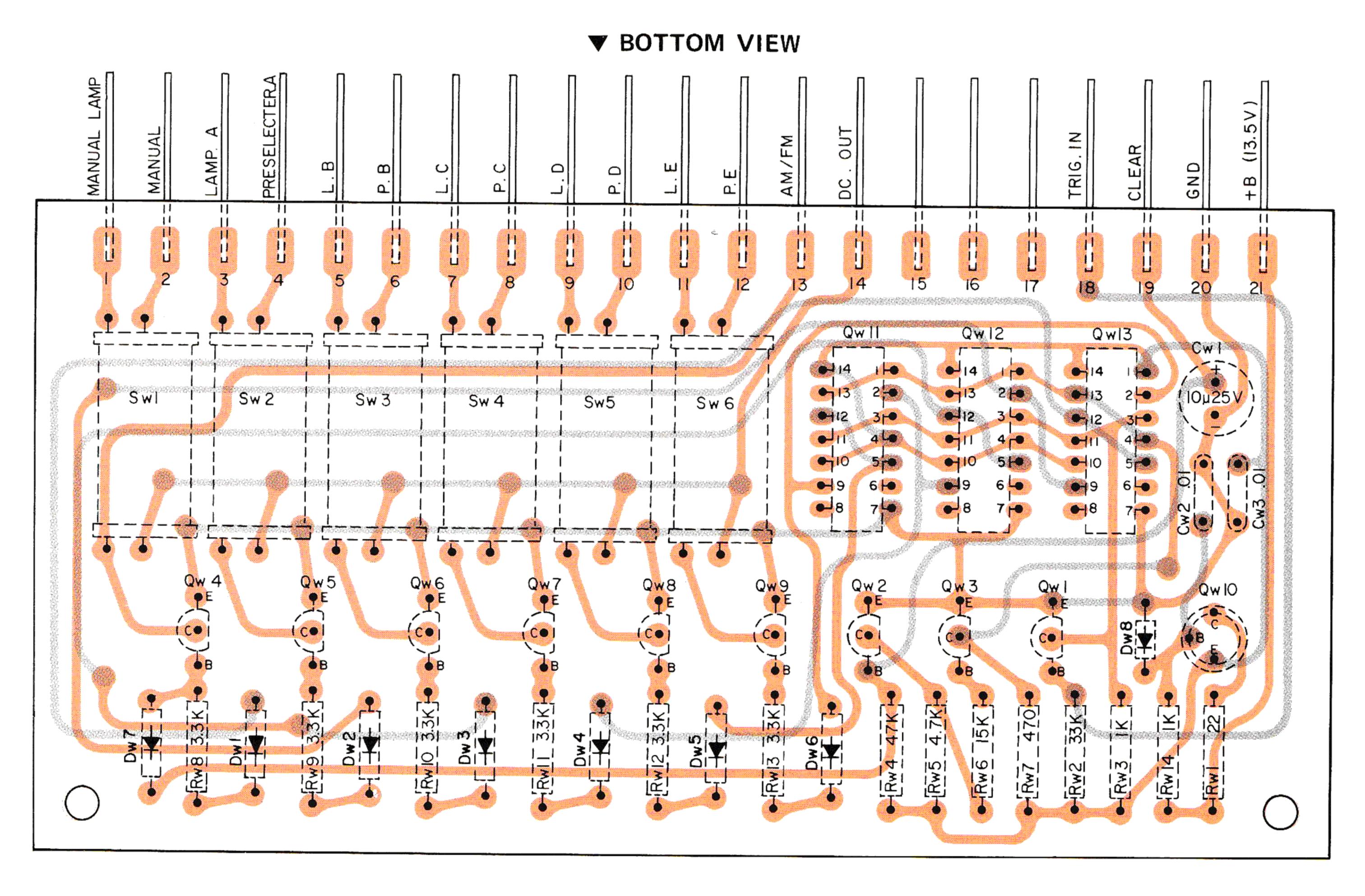
▼ BOTTOM VIEW



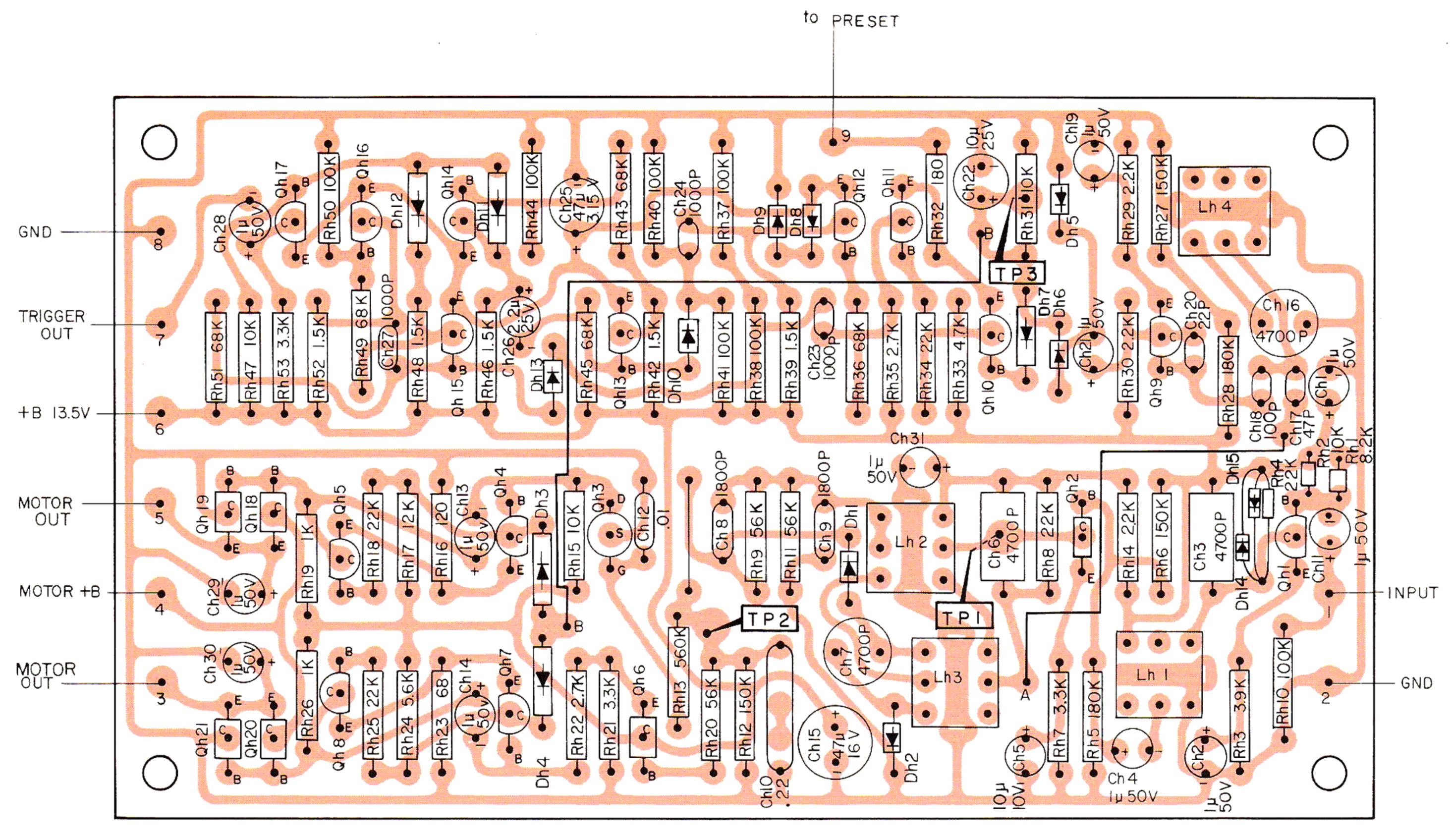
REMOTE CONTROL PRESETTER UNIT(X13-1120-30)



▲ TOP VIEW

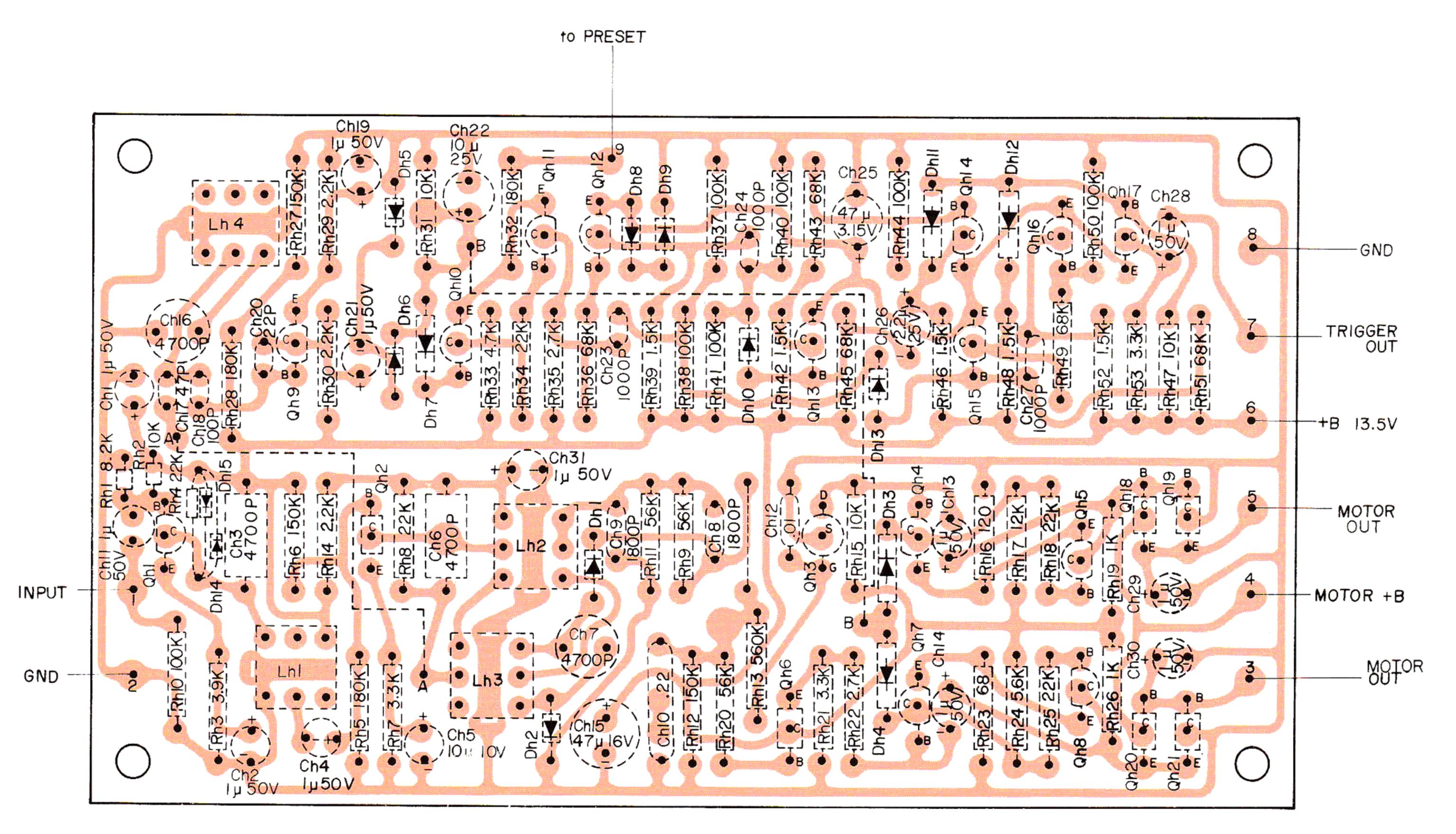


REMOTE CONTROL RECEIVER UNIT(X13-1130-30)

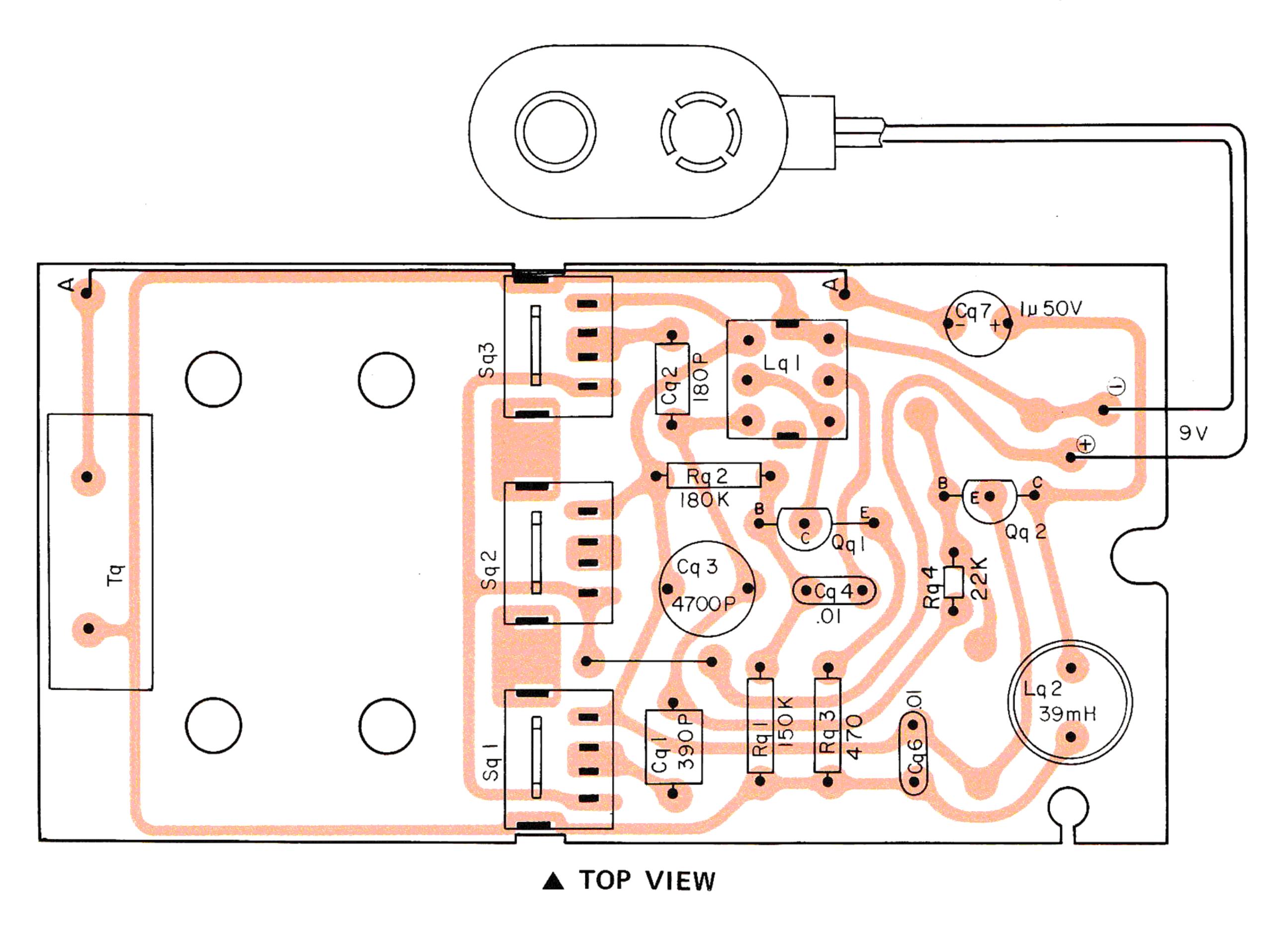


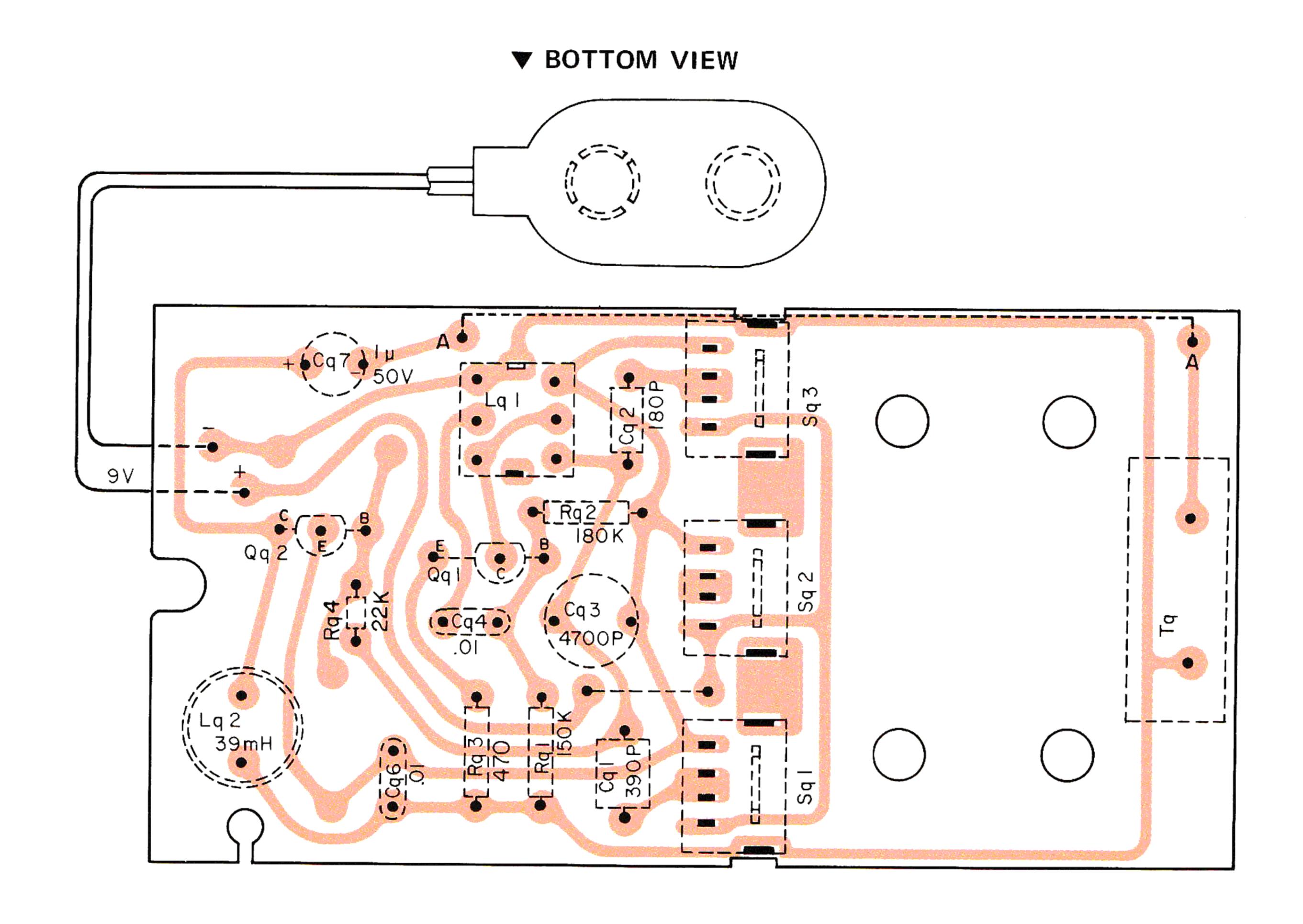
TOP VIEW

▼ BOTTOM VIEW

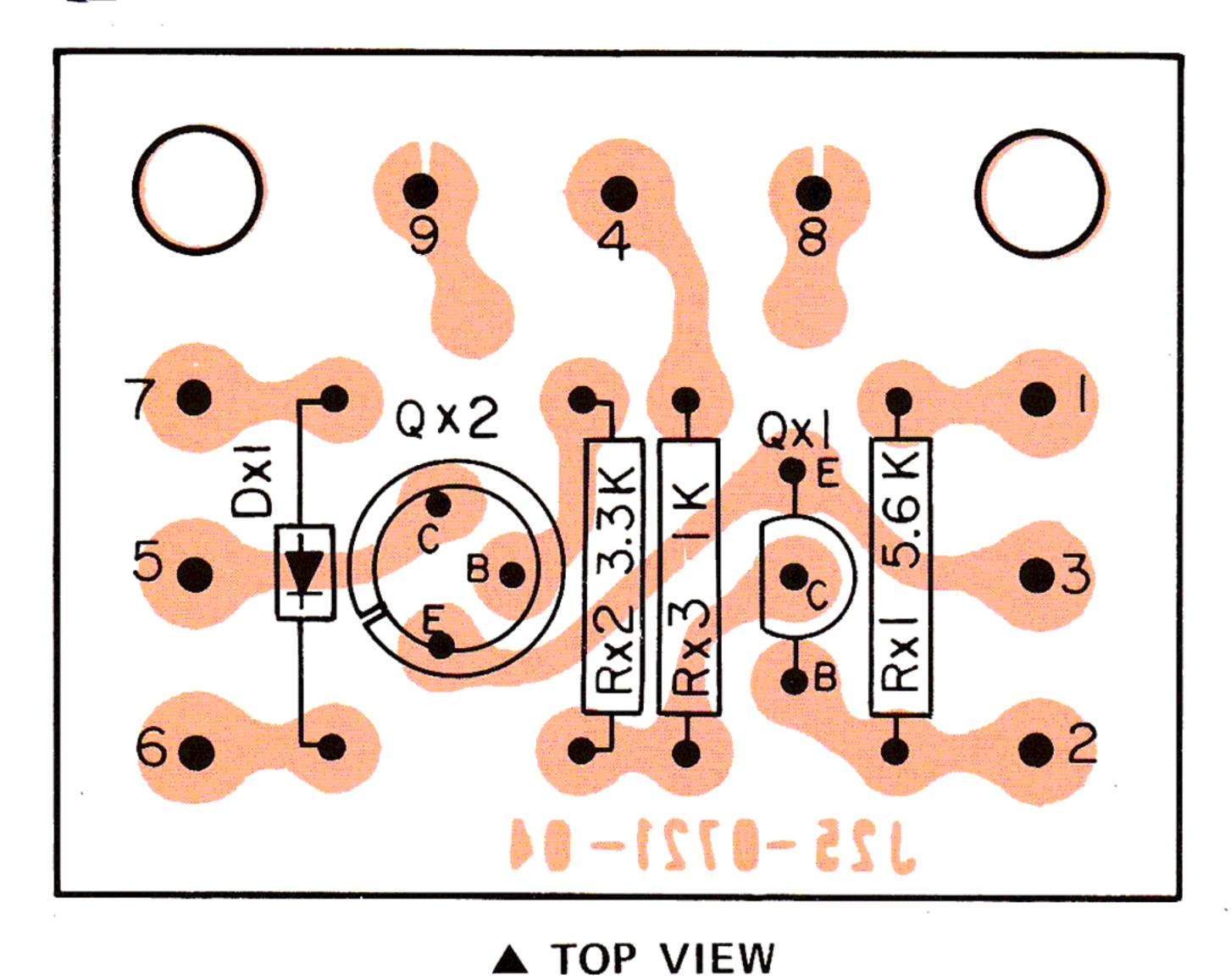


REMOTE CONTROL TRANSMITTER UNIT(X13-1140-30)



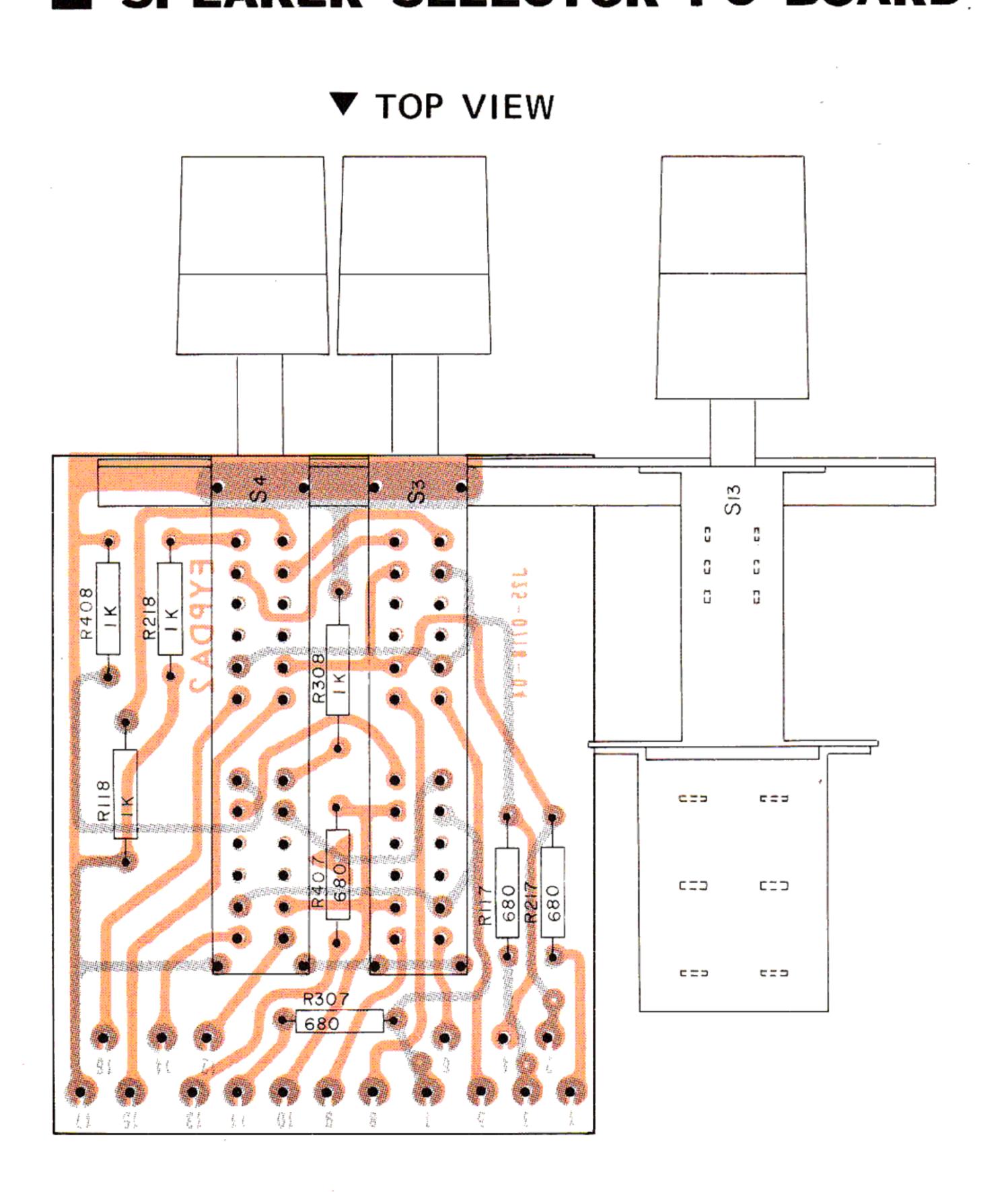


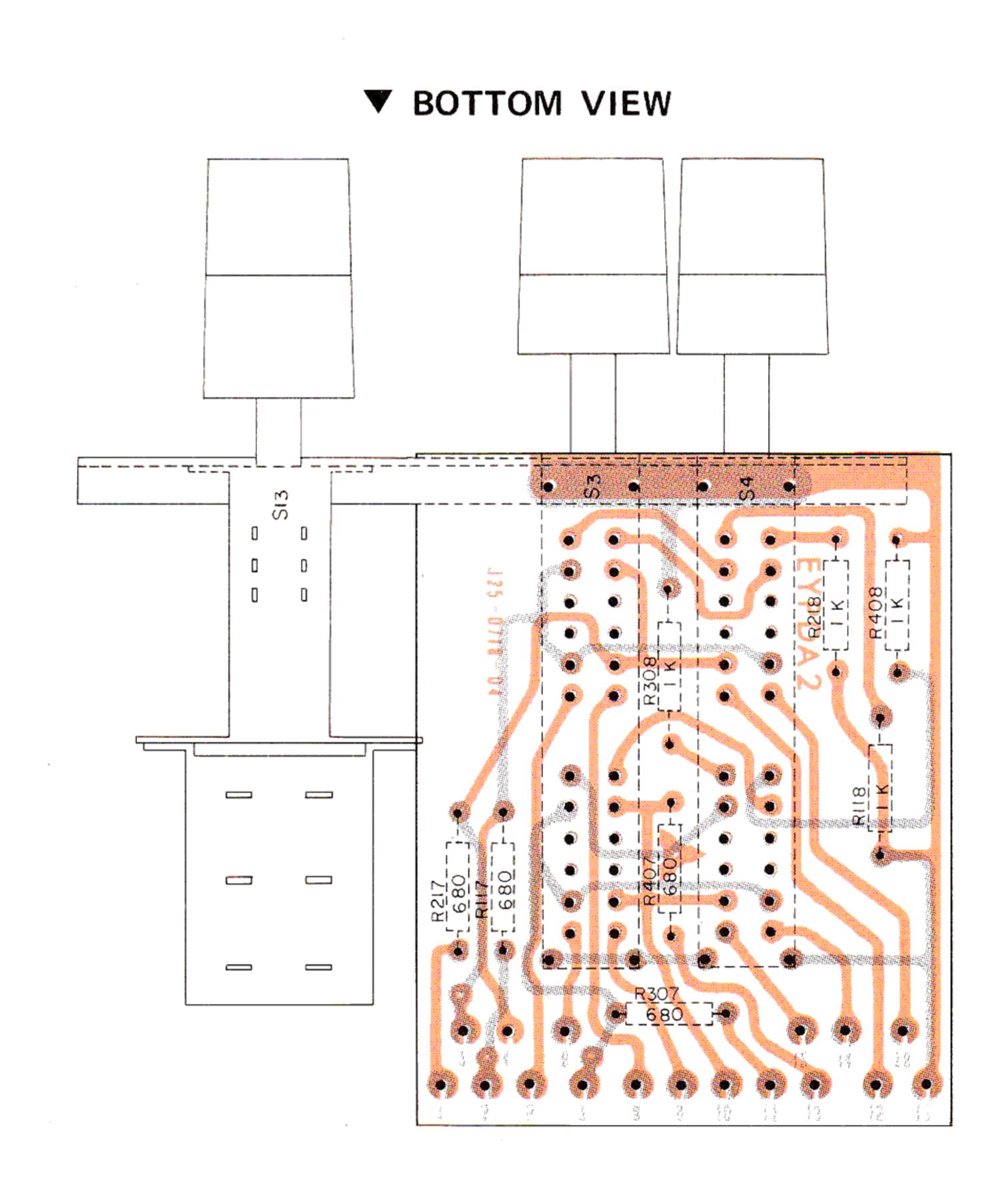
POINTER UNIT(X13-1280-30)



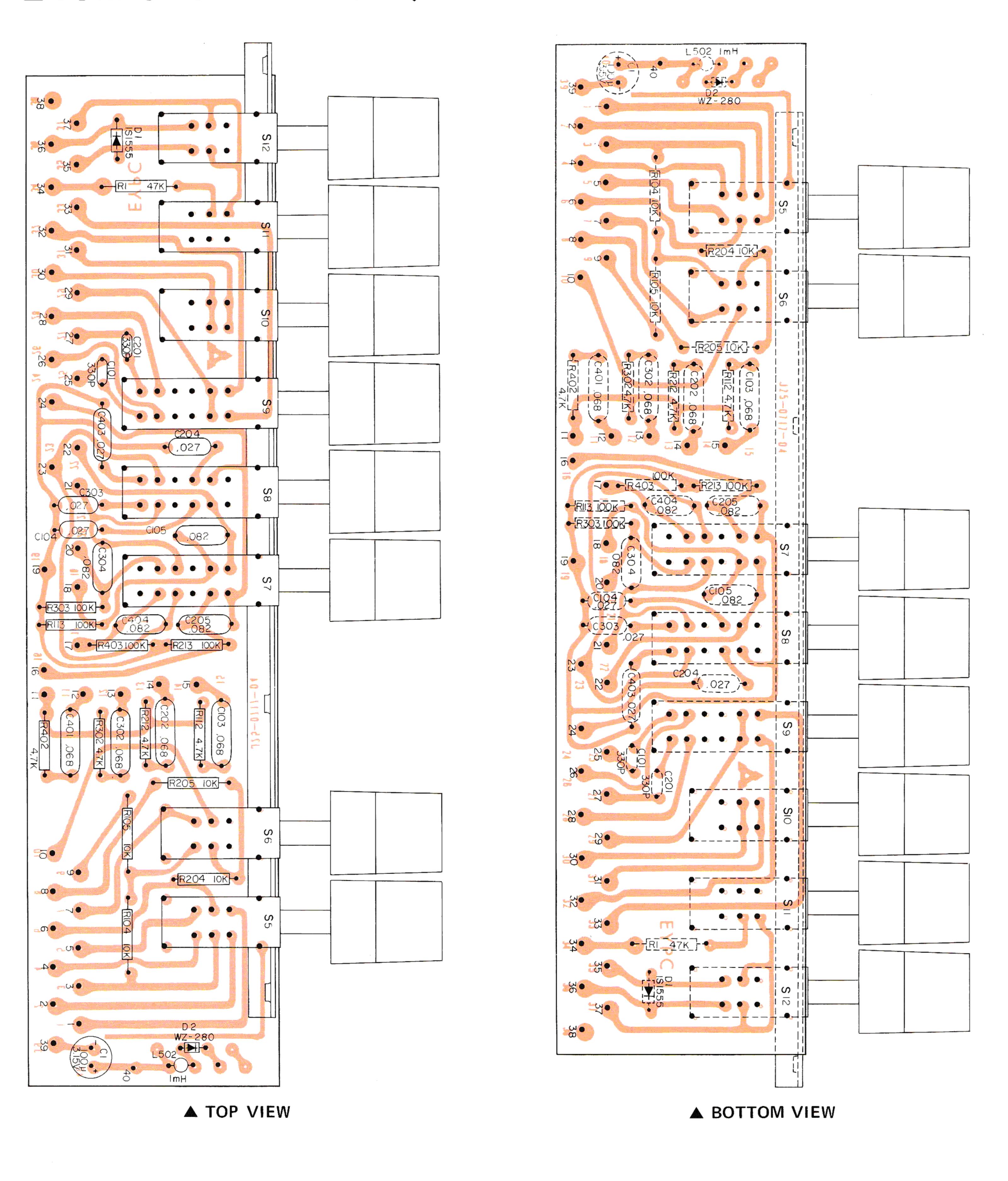
▲ BOTTOM VIEW

SPEAKER SELECTOR PC BOARD

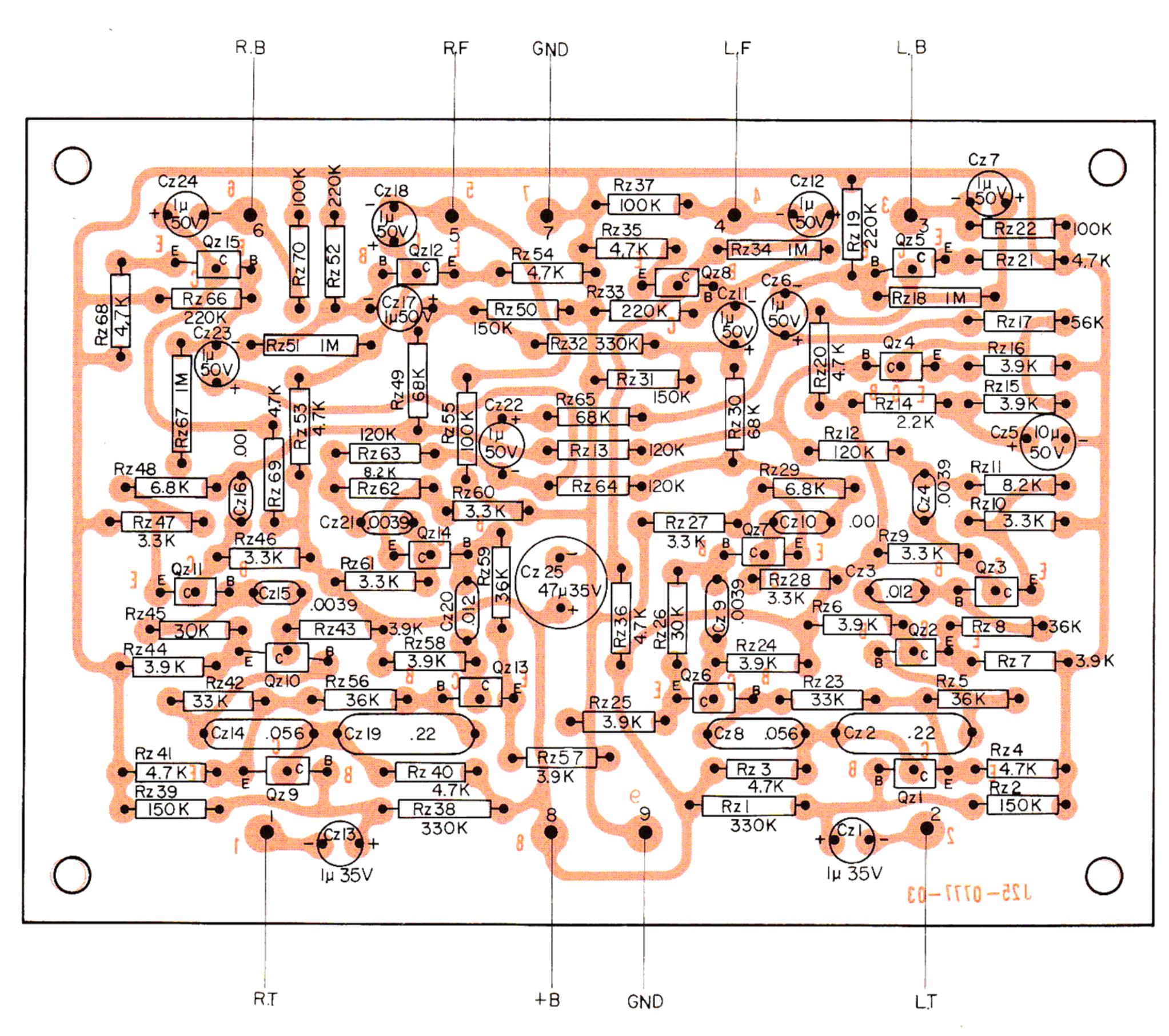




PUSHBUTTON SWITCH UNIT(X13-1290-30)

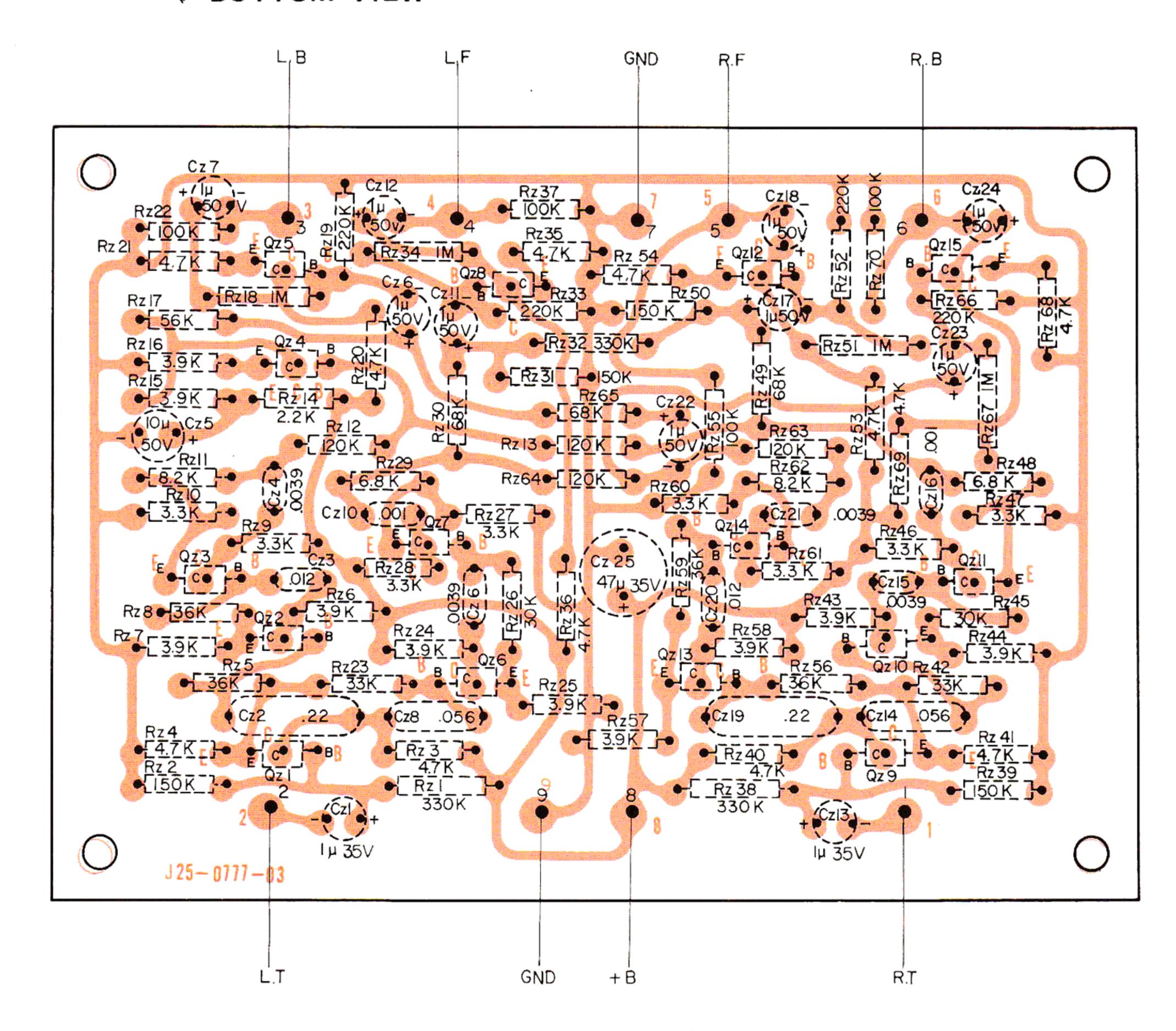


M SQ-DECODER UNIT(X15-1080-01)

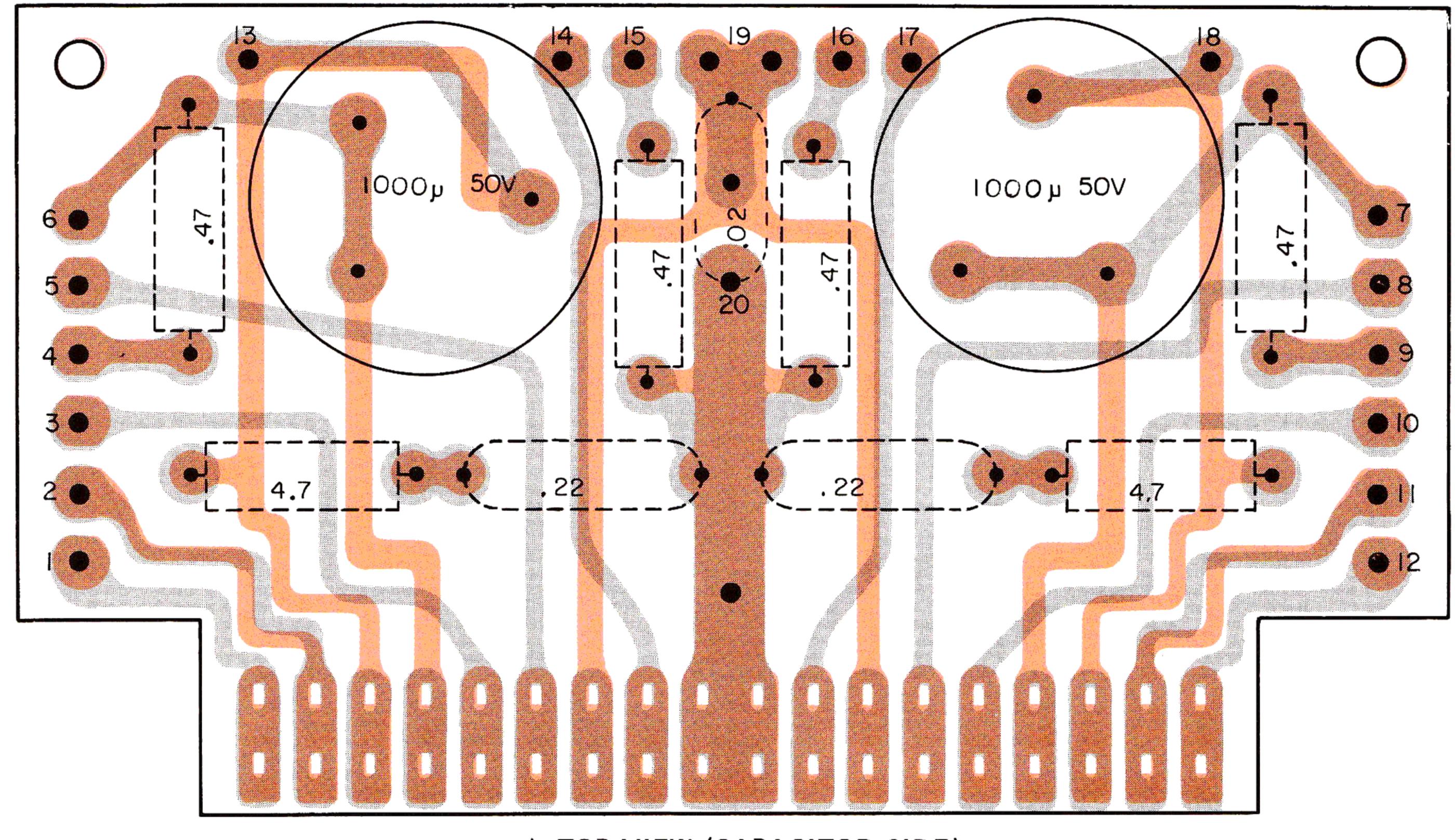


▲ TOP VIEW

▼ BOTTOM VIEW

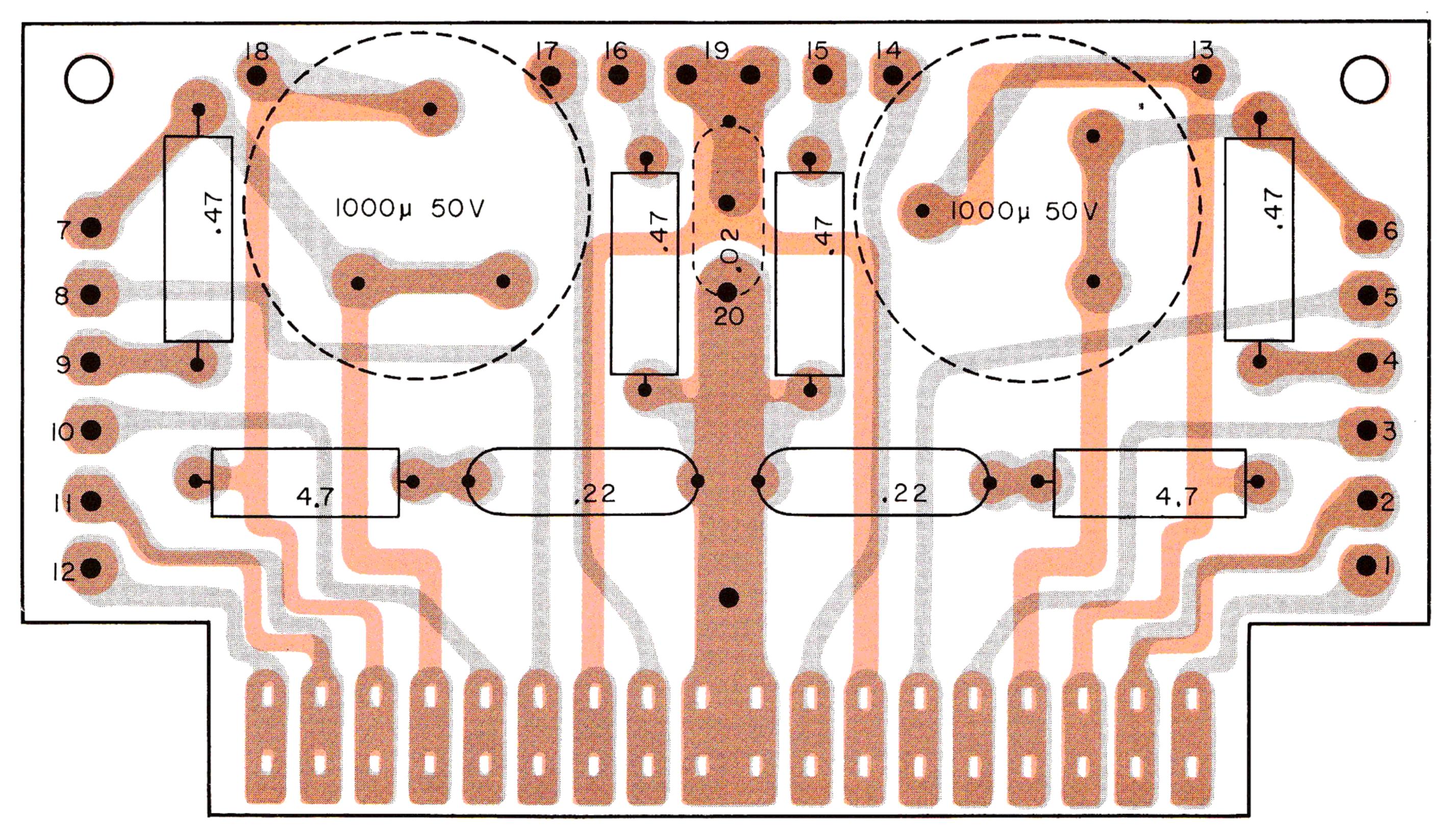


OUTPUT PC BOARD



▲ TOP VIEW (CAPACITOR SIDE)

W BOTTOM VIEW



PARTS LIST

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTION	NC	
			CAPACITORS			
C2		CE04W1C101	Electrolytic	100μF	16WV	
C3, 4		CK45F1H403M	Ceramic	0.04μF	±20%	
C5		CQ93M1H104K	Mylar	$0.1 \mu F$	±10%	
C6, 7		CK45D1H561M	Ceramic	560pF	±20%	
C102		CK45D1H471M	Ceramic	470pF	±20%	
C106		C90-0123-05	Electrolytic	1000μF	50WV	
C107		CQ93M1H224K	Mylar	0.22μF	±10%	
C108		CC45SL1H100D	Ceramic	10pF	±0.5pF	
C109		CK45F2H203Z	Ceramic	470pF	+80%	-20%
C110		CK45D1H561M	Ceramic	560pF	±20%	2070
C203		CK45D1H301M CK45D1H471M	Ceramic	470pF	±20%	
			Electrolytic	1000μF	50WV	
C206		C90-0123-05		·	±10%	
C207		CQ93M1H224K	Mylar	0.22μF		
C208		CC45SL1H100D	Ceramic	10pF	±0.5pF	200/
C209		CK45F2H203Z	Ceramic	0.02μF	+80%	-20%
C210		CK45D1H561M	Ceramic	560pF	±20%	
C301		CK45D1H471M	Ceramic	470pF	±20%	
C305		C90-0123-05	Electrolytic	1000μF	50WV	
C306		CQ93M1H224K	Mylar	0.22μF	±10%	
C307		CK45D1H561M	Ceramic	560pF	±20%	
C402		CK45D1H471M	Ceramic	470pF	±20%	
C405		C90-0123-05	Electrolytic	1000μF	50WV	
C406		CQ93M1H224K	Mylar	$0.22\mu F$	±10%	
C407		CK45D1H561M	Ceramic	560pF	±20%	
C501		C90-0120-05	Electrolytic	3300µF	80WV	
C502		C90-0145-05	Polystyrene	$0.01 \mu F$	±20% (UL)
C503, 504		CP02B2J103M	Oil filled	0.01µF	± 20 %	
C505		CE04W1H101	Electrolytic	100μF	50WV	
C506		CE02W1V102	Electrolytic	1000μF	35WV	
			RESISTORS			
R2		PD14BY2E560J	Carbon film	56Ω	±5%	1/4W
R3		RC05GF2H151K	Carbon composition	150 Ω	±10%	1/2W
R4		PD14BY2E104J	Carbon film	100kΩ	±5%	1/4W
R5		PD14BY2E683J	Carbon film	68kΩ	±5%	1/4W
R101		PD14BY2E822J	Carbon film	8.2kΩ	±5%	1/4W
R102		PD14BY2E103J	Carbon film	10kΩ	±5%	1/4W
R103		PD14BY2E183J	Carbon film	18kΩ	±5%	1/4W
R106, 107		PD14BY2E153J	Carbon film	15kΩ	±5%	1/4W
R108		PD14BY2E333J	Carbon film	33kΩ	±5%	1/4W
R111		PD14B12E3333 PD14BY2E153J	Carbon film	33k32 15kΩ	±5%	1/4W
R114, 115		RN14AB3DR47K	Metal film	0.47Ω	±10%	2W
R114, 115		RN14AB3DA47K			±10%	2W
			Metal film Carbon composition	4.7Ω 680Ω		
R117		RC05GF2H681K	Carbon composition		±10%	1/2W
R118		RC05GF2H102K	Carbon composition	1kΩ	±10%	1/2W
R201		PD14BY2E822J	Carbon film	8.2kΩ	±5% ±5%	1/4W
R202		PD14BY2E103J	Carbon film	10kΩ	±5%	1/4W
R203		PD14BY2E183J	Carbon film	18kΩ	±5%	1/4W
R206, 207		PD14BY2E153J	Carbon film	15k Ω	±5%	1/4W
R208		PD14BY2E333J	Carbon film	33k Ω	±5%	1/4W
R211		PD14BY2E153J	Carbon film	15k Ω	±5%	1/4W
R214, 215		RN14AB3DR47K	Metal film	0.47Ω	±10%	2W
R216		RN14AB3D4R7K	Metal film	4.7Ω	±10%	2W
R217		RC05GF2H681K	Carbon composition	680Ω	±10%	1/2W
R218		RC05GF2H102K	Carbon composition	1kΩ	±10%	1/2W
N210		1	1			

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REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPT	ION	
R304, 305		RN14AB3DR47K	Metal film	0.47Ω	±10%	2W
R306		RN14AB3D4R7K	Metal film	4.7Ω	±10%	2W
		RC05GF2H681K	Carbon composition	680Ω	±10%	1/2W
R307			•		±10%	1/2W
R308		RC05GF2H102K	Carbon composition	1kΩ		•
₹401		PD14BY2E153J	Carbon film	15kΩ	±5%	1/4W
R404, 405		RN14AB3DR47K	Metal film	0.47Ω	±10%	2W
R406		RN14AB3D4R7K	Metal film	4.7Ω	±10%	2W
R407		RC05GF2H681K	Carbon composition	680Ω	±10%	1/2W
R408		RC05GF2H102K	Carbon composition	1kΩ	±10%	1/2W
R501		RC05GF2H225K	Carbon composition	$2.2M\Omega$	±10%	1/2W
R502		RW14AG3S750K	Wire wound	75Ω	±10%	6W
R503		RN14AB3D100K	Metal film	10 Ω	±10%	2W
R504		RW14AG3S470K	Wire wound	47Ω	±10%	6W
		SEM	ICONDUCTORS			
Q1 ~ 8			2SC1111 Sanken si	licon		
D501			S2HB20 Shindenge	en silicon		
		РОТ	ENTIOMETERS			
VR1	P-1202	R08-5016-05	Potentiometer 100kΩ (B	dual TAPE I	NPUT	
VR2	P-1203	R11-5003-05	Potentiometer 100kΩ (B) dual and 10	0 k Ω (A) d ual	MAIN VOLUME
VR3	P-1204	R11-5004-05	Potentiometer 100kΩ (B) 4 gangs 40	H-AUX VC	LUME
VR4	P-1206	R13-5009-05				AR BALANCE
VR5	P-1205	R13-5008-05		/) slide FRON		
	P-1205					
VR6	P-1200	R13-5008-05	Potentiometer 100kΩ (V	V) slide REAF		
			SWITCHES			
S1	S-1075	S01-5004-05	Rotary (F. 5. 18, 4)	SELECTOR		
S2	S-1074	S01-2015-05	Rotary (F. 2. 4. 4)	MODE		
S3	S-7069	S41-3004-05	Pushbutton (3-keys)	SPEAKER (A)	
S4	S-7069	S41-3004-05	Pushbutton (3-keys)	SPEAKER (в)	
S13	S-7069	S41-3004-05		POWER (U	-	
S14	S-2123	S31-2007-05		NSITIVITY	_,	
_	S-7070	S59-6001-05		PRESET		
	TA 0000	L03-0065-05	Power transformer	(UL)		
	TA-0323				\C36/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ΔC7\/Y2Λ
	TB-0361	L19-0009-05	Pri: AC117VX2, Sec: AC	74 V A3.5A, A	1030 V AU.8A	, AUTVAZA
			Balun trans.			
L501	CB-2143	L33-0025-05	Choke coil (1µH)			
		M	ISCELLANEOUS			
	Z-0837	A03-0094-02	Chabinet			
		A10-0301-01	Chassis			
	Z-0838	A20-0495-02	Panel assembly			
,	2-0030	A20-0495-02 A20-0496-05	Panel			
	I					
		1 421 0000 00	Ornamental panel			
		A21-0088-02				
		A22-0110-01	Sub panel			
		A22-0110-01 A23-0276-02				
		A22-0110-01	Sub panel			
		A22-0110-01 A23-0276-02	Sub panel Rear panel			
	H-2426	A22-0110-01 A23-0276-02 A40-0095-03 B04-0041-04	Sub panel Rear panel Bottom plate Screw x 2			
		A22-0110-01 A23-0276-02 A40-0095-03 B04-0041-04 B04-0042-04	Sub panel Rear panel Bottom plate Screw x 2 Screen (microphone cover)		
	H-2426 H-1778 H-1635	A22-0110-01 A23-0276-02 A40-0095-03 B04-0041-04	Sub panel Rear panel Bottom plate Screw x 2			

PARTS LIST

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER	DESCRIPTION
	H-2427	B19-0137-04	Filter (for meter)
_	D-5062	B20-0227-04	Dial calibrations
_	D-1055	B21-3028-05	Dial pointer assembly (orange)
	L-0362	B30-0015-15	Pilot lamp (fuse type, 8V, 300mA) x 3
	L-0362	B30-0048-05	Pilot lamp (8V, 50mA, with UL lead wire) x 5
	L-0363	B30-0048-05	Pilot lamp (8V, 30mA, with UL lead wire)
		B30-0032-05 B30-0133-05	
	M-0181		Meter (signal)
		B42-0292-04	UL sticker
		B42-0359-04	UL caution sticker (bottom)
_		B42-0372-04	Fuse caution sticker x 2
_		B50-0793-00	Instruction manual
_	D-3041	D01-0015-04	Flywheel
_	D-3042	D15-0058-04	Pulley
_	D-3043	D15-0075-04	Pulley (small size) x 6
	D-3044	D15-0101-05	Pulley (30 ϕ)
	D-3045	D20-0091-04	Dial shaft
	D-3046	D21-0273-04	Gear box shaft
		D21-0273-04 D21-0274-04	
	D-3047	D40-0129-05	Volume shaft Gear box accembly
	M-4195	D40-0129-05	Gear box assembly
		E02-0209-05	Transistor socket x 8
_	J-6143	E08-0221-05	AC outlet (UL) x 2
_	J-4241	E10-1405-15	PC board connector (Tone amp.)
	J-1406	E10-1406-05	PC board connector (Pre amp.)
	J-4242	E10-1808-05	PC board connector (Main amp.) x 2
	J-0415	E11-0002-05	Phone jack (REAR PHONES)
_	J-0416	E11-0027-05	Phone jack (FRONT PHONES)
_	J-0417	E13-0404-05	Pin jack (4P, SPEAKERS)
_	J-0418	E13-0408-05	Pin jack (4P, 2CH INPUT, 4CH AUX INPUT)
_	J-0419	E13-0601-05	Pin jack (6P, TAPE RECORDER)
		E14-0101-05	Pin plug
	J-6144	E20-0402-05	Terminal strips (4P, ANT.)
_	J-4243	E21-0138-15	Terminal (GND)
_	J-4245		
	J-4244	E21-0803-05	Push terminal (8P, SPEAKERS) x2
	H-1636	E22-0216-05	Lug-type terminal strips (2P, UL)
_	H-2428	E22-0220-05	Wire lap terminal strips (2P, UL) x 2
	H-2429	E22-0221-05	Lug-type terminal strips (2P, UL)
	H-2430	E22-0415-05	Lug-type terminal strips (4P, UL)
_	H-1637	E22-0416-05	Lug-type terminal strips (4P, UL) x 3
	H-1639	E22-0420-05	Wire lap terminal strips (4P, UL) x 2
_		E23-0016-04	Single tongue
_	J-4247	E23-0046-04	Terminal (12.6mm) × 49
		E23-0047-04	Terminal (18.6mm) x 12
_	H-1640	E29-0026-05	L type wire lap terminal
_		E30-0181-05	Power cord
	HH-0047	F01-0129-04	Heat sink (For diode SIRB10)
_	HH-0046	F01-0130-03	Heat sink (For power transistor) x 2
	1111-00-0	F05-3021-05	Fuse (3A, UL)
_		F07-0250-03	Dial cover
		F10-0290-04	Shield plate
		F10-0291-03	Shield plate
_		F14-0050-04	Soft tape (For dial pointer)
_		F15-0001-04	Dust sheet (38 x 90)
		F15•0019-04	Dust sheet (15 \times 50 \times 0.2t)
	1	F19-0081-04	Blind (For presetter)

REF. NO.	RS BART MUMBER	MFR'S	DESCRIPTION
	PART NUMBER	PART NUMBER	
		F20-0062-04	Insulator (For diode)
		F20-0063-04	Insulator (For antenna)
		F20-0066-05	Mica plate (For power transistor, UL) x 8
_		F20-0068-04	Insulator (For ac outlet)
		F20-0070-04	Insulator (For gear box)
		F29-0006-04	Feeder holder x 2
		F31-0089-03	Chassis reinforce x 2
_		F99-0008-04	Slider
	RA-5571	G01-0045-14	Dial spring x 2
_	117 007 1	G53-0033-04	Rubber packing
_		H01-0773-04	Carton case (Inside)
		H02-0165-24	Carton case (For REMOTE CONTROL)
_		H03-0115-04	Carton case (Outside)
_		H10-0587-03	Polystyrene formed fixture
		H10-0588-03	Polystyrene formed fixture
_		H10-0589-04	Buffer fixture
		H10-0590-14	Buffer fixture
		Ĥ10-0591-04	Protection sheet
		H10-0593-24	Buffer fixture (For REMOTE CONTROL)
_		H10-0753-04	Buffer fixture (For REMOTE CONTROL)
_		H20-0331-04	Protection cover
		H25-0029-04	Polyethylene bag
		H25-0032-00	Polyethylene bag
		H25-0078-00	Instruction bag
_		H30-0010-00	Soft tape (For front glass, 8 x 410 x 3t)
		100 00 10 11	
_		J02-0049-14	Leg x 4
		J11-0013-05	Cramper x 3
	F-1072	J11-0016-05	V-shape cramper
		J11-0021-05	V-shape cramper x 3
		J13-0016-15	Fuse holder (Screw-type, UL)
	F-0105	J13-0023-05	Fuse holder (Clip-type) x 3
_		J19-0233-13	Dial stopper (Right, for presetter)
_		J19-0234-13	Dial stopper (Left, for meter)
		J19-0235-04	Front glass stopper x 5
		J19-0246-24	Lead wire supporter
_		J19-0294-04	Varistor stopper
		J19-0295-04	Pushbutton switch stopper (A)
		J19-0296-04	Pushbutton switch stopper (B)
		J19-0298-04	Preamp unit stopper
_		J19-0306-05	Lead wire holder x 14
		J21-0935-04	PC board stopper (For main amp.) x 4
		J21-0936-04	AC antenna hardware
		J21-0937-04	Antenna mounting hardware (A)
		J21-0938-04	Antenna mounting hardware (B)
		J21-0939-04	L shape hardware (For gear box) x 2
		J21-0940-04	L shape hardware (For 14P PC board connector)
		J21-1017-04	Potentiometer mounting hardware
		J21-1017-04 J21-1018-04	Pilot lamp mounting hardware (For meter pilot)
		J25-0718-04	PC board (For SPEAKER SELECT)
			PC board (For OUTPUT)
		J25-0722-03	
_		J30-0081-04	Dial spacer x 2
_		J40-0002-04	Bushing (9mm) x 2
		J41-0006-00	Power cord bushing (UL)
		J50-0050-05	Hinge x 2

DEE NO	RS	MFR'S	DEGOSIONI
REF. NO.	PART NUMBER	PART NUMBER	DESCRIPTION
		J61-0017-05	Beaded band
_		J61-0018-05	Beaded band x 6
_		J61-0023-05	Lead wire clip
_		J61-0035-05	Lead wire clip x 3
_	K-1079	K21-0249-04	Knob (B) (Rear-ch, BASS, MID, TREBLE)
	K-1080	K23-0090-04	Knob (TUNING)
_	K-1081	K23-0091-04	Knob (Front-ch, BASS, MID, TREBLE)
	K-1082	K23-0092-04	Knob (X) (110116-011, DX33, MID, THEBLE) Knob (VOLUME, SELECTOR)
	K-1083	K23-0093-04	Knob (Volowie, beleeven) Knob (Mode, 4CH-AUX, VR)
	K-1084	K23-0094-04	Knob (BALANCE) x 3
		N09-0100-04	Screw (For small pulley) x 3
		N10-2030-11	Hexagon nut (3 ϕ) x 4
		N14-0074-05	Speed nut
-		N15-1030-46	Flat washer (3 ϕ) x 4
		N15-1040-41	Flat washer (3ϕ) x 4
_		N35-4015-45	Ornamental screw (4φ x 15 mm) x 4
		N84-2605-46	Pan head tap tight screw (2ϕ x 5mm) x 4
		N84-3006-41	Pan head tap tight screw (2ϕ x 5mm) x 2
		N84-3006-46	Pan head tap tight screw (3 ϕ x 6mm) x 15
_		N84-3008-41	Pan head tap tight screw (3 ϕ x 8mm) x 2
_		N84-3010-41	Pan head tap tight screw (3 ϕ x 10mm) x 4
_		N84-3012-46	Pan head tap tight screw (3 ϕ x 12mm) x 16
_		N84-4025-41	Pan head tap tight screw (4ϕ x 25mm)
_		N87-3006-46	Brassiere tap tight screw $(3\phi \times 6\text{mm}) \times 47$
		N87-3008-46	Brassiere tap tight screw (3 ϕ x 8mm) x 44
-		N87-3010-46	Brassiere tap tight screw (3 ϕ x 10mm) x 8
_	,	N87-3014-46	Brassiere tap tight screw (3 ϕ x 14mm) x 14
_		N87-4008-46	Brassiere tap tight screw (4 ϕ x 8mm) x 10
		N87-3008-41	Brassiere tap tight screw (3 ϕ x 8mm) x 29
		N87-4006-46	Brassiere tap tight screw $(4\phi \times 6\text{mm}) \times 4$
_		N87-4010-46	Brassiere tap tight screw $(4\phi \times 10\text{mm}) \times 4$
		N88-3008-46	Flat head tap tight screw (3 ϕ x 8mm) x 8
		N89-3005-45	Binding tap tight screw (Black, 3φ x 8mm) x 8
_	CA-0169	T90-0026-05	Ferrite antenna
_	S-4340	T95-0002-05	Transducer (Receive)
	X-4271	X00-1100-30	Power supply unit (A)
	X-4272	X00-1110-30	Power supply unit (B)
_	X-4273	X05-1030-30	Tuner unit
_	X-2034	X07-1050-10	Main amp unit (Front-ch)
_	X-2035	X07-1050-11	Main amp unit (Rear-ch)
_	X-2036	X08-1020-12	Preamp unit
	X-2037	X11-1020-30	Tone amp unit
	X-4274	X13-1090-11	Protection unit
	X-2038	X13-1100-30	15 dB amp unit
	X-4275	X13-1120-30	Remote control presetter unit
_	X-4276	X13-1130-30	Remote control receiver unit
	X-4277	X13-1140-30	Remote control transmitter unit
	X-4402	X13-1280-30	Pointer unit
	X-4403	X13-1290-30	Pushbutton switch unit
	X-4278	X15-1080-01	SQ-decoder unit
		351-0003-00	Dial cord (0.5 ϕ) 270 cm

■ POWER SUPPLY UNIT(X00-1100-30)

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER			DESCRIPTI	ΟŃ	
			CAPACITORS				
Ck1, 2		CP02B2J103M	Oil filled		0.01μF	±20%	
Ck3		CE02W1J102	Electrolytic		1000μF	63WV	
Ck4		CE04W1V221	Electrolytic		$220\mu F$	35WV	
Ck5		CE04W1C221	Electrolytic		220μF	16WV	
Ck6		CE04W1C471	Electrolytic		470µF	16WV	
			RESISTORS				
Rk1		RW14AG3S330K	Wire wound		33Ω	±10%	6W
Rk2		RN14AB3D152K	Metal film		1.5k Ω	±10%	2W
Rk3		RW14AB3G821K	Wire wound		820Ω	±10%	4W
Rk4		RN14AB3A222K	Metal film		$2.2k\Omega$	±10%	1W
Rk5		PD14BY2E152K	Carbon film		1.5k Ω	±10%	1/4W
Rk6		RN14AB3A332K	Metal film		3.3 k Ω	±10%	1W
	-	SE	MICONDUCTORS				
Qk1			2SC1060 (B)	Hitachi	silicon trans	istor	
Dk1			S1RB-10	silicon	(100V, 1A)	
Dk2			YZ-140	silicon	(14V, 500r	nA)	
			COIL				
Lk1	CA-2790	L33-0104-05	Ferri-inductor (1	1mH, 50m/	4)		
		MI	SCELLANEOUS			,	
_		E23-0006-04	PC board termina	al x 8			
		E23-0047-04	PC board termina		***		
_		F01-0116-04	Heat sink				
_		F06-2022-05	Fuse (2A) lead to	ype (UL)			
		J21-0737-04	PC board holder	•			
		N84-3006-46	Pan head screw x				
		N87-3006-46	Brassiere tap tigh		3		

POWER SUPPLY UNIT(X00-1110-30)

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTION	ON	
			CAPACITORS			
Cy1		CE02W1C102	Electrolytic	1000μF	16WV	
Cy2		CE04W1C101	Electrolytic	100μF	16WV	
Cy3		CE04W1H010	Electrolytic	1μF	50WV	
Cy4		CE04W1H470	Electrolytic	47μF	50WV	
Cy5		CE04W1H101	Electrolytic	100μF	50WV	
Cy6		CE04W1C221	Electrolytic	220µF	16WV	
Cy7		CE04W1H100	Electrolytic	10μF	50WV	
Cy8		CE04W1V470	Electrolytic	47μF	35WV	
Cy9		CE04W1E100	Electrolytic	10μF	25WV	
Cy10		CE04W1E4R7	Electrolytic	4.7µF	25WV	
			RESISTORS			
Ry1		PD14BY2E222J	Carbon film	2.2kΩ	±5%	1/4W
Ry2	•	PD14BY2E472J	Carbon film	$4.7 k\Omega$	±5%	1/4W
Ry4		PD14BY2E472J	Carbon film	4.7k Ω	±5%	1/4W
Ry5		RN14AB3D182K	Metal film	1.8k Ω	±10%	1/4W
Ry6		RC05GF2H101K	Carbon composition	100Ω	±10%	1/2W
Ry7		PD14BY2E103J	Carbon film	10kΩ	±5%	1/4W
Ry8		PD14BY2E752J	Carbon film	$7.5 k\Omega$	±5%	1/4W

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTI	ON	
Ry9		RC05GF2H392K	Carbon composition	3.9 k Ω	±10%	1/2W
Ry10		PD14BY2E182J	Carbon film	1.8k Ω	± 5%	1/4W
Ry11		PD14BY2E104J	Carbon film	100k Ω	± 5%	1/4W
Ry12	` .	PD14BY2E470J	Carbon film	47Ω	± 5%	1/4W
Ry13		PD14BY2E104J	Carbon film	100k Ω	± 5%	1/4W
Ry14, 15		PD14BY2E333J	Carbon film	33 k Ω	± 5%	1/4W
Ry16		PD14BY2E102J	Carbon film	1k Ω	± 5%	1/4W
Ry17		PD14BY2E152J	Carbon film	1.5k Ω	± 5%	1/4W
Ry18, 19		PD14BY2E683J	Carbon film	68 k Ω	± 5%	1/4W
Ry20		PD14BY2E223 J	Carbon film	$22k\Omega$	± 5%	1/4W
Ry21		PD14BY2E152J	Carbon film	1.5k Ω	± 5%	1/4W
		SEN	MICONDUCTORS			
Qy1			2SC1061 (C) Hitac	ni silicon		
Qy2~5			2SC945 NEC	silicon	•	
Dy1		· ·	10D1 Silico	n (100V, 1	A)	
Dy2			YZ-140 Silico	n (14V, 50	0mA)	
Dy4~6		•	1S1555 Silico	n (35V, 10	0mA)	
			COIL			
Ly1	CA-2790	L33-0104-05	Ferri-inductor (1mH, 50n	nA)		
	•	M	SCELLANEOUS			
		E23-0006-04	PC board terminal x 16			
_		F06-2022-05	2A lead type fuse (UL)			
_		J21-0737-04	L shape hardware x 2			
		N30-3006-11	Pan head screw x 2			
	,					

■ TUNER UNIT(X05-1030-30)

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER	DESCRIPTION			
	*		CAPACITORS			
Cg1		CK45F1H223Z	Ceramic	0.022μF	+80%	-20%
Cg2		CK45B1H561K	Ceramic	560pF	±10%.	
Cg3		CQ93M1H223M	Mylar	$0.022 \mu F$	±20%	
Cg4		CC45SL1H100K	Ceramic	10pF	±10%	
Cg5		CK45F1H473Z	Ceramic	$0.047 \mu F$	+80%	-20 %
Cg6		CM93D1H331J(Z)	Mica	330pF	±5%	
Cg7		CK45F1H223Z	Ceramic	$0.022 \mu F$	+80%	-20 %
Cg8		CQ93M1H102M	Mylar	0.001µF	±20%	
Cg9~11		CK45F1H223Z	Ceramic	$0.022 \mu F$	+80%	-20 %
Cg12		CQ08S2B102J	Polystyrene	1000pF	±5%	
Cg13, 14		CK45F1H223Z	Ceramic	0.022μ F	+80%	-20 %
Cg15		CQ08S2B102J	Polystyrene	1000pF	±5%	
Cg16		CQ93M1H223M	Mylar	0.022µF	±20%	
Cg17		CE04W0F101	Electrolytic	100μF	3.15WV	
Cg18		CC45SL1H331K	Ceramic	330pF	±10%	
Cg19		CQ08S2B102J	Polystyrene	1000pF	±5%	
Cg20		CK45F1H223Z	Ceramic	0.022µF	+80%	-20 %
Cg21		CE04W1E100	Electrolytic	10μF	25WV	
Cg22		CC45SL1H050D	Ceramic	5pF	±0.5pF	
Cg23		CQ93M1H103M	Mylar	0.01µF	±20%	
Cg24		CK45F1H223Z	Ceramic	€ 0.022μF	+80%	-20 %

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER	-	DESCRIPTIO	N	-
Cg25	,	CQ93M1H472M	Mylar	0.0047µF	±20%	
Cg26		CK45B1H471K	Ceramic	470pF	±10%	*
Cg27, 28		CK45F1H223Z	Ceramic	0.022µF	+80%	-20%
Cg29		CE04W1H010	Electrolytic	1μF	50WV	2070
Cg30~32		CK45F1H223Z	Ceramic	0.022μF	+80%	-20%
Cg33, 34		CC45SL1H221K	Ceramic	•	±10%	-2076
	4			220pF		
Cg35		CC45SL1H101K	Ceramic	100pF	±10%	
Cg36		CE04W1E100	Electrolytic	10μF	25WV	
Cg37		CK45F1H223Z	Ceramic	0.022µF	+80%	-20 %
Cg38, 39		CE04W1E2R2M	Electrolytic	2.2μ F	25WV	
Cg40		CC45SL1H100K	Ceramic	10pF	±10%	
Cg41		CE04W1E100	Electrolytic	10μF	25WV	
Cg42	,	CQ93M1H472M	Mylar	$0.0047 \mu F$	±20%	
Cg43		CQ93M1H223M	Mylar	0.022µF	±20%	
Cg44		CK45B1H361K	Ceramic	360pF	±10%	
Cg45		CE04W1E100	Electrolytic	10μF	25WV	
Cg46		CQ09S1H472J(X)	Polystyrene	0.0047µF	±5%	
Cg47		CQ08S2B682J	Polystyrene	0.0047μF 0.0068μF	±5%	
_				•		
Cg48		CE04W1H010	Electrolytic	1μF	50WV	
Cg49		CE04W1H220	Electrolytic	22μF	50WV	
Cg50		CK45F1H473Z	Ceramic	0.047μF	+80%	-20%
Cg51		CM93D1H471J(Z)	Mica	470pF	±5%	
Cg52		CM93D1H121J(Z)	Mica	120pF	±5%	
Cg53		CQ09S1H472J(X)	Polystyrene	0.0047µF	±5%	
Cg54		CE04W1H010	Electrolytic	1μF	50WV	
Cg55		CE04W1E100	Electrolytic	10μF	25WV	
Cg56, 57		CM93D1H101J(Z)	Mica	100pF	±5%	
Cg58, 59		CK45B1H471K	Ceramic	470pF	±10%	
Cg60, 61		CQ93M1H104M	Mylar	0.1μF	±20%	
Cg62, 63		CM93D1H331J(Z)	Mica	330pF	±5%	
Cg64, 65		CQ93M1H822J	Mylar	0.0082μF	±5%	
	T	<u></u>	RESISTORS			
Rg1		PD14BY2B104J	Carbon film	100k Ω	±5%	1/8W
Rg2		PD14BY2B102J	Carbon film	1kΩ	±5%	1/8W
Rg3		PD14BY2B104J	Carbon film	100kΩ	±5%	1/8W
Rg4		PD14BY2B103J	Carbon film	10 kΩ	±5%	1/8W
Rg5		PD14BY2B152J	Carbon film	1.5k Ω	±5%	1/8W
Rg6		PD14BY2B224J	Carbon film	220 kΩ	±5%	1/8W
Rg7		PD14BY2B472J	Carbon film	4.7kΩ	±5%	1/8W
Rg8		PD14BY2B102J	Carbon film	1kΩ	±5%	1/8W
₹g9		PD14BY2B103J	Carbon film	10kΩ	±5%	, -
_					_	1/8W
Rg10, 11		PD14BY2B102J	Carbon film	1kΩ	±5%	1/8W
Rg12		PD14BY2B472J	Carbon film	4.7kΩ	±5%	1/8W
Rg13		PD14BY2B183J	Carbon film	18kΩ	±5%	1/8W
Rg14		PD14BY2B561J	Carbon film	560Ω	±5%	1/8W
Rg15		PD14BY2B154J	Carbon film	150k Ω	±5%	1/8W
•		PD14BY2B222J	Carbon film	$2.2 k\Omega$	±5%	1/8W
•		PD14BY2B223J	Carbon film	22 kΩ	±5%	1/8W
Rg16		PD14BY2B562J	Carbon film	5.6k Ω	±5%	1/8W
Rg16 Rg17			1	47Ω	±5%	1/8W
Rg16 Rg17 Rg18		PD14BY2B470J	Carbon film		-	
Rg16 Rg17 Rg18 Rg19		PD14BY2B470J PD14BY2B103J	Carbon film Carbon film		±5%	1/8W
Rg16 Rg17 Rg18 Rg19 Rg20		PD14BY2B103J	Carbon film	10 kΩ	±5% ±5%	1/8W 1/8W
Rg16 Rg17 Rg18 Rg19 Rg20 Rg21		PD14BY2B103J PD14BY2B221J	Carbon film Carbon film	10kΩ 220Ω	±5%	1/8W
Rg16 Rg17 Rg18 Rg19 Rg20 Rg21 Rg22		PD14BY2B103J PD14BY2B221J PD14BY2B682J	Carbon film Carbon film Carbon film	10kΩ 220Ω 6.8kΩ	±5% ±5%	1/8W 1/8W
Rg16 Rg17 Rg18 Rg19 Rg20 Rg21 Rg22 Rg23, 24		PD14BY2B103J PD14BY2B221J PD14BY2B682J PD14BY2B333J	Carbon film Carbon film Carbon film Carbon film	10kΩ 220Ω 6.8kΩ 33kΩ	±5% ±5% ±5%	1/8W 1/8W 1/8W
Rg16 Rg17 Rg18 Rg19 Rg20 Rg21 Rg22 Rg23, 24 Rg25 Rg26, 27		PD14BY2B103J PD14BY2B221J PD14BY2B682J	Carbon film Carbon film Carbon film	10kΩ 220Ω 6.8kΩ	±5% ±5%	1/8W 1/8W

PD14BY2B62J	REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTION	ON	
PD148Y2862J Carbon film S 8kΩ 15% 1/8W PD148Y2862J Carbon film S 6kΩ 15% 1/8W PD148Y2813J Carbon film S 6kΩ 15% 1/8W PD148Y2813J Carbon film 22kΩ 15% 1/8W R042 PD148Y28472J Carbon film 47kΩ 15% 1/8W R043 PD148Y28472J Carbon film 47kΩ 15% 1/8W R043 PD148Y28472J Carbon film 47kΩ 15% 1/8W R043 PD148Y28473J Carbon film 47kΩ 15% 1/8W R043 PD148Y28193J Carbon film 15kΩ 15% 1/8W R043 PD148Y28193J Carbon film 10kΩ 15% 1/8W R043 PD148Y28193J Carbon film 220Ω 15% 1/8W R043 PD148Y28193J Carbon film 220Ω 15% 1/8W R044 PD148Y28193J Carbon film 47kΩ 15% 1/8W R044 PD148Y28193J Carbon film 15kΩ 15% 1/8W R044 PD148Y28193J Carbon film 15kΩ 15% 1/8W R044 PD148Y28193J Carbon film 15kΩ 15% 1/8W R044 PD148Y28193J Carbon film 100Ω 15% 1/8W R045 PD148Y28193J Carbon film 100Ω 15% 1/8W	Rg28		PD14BY2B104J	Carbon film	100 kΩ	±5%	1/8W
PD148Y2862J			PD14BY2B682J	Carbon film	6.8 k Ω		1/8W
PD148Y2B153.1 Carbon film 15kΩ ±5% 1/8W PD148Y2B472.1 Carbon film 22kΩ ±5% 1/8W PD148Y2B472.1 Carbon film 4.7kΩ ±5% 1/8W PD148Y2B472.1 Carbon film 4.7kΩ ±5% 1/8W PD148Y2B152.1 Carbon film 1.5kΩ ±5% 1/8W PD148Y2B103.1 Carbon film 1.5kΩ ±5% 1/8W PD148Y2B103.1 Carbon film 10kΩ ±5% 1/8W PD148Y2B103.1 Carbon film 47kΩ ±5% 1/8W PD148Y2B103.1 Carbon film 47kΩ ±5% 1/8W PD148Y2B102.1 Carbon film 12kΩ ±5% 1/8W R044 PD148Y2B102.1 Carbon film 12kΩ ±5% 1/8W R044 PD148Y2B102.1 Carbon film 47kΩ ±5% 1/8W R044 PD148Y2B102.1 Carbon film 47kΩ ±5% 1/8W R044 PD148Y2B102.1 Carbon film 47kΩ ±5% 1/8W R044 PD148Y2B152.1 Carbon film 47kΩ ±5% 1/8W R044 PD148Y2B152.1 Carbon film 1.5kΩ ±5% 1/8W R044 PD148Y2B152.1 Carbon film 4.7kΩ ±5% 1/8W R044 PD148Y2B10.1 Carbon film 4.7kΩ ±5% 1/8W R044 PD148Y2B10.1 Carbon film 4.7kΩ ±5% 1/8W R046 PD148Y2B10.1 Carbon film 2.2kΩ ±5% 1/8W R048 PD148Y2B22.1 Carbon film 2.2kΩ ±5% 1/8W R048 PD148Y2B2.1 Carbon film 2.2kΩ ±5% 1/8W R04							•
PD14BY2B2231 Carbon film 22kΩ ±5% 1/8W PD14BY2B471J Carbon film 4.7kΩ ±5% 1/8W PD14BY2B471J Carbon film 4.7kΩ ±5% 1/8W PD14BY2B471J Carbon film 4.7kΩ ±5% 1/8W PD14BY2B4731 Carbon film 1.5kΩ ±5% 1/8W PD14BY2B4731 Carbon film 4.7kΩ ±5% 1/8W PD14BY2B4731 Carbon film 4.7kΩ ±5% 1/8W RD14BY2B4731 Carbon film 4.7kΩ ±5% 1/8W RD14BY2B4731 Carbon film 4.7kΩ ±5% 1/8W RD14BY2B211 Carbon film 4.7kΩ ±5% 1/8W RD14BY2B211 Carbon film 4.7kΩ ±5% 1/8W RD14BY2B213 Carbon film 4.7kΩ ±5% 1/8W RD14BY2B231 Carbon film 4.7kΩ ±5% 1/8W RD14BY2B101 Carbon film 4.7kΩ ±5% 1/8W RD14BY2B103 Carbon film 4.7kΩ ±5% 1/8W RD14BY2B10							
PD14BY 2B471 Carbon film 4.7kΩ ±5% 1/8W PD14BY 2B471 Carbon film 4.7kΩ ±5% 1/8W PD14BY 2B152 Carbon film 1.5kΩ ±5% 1/8W PD14BY 2B152 Carbon film 1.5kΩ ±5% 1/8W PD14BY 2B152 Carbon film 1.0kΩ ±5% 1/8W R368 PD14BY 2B473 Carbon film 200Ω ±5% 1/8W R369 PD14BY 2B211 Carbon film 200Ω ±5% 1/8W R369 PD14BY 2B211 Carbon film 1kΩ ±5% 1/8W R369 PD14BY 2B212 Carbon film 1kΩ ±5% 1/8W R369 PD14BY 2B212 Carbon film 1kΩ ±5% 1/8W R369 PD14BY 2B473 Carbon film 47kΩ ±5% 1/8W R369 PD14BY 2B473 Carbon film 47kΩ ±5% 1/8W R369 PD14BY 2B152 Carbon film 1.5kΩ ±5% 1/8W R369 PD14BY 2B822 Carbon film 6.8kΩ ±5% 1/8W R369 PD14BY 2B822 Carbon film 6.8kΩ ±5% 1/8W R369 PD14BY 2B101 Carbon film 100Ω ±5% 1/8W R369 PD14BY 2B222 Carbon film 2.2kΩ ±5% 1/8W R369 PD14BY 2B22 Carbon film 2.2kΩ ±5% 1/8W R369 PD14BY 2B23 Carbon film 2.2kΩ ±5% 1/8W R369 PD14BY 2B23 Carbon film 100Ω ±5% 1/8W R3	_						•
PD14BY 28H52J Carbon film L5KQ ±5% 1/8W L5KQ + L5							•
PD14BY2B1521 Carbon film 1.8kΩ							
Polis Pol			PD14BY2B471J				
Post	Rg36		PD14BY2B152J	Carbon film	1.5k Ω	±5%	1/8W
PD14BY2B221J Carbon film 220Ω 45% 1/8W Rig41 PD14BY2B231 Carbon film 1kΩ 45% 1/8W Rig42 PD14BY2B232J Carbon film 1kΩ 45% 1/8W Rig43 PD14BY2B2B22J Carbon film 220kΩ 25% 1/8W Rig44 PD14BY2B2B22J Carbon film 1.5kΩ 45% 1/8W Rig45 PD14BY2B882J Carbon film 6.8kΩ 45% 1/8W Rig46 PD14BY2B882J Carbon film 6.8kΩ 45% 1/8W Rig46 PD14BY2B101J Carbon film 100Ω 45% 1/8W Rig46 PD14BY2B222J Carbon film 100Ω 45% 1/8W Rig47 PD14BY2B222J Carbon film 22kΩ 45% 1/8W Rig48 PD14BY2B222J Carbon film 22kΩ 45% 1/8W Rig49 PD14BY2B222J Carbon film 22kΩ 45% 1/8W Rig49 PD14BY2B222J Carbon film 22kΩ 45% 1/8W Rig50 PD14BY2B223J Carbon film 22kΩ 45% 1/8W Rig51 PD14BY2B222J Carbon film 22kΩ 45% 1/8W Rig52 PD14BY2B223J Carbon film 22kΩ 45% 1/8W Rig54 PD14BY2B223J Carbon film 22kΩ 45% 1/8W Rig55 PD14BY2B103J Carbon film 22kΩ 45% 1/8W Rig56 PD14BY2B103J Carbon film 10kΩ 45% 1/8	Rg37		PD14BY2B103J	Carbon film	10k Ω	±5%	1/8W
PD148Y2B102J Carbon film	Rg38		PD14BY2B473J	Carbon film	47k Ω	±5%	1/8W
PD148Y2B473 Carbon film 47kΩ ±5% 1/8W	Rg39		PD14BY2B221J	Carbon film	220Ω	±5%	1/8W
Polaby2882J Carbon film 20kΩ 55% 1/8W	Rg40		PD14BY2B102J	Carbon film	1kΩ	±5%	1/8W
Polaby2882J Carbon film 20kΩ 55% 1/8W	•		PD14BY2B473J	Carbon film	47 k Ω	±5%	1/8W
PD14BY2B152J Carbon film 1.5kΩ ±5% 1/8W PD14BY2B162J Carbon film 6.8kΩ ±5% 1/8W PD14BY2B162J Carbon film 6.8kΩ ±5% 1/8W Ry645 PD14BY2B10J Carbon film 100Ω ±5% 1/8W Ry646 PD14BY2B10J Carbon film 100Ω ±5% 1/8W Ry648 PD14BY2B22J Carbon film 2.2kΩ ±5% 1/8W Ry648 PD14BY2B22J Carbon film 2.2kΩ ±5% 1/8W Ry649 PD14BY2B22J Carbon film 2.2kΩ ±5% 1/8W Ry650 PD14BY2B22J Carbon film 2.2kΩ ±5% 1/8W Ry650 PD14BY2B22J Carbon film 100Ω ±5% 1/8W Ry650 PD14BY2B10J Carbon film 22kΩ ±5% 1/8W Ry650 PD14BY2B152J Carbon film 22kΩ ±5% 1/8W Ry650 PD14BY2B10J Carbon film 22kΩ ±5% 1/8W Ry650 PD14BY2B10J Carbon film 10kΩ	_			Carbon film	220 kΩ		1/8W
PD14BY28682J Carbon film 6.8kΩ ±5% 1/8W PD14BY2810J Carbon film 4.7kΩ ±5% 1/8W PD14BY2810J Carbon film 2.2kΩ ±5% 1/8W PD14BY2812J Carbon film 2.2kΩ ±5% 1/8W PD14BY2822J Carbon film 2.2kΩ ±5% 1/8W PD14BY2822J Carbon film 2.2kΩ ±5% 1/8W Rg48 PD14BY2822J Carbon film 2.2kΩ ±5% 1/8W Rg49 PD14BY2812J Carbon film 100Ω ±5% 1/8W Rg50 PD14BY2810J Carbon film 100Ω ±5% 1/8W Rg51 PD14BY2815J Carbon film 100Ω ±5% 1/8W Rg52 PD14BY2815J Carbon film 22kΩ ±5% 1/8W Rg53 PD14BY2812J Carbon film 22kΩ ±5% 1/8W Rg54 PD14BY2810J Carbon film 10kΩ ±5% 1/8W Rg55 PD14BY2810J Carbon film 10kΩ ±5% 1/8W Rg56 PD14BY2810J Carbon film 10kΩ ±5% 1/8W Rg66 PD14BY2810J Carbon film 10kΩ ±5% 1/8W Rg67 PD14BY2810J Carbon film 10kΩ ±5% 1/8W Rg68 PD14BY2810J Carbon film 10kΩ ±5% 1/8W Rg69 PD14BY2810J Carbon film 10kΩ ±5% 1/8W Rg60 PD14BY2810J Carb							
PD14BY2B101J Carbon film 1.00Ω ±5% 1/8W PD14BY2B101J Carbon film 1.00Ω ±5% 1/8W PD14BY2B22J Carbon film 2.2kΩ ±5% 1/8W PD14BY2B101J Carbon film 2.2kΩ ±5% 1/8W PD14BY2B102J Carbon film 2.2kΩ ±5% 1/8W PD14BY2B12J Carbon film 2.2kΩ ±5% 1/8W PD14BY2B103J Carbon film 1.5kΩ ±5% 1/8W PD14BY2B103J Carbon film 1.0kΩ ±5% 1/8W R365 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W R366 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W R367 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W R368 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W R369 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W R369 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W R360 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W R361 Carbon film 10kΩ ±5% 1/8W R362 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W R362 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W R363 Carbon film 10kΩ ±5% 1/8W R364							
PD14BY2B101J Carbon film 100Ω ±5% 1/8W PD14BY2B22J Carbon film 2.2kΩ ±5% 1/8W PD14BY2B22J Carbon film 2.2kΩ ±5% 1/8W PS484 PD14BY2B22J Carbon film 2.2kΩ ±5% 1/8W PS4850 PD14BY2B101J Carbon film 100Ω ±5% 1/8W PS4851 PD14BY2B101J Carbon film 100Ω ±5% 1/8W PS5851 PD14BY2B101J Carbon film 100Ω ±5% 1/8W PS5851 PD14BY2B101J Carbon film 1.5kΩ ±5% 1/8W PS5852 PD14BY2B152J Carbon film 1.5kΩ ±5% 1/8W PS5854 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W PS5855 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W PS5855 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W PS5860 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W PS696 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W PS697 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W PS698 PS6980 PS6990							• -
PD14BY2B222J Carbon film 2.2kΩ							
PD148Y2B223J Carbon film 22kΩ	•						•
PD14BY2B222J Carbon film 2.2kΩ	Rg47	,	PD14BY2B222J	Carbon film	2.2 k Ω		
PD14BY2B101J Carbon film 100Ω	Rg48		PD14BY2B223J	Carbon film	22k Ω	±5%	1/8W
PD14BY2B223J Carbon film 22kΩ ±5% 1/8W 1/8W 1/8952 PD14BY2B2152J Carbon film 1.5kΩ ±5% 1/8W 1/8W 1/8952 PD14BY2B2152J Carbon film 1.5kΩ ±5% 1/8W 1/8W 1/8954 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W 1/8W 1/8956 PD14BY2B124J Carbon film 120kΩ ±5% 1/8W 1/8W 1/8956 PD14BY2B124J Carbon film 10kΩ ±5% 1/8W 1/8W 1/8956 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W 1/8W 1/8956 PD14BY2B104J Carbon film 10kΩ ±5% 1/8W 1/8W 1/8956 PD14BY2B104J Carbon film 100kΩ ±5% 1/8W 1/8W 1/8956 PD14BY2B104J Carbon film 100kΩ ±5% 1/8W 1/8W 1/8956 PD14BY2B104J Carbon film 11kΩ ±5% 1/8W 1	Rg49		PD14BY2B222J	Carbon film	2.2 k Ω	±5%	1/8W
PD14BY2B152J Carbon film 1.5kΩ	Rg50		PD14BY2B101J	Carbon film	100Ω	±5%	1/8W
PD14BY2B221J Carbon film 220Ω ±5% 1/8W Rg55	Rg51		PD14BY2B223J	Carbon film	22 k Ω	±5%	1/8W
PD14BY2B221J Carbon film 220Ω ±5% 1/8W Rg54	Rg52		PD14BY2B152J	Carbon film	1.5k Ω	±5%	1/8W
PD14BY2B103J Carbon film 10kΩ ±5% 1/8W Rg56 - 59 PD14BY2B124J Carbon film 120kΩ ±5% 1/8W Rg66 - 59 PD14BY2B124J Carbon film 120kΩ ±5% 1/8W Rg60 PD14BY2B124J Carbon film 120kΩ ±5% 1/8W Rg61 , 62 PD14BY2B124J Carbon film 120kΩ ±5% 1/8W Rg61 , 62 PD14BY2B104J Carbon film 100kΩ ±5% 1/8W Rg65 PD14BY2B13J Carbon film 11kΩ ±5% 1/8W Rg66 PD14BY2B13J Carbon film 11kΩ ±5% 1/8W Rg66 PD14BY2B14J Carbon film 17kΩ ±5% 1/8W Rg66 PD14BY2B14J Carbon film 17kΩ ±5% 1/8W Rg66 PD14BY2B14J Carbon film Rg66			PD14BY2B221J	Carbon film	220Ω	±5%	1/8W
PD14BY2B124J Carbon film 120kΩ ±5% 1/8W Rg66-69 PD14BY2B103J Carbon film 10kΩ ±5% 1/8W Rg60 PD14BY2B103J Carbon film 120kΩ ±5% 1/8W Rg61, 62 PD14BY2B104J Carbon film 100kΩ ±5% 1/8W Rg63, 64 PD14BY2B104J Carbon film 11kΩ ±5% 1/8W Rg63, 64 PD14BY2B113J Carbon film 11kΩ ±5% 1/8W Rg66 PD14BY2B113J Carbon film 11kΩ ±5% 1/8W Rg66 PD14BY2B1470J Carbon film 11kΩ ±5% 1/8W Rg66 PD14BY2B1470J Carbon film 11kΩ ±5% 1/8W Rg66 PD14BY2B470J Carbon film 100kΩ ±5% 1/8W Rg66 PD14BY2B470J Carbon film 100kΩ ±5% 1/8W Rg66 PD14BY2B470J Carbon film 100kΩ ±5% 1/8W Rg66 PD14BY2B470J Carbon film 10kΩ Edward Edwa	•						
PD14BY2B103J Carbon film 10kΩ ±5% 1/8W R360 PD14BY2B104J Carbon film 120kΩ ±5% 1/8W R361, 62 PD14BY2B104J Carbon film 100kΩ ±5% 1/8W R363, 64 PD14BY2B13J Carbon film 11kΩ ±5% 1/8W R365 PD14BY2B13J Carbon film 11kΩ ±5% 1/8W R366 PD14BY2B13J Carbon film 11kΩ ±5% 1/8W R366 PD14BY2B13J Carbon film 47Ω ±5% 1/8W R366 PD14BY2B47U Carbon film 47Ω ±5% 1/8W R366 PD14BY2B13J Carbon film 10kΩ NEC silicon R366 PD14BY2B13J Carbon film 10kΩ NEC silicon R367 PS167 PS16	•						, -
PD14BY2B124J Carbon film 120kΩ ±5% 1/8W Rg61, 62 PD14BY2B104J Carbon film 100kΩ ±5% 1/8W Rg63, 64 PD14BY2B113J Carbon film 11kΩ ±5% 1/8W Rg65 PD14BY2B113J Carbon film 11kΩ ±5% 1/8W Rg65 PD14BY2B113J Carbon film 11kΩ ±5% 1/8W Rg65 PD14BY2B470J Carbon film 47Ω ±5% 1/8W Rg65 PD14BY2B470J Carbon film 47Ω ±5% 1/8W Rg65 PC trimmer 1kΩ Rg65 Rg66 PC trimmer 1kΩ Rg66 Rg66 Rg66 PC trimmer 1kΩ Rg66	•						
PD14BY2B104J Carbon film 100kΩ ±5% 1/8W Rg63, 64 PD14BY2B113J Carbon film 11kΩ ±5% 1/8W Rg65 PD14BY2B113J Carbon film 11kΩ ±5% 1/8W Rg65 PD14BY2B470J Carbon film 11kΩ ±5% 1/8W Rg65 PD14BY2B470J Carbon film 47Ω ±5% 1/8W Rg65 PD14BY2B470J Carbon film 47Ω ±5% 1/8W Rg65 PD14BY2B470J Carbon film 47Ω ±5% 1/8W Rg65 PC trimmer 1kΩ (B) PC 6880 PC trimmer 1kΩ (B) PC 6890 PC trimmer 1kΩ (B) PC 6890 PC trimmer 1kΩ (B) PC 6979 PC trimmer 1kΩ (B) PC trimmer 1kΩ							
PD14BY2B113J Carbon film 11kΩ							-
SEMICONDUCTORS SEC. 10	Rg61, 62		PD14BY2B104J				
SEMICONDUCTORS 2SC381 (R) Toshiba silicon PC555A NEC IC IC IC IC IC IC IC	Rg63, 64		PD14BY2B113J	Carbon film	11kΩ	±5%	1/8W
2SC381 (R) Toshiba silicon μPC555A NEC IC 1C 1C 1C 1C 1C 1C 1	Rg65		PD14BY2B470J	Carbon film	47Ω	±5%	1/8W
μPC555A NEC IC 28C945 (Q) or (R) NEC silicon 28C945 (Q) or (R) NEC silicon 28C941 (R) or (O) Toshiba silicon 28C945 (B) or (C) Hitachi silicon 28C945 (B) or (C) Hitachi silicon 28C941 (R) or (O) Toshiba silicon 28C948 (B) or (C) Hitachi silicon 28C948 (C) Hitachi silicon 28C98			SE	MICONDUCTORS			
25C945 (Q) or (R) NEC silicon	Ωg1~3			2SC381 (R)	Toshiba sil	icon	
28C941 (R) or (O) Toshiba silicon	Ωg4			μPC555A	NEC IC		
25C458 (B) or (C)	Ωg5			2SC945 (Q) or (R)	NEC silico	n	
2SA733 (Q) or (R) NEC silicon	2g6			2SC941 (R) or (O)	Toshiba sil	icon	
2SA733 (Q) or (R) NEC silicon	Ωg7, 8			2SC458 (B) or (C)	Hitachi sili	con	
2SC1213A (C) Hitachi silicon	Ωg9			2SA733 (Q) or (R)	NEC silico	n	
2SC458 (C) Hitachi silicon	_			2SC1213A (C)	Hitachi sili	con	
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$0 ext{g}5, 6$ $0 ext{g}7 \sim 16$ $0 ext{g}7 \sim 16$ $0 ext{g}17, 18$ $0 ext{g}19 \sim 22$ $0 ext{g}18 \sim 181555$ $0 ext{g}10 ext{g}10 \sim 181555$ $0 ext{g}10 \sim 1815555$ $0 ext{g}10 \sim 1815555$ $0 ext{g}10 \sim 1815555$ $0 \sim 1815555$ $0 \sim 1815555$ $0 \sim $					_		
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POTENTIOMETER VRg1 P-6078 R12-2002-05 PC trimmer $6.8k\Omega$ (B) VRg2 P-6077 R12-1002-05 PC trimmer $1k\Omega$ (B) VRg3 P-6080 R12-2016-05 PC trimmer $5k\Omega$ (B) VRg4 P-6081 R12-3030-05 PC trimmer $10k\Omega$ (B) VRg5 P-6079 R12-1021-05 PC trimmer $1k\Omega$ (B)	_					•	
VRg1 P-6078 R12-2002-05 PC trimmer $6.8k\Omega$ (B) VRg2 P-6077 R12-1002-05 PC trimmer $1k\Omega$ (B) VRg3 P-6080 R12-2016-05 PC trimmer $5k\Omega$ (B) VRg4 P-6081 R12-3030-05 PC trimmer $10k\Omega$ (B) VRg5 P-6079 R12-1021-05 PC trimmer $1k\Omega$ (B)	Og19∼22			1N60	Germaniur	n (25V, 50	lmA)
VRg2 P-6077 R12-1002-05 PC trimmer $1k\Omega$ (B) VRg3 P-6080 R12-2016-05 PC trimmer $5k\Omega$ (B) VRg4 P-6081 R12-3030-05 PC trimmer $10k\Omega$ (B) VRg5 P-6079 R12-1021-05 PC trimmer $1k\Omega$ (B)			PC	TENTIOMETER			
VRg2 P-6077 R12-1002-05 PC trimmer $1k\Omega$ (B) VRg3 P-6080 R12-2016-05 PC trimmer $5k\Omega$ (B) VRg4 P-6081 R12-3030-05 PC trimmer $10k\Omega$ (B) VRg5 P-6079 R12-1021-05 PC trimmer $1k\Omega$ (B)	VRg1	P-6078	R12-2002-05	PC trimmer	6.8 k Ω (B)		
VRg3 P-6080 R12-2016-05 PC trimmer $5kΩ$ (B) VRg4 P-6081 R12-3030-05 PC trimmer $10kΩ$ (B) VRg5 P-6079 R12-1021-05 PC trimmer $1kΩ$ (B)			R12-1002-05				•
VRg4 P-6081 R12-3030-05 PC trimmer 10k Ω (B) VRg5 P-6079 R12-1021-05 PC trimmer 1k Ω (B)	_						
VRg5 P-6079 R12-1021-05 PC trimmer 1kΩ (B)	•						
	J						
VRgb P-6107 R12-3028-05 PC trimmer 20kΩ (B)	•						
	vrgo	P-610/	K 12-3028-05	PC trimmer	70K7∫ (R)		

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTION
VRg7	P-6082	R12-4019-05	PC trimmer	50kΩ (B)
VRg8	P-6083	R12-5019-05	PC trimmer	100kΩ (B)
			TRANS./COIL	
Tg1	CA-7108	L30-0236-05	I. f. trans.	(10.7 MHz, 56pF)
Tg2	CA-7106	L30-0080-05	I. f. trans.	(455 kHz, 100pF)
Tg3	CA-7109	L30-0251-05	1. f. trans.	(10.7 MHz, 56pF)
Tg4	CA-7107	L30-0081-05	1. f. trans.	(455 kHz, 1000pF)
Tg5	CA-7110	L30-0237-15	I. f. trans.	(10.7 MHz, 56pF)
Tg6	CA-7105	L30-0052-05	I. f. trans.	(455 kHz, 1000pF)
Tg7	CA-2705	L30-0207-15	Discriminator coil	(10.7 MHz)
Tg8	CA-4330	L30-0082-05	OSC coil	(796 kHz, 144µH)
Tg9	CA-2710	L35-0044-05	19 kHz coil	(19 kHz, 14.8mH, 4700pF)
Tg10	CA-2712	L35-0050-05	67 kHz coil	(67 kHz, 12 mH, 470pF)
Tg11	CA-2713	L35-0051-05	72 kHz coil	(72 kHz, 40 mH, 120pF)
Tg12	CA-2711	L35-0055-05	38 kHz coil	(38 kHz, 3.73mH, 4700pF)
Lg1	CA-2706	L33-0086-05	Ferri-inductor	(1µH, 100 mA)
Lg2	CA-2707	L33-0092-05	Ferri-inductor	(33µH, 100 mA)
Lg3~5	CA-2706	L33-0086-05	Ferri-inductor	(1µH, 100 mA)
Lg6, 7	CA-2709	L33-0171-05	Ferri-inductor	53 mA, 10 mA
Lg8	CA-2708	L33-0117-05	Ferri-inductor	(10µH, 50 mA)
			FILTER	
CFg1	C-0445	L72-0014-05	Ceramic filter	(10.7 MHz)
		VAR	ABLE CAPACITOR	
	C-4395	C01-0165-05	Variable capacitor with	100kΩ variable resistor (8.7pF~336.7pF)
	•	M	ISCELLANEOUS	
		E23-0048-04	PC board terminal x 23	
_	C-4394	L60-0025-05	Front end	

FRONT MAIN AMP UNIT(X07-1050-10)

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTION	ON	
			CAPACITORS		•	
Cf1, 2		CS04E1E010X or M	Tantalum	1μF	25WV	
Cf3, 4		CK45D1H561M	Ceramic	560pF	±20%	
Cf5, 6		CE04W0J471	Electrolytic	470µF	6.3WV	
Cf7, 8		CE04W1E100	Electrolytic	10μF	25WV	
Cf9, 10		CE04W1H100	Electrolytic	10μF	50WV	
Cf11, 12		CC45SL1H151K	Ceramic	150pF	±10%	
Cf13, 14		CE04W0F101	Electrolytic	100μF	3.15WV	
Cf15, 16		CE04W1H470	Electrolytic	47µF	50WV	
Cf17		CE02W2A101	Electrolytic	100μF	100WV	
Cf18		CE04W1E101	Electrolytic	100µF	25WV	
	•		RESISTORS			
Rf1, 2		PD14BY2E104J	Carbon film	100kΩ	±5%	1/4W
Rf3, 4		PD14BY2E564J	Carbon film	560 kΩ	±5%	1/4W
Rf5, 6		PD14BY2E562J	Carbon film	5.6k Ω	±5%	1/4W

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER	DESCRIPTION				
Rf7, 8		PD14BY2E124J	Carbon film	120kΩ	±5%	1/4W	
Rf9, 10		PD14BY2E330J	Carbon film	33Ω	±5%	1/4W	
Rf11, 12	-	PD14BY2E102J	Carbon film	1k Ω	±5%	1/4W	
Rf13, 14		PD14BY2E103J	Carbon film	10k Ω	±5%	1/4W	
Rf15, 16		PD14BY2E123J	Carbon film	12k Ω	±5%	1/4W	
Rf17, 18		PD14BY2E124J	Carbon film	120k Ω	±5%	1/4W	
Rf21, 22		PD14BY2E101J	Carbon film	100Ω	±5%	1/4W	
Rf23, 24		PD14BY2E221J	Carbon film	220Ω	±5%	1/4W	
Rf25, 26		PD14BY2E472J	Carbon film	4.7 k Ω	±5%	1/4W	
Rf27, 28		PD14BY2E222J	Carbon film	2.2 k Ω	±5%	1/4W	
Rf29, 30		RN14AB3A330J	Metal film	33Ω	±5%	1W	
Rf31~34		RN14AB3A331J	Metal film	330Ω	±5%	1W	
Rf35		PD14BY2E563J	Carbon film	56k Ω	±5%	1/4W	
		SEI	MICONDUCTORS				
Qf1, 2			2SC1000 (GR) or (BL)	Toshiba	silicon		
Qf3, 4			2SC983 (O) or (Y)	Toshiba	silicon		
Qf5, 6			2SA497	Toshiba	silicon		
Qf7, 8			2SC1212A (B) or (C)	Hitachi s	ilicon		
Df1, 2			STV-3	Silicon	(1.66~1.74\	/, 120mA)	
Df3, 4			1S1553V	Silicon	(70V, 100m	A)	
Df5			VO6B	Silicon	(100V, 1.1A	.)	
		РО	TENTIOMETERS				
VRf1, 2	P-6084	R12-3025-05	PC trimmer 10kΩ (B)	BIAS A	J.		
VRf3, 4	P-6085	R12-0048-05	PC trimmer 100Ω (B)	BIAS A	DJ.		
		MI	SCELLANEOUS				
_		001-0501-00	Tinned wire x 6				

REAR MAIN AMP UNIT(X07-1050-11)

PART NUMBER	MFR'S PART NUMBER		DESCRIPTIO	N	
		CAPACITORS		-	
	CS04E1E010 XorM	Tantalum	1μF	25WV	•
	CK45D1H561M	Ceramic	560pF	±20%	
	CE04W0J471	Electrolytic	470µF	6.3WV	
	CE04W1E100	Electrolytic	10μF	25WV	
	CE04W1H100	Electrolytic	10μF	50WV	
	CC45SL1H151K	Ceramic	150pF	±10%	
	CE04W0F101	Electrolytic	100μF	3.15WV	
	CE04W1H470	Electrolytic	$47\mu F$	50WV	
	CE04W1E101	Electrolytic	100μF	25WV	
		RESISTORS			
	PD14BY2E104J	Carbon film	100kΩ	±5%	1/4W
	PD14BY2E564J	Carbon film	560k Ω	±5%	1/4W
	PD14BY2E562J	Carbon film	5.6k Ω	±5%	1/4W
	PD14BY2E124J	Carbon film	120 kΩ	±5%	1/4W
	PD14BY2E330J	Carbon film	33Ω	±5%	1/4W
		CS04E1E010 XorM CK45D1H561M CE04W0J471 CE04W1E100 CE04W1H100 CC45SL1H151K CE04W0F101 CE04W1H470 CE04W1E101 PD14BY2E104J PD14BY2E564J PD14BY2E562J PD14BY2E124J	CK45D1H561M CE04W0J471 Electrolytic CE04W1E100 Electrolytic CE04W1H100 Electrolytic CC45SL1H151K Ceramic CE04W0F101 Electrolytic CE04W1H470 Electrolytic Electrolytic Electrolytic Electrolytic CE04W1E101 Electrolytic Electrolytic CE04W1E101 Carbon film PD14BY2E564J PD14BY2E562J Carbon film PD14BY2E124J Carbon film	CS04E1E010 XorM Tantalum 1μF CK45D1H561M Ceramic 560pF CE04W0J471 Electrolytic 470μF CE04W1E100 Electrolytic 10μF CE04W1H100 Electrolytic 150pF CC45SL1H151K Ceramic 150pF CE04W0F101 Electrolytic 100μF CE04W1H470 Electrolytic 47μF CE04W1E101 Electrolytic 100μF RESISTORS PD14BY2E104J Carbon film 100kΩ PD14BY2E564J Carbon film 560kΩ PD14BY2E562J Carbon film 5.6kΩ PD14BY2E124J Carbon film 120kΩ	CS04E1E010 XorM Tantalum 1μF 25WV

PART NUMBER	MFR'S PART NUMBER	DESCRIPTION				
•	PD14BY2E102J	Carbon film		1kΩ	±5%	1/4W
	PD14BY2E103J	Carbon film		10k Ω	±5%	1/4W
*.	PD14BY2E123J	` Carbon film		12k Ω	±5%	1/4W
	PD14BY2E124J	Carbon film		120k Ω	±5%	1/4W
	PD14BY2E101J	Carbon film		100Ω	±5%	1/4W
	PD14BY2E221J	Carbon film		220Ω	±5%	1/4W
	PD14BY2E472J	Carbon film		4.7k Ω	±5%	1/4W
	PD14BY2E222J	Carbon film		$2.2k\Omega$	±5%	1/4W
	RN14AB3A330K	Metal film		33Ω	±10%	1W
	RN14AB3A331K	Metal film		330Ω	±10%	1 W
	SEN	IICONDUCTOR	S	•		
	,-	2SC1000 (GR) or (BL) Toshiba silicon				
,5		2SC983 (O) o	r (Y)	Toshiba	silicon	
		2SA497		Toshiba	silicon	
		2SC1212A (B)	or (C)	Hitachi s	ilicon	
		STV-3		Silicon	(1.66 ~1.75\	√, 120mA)
		1S1553V		Silicon	(70V, 100m	4)
	PO	TENTIOMETER	S			
P-6084	R12-3025-05	PC trimmer	10kΩ (B)	BIAS A	DJ.	
P-6085	R12-0048-05	PC trimmer	100Ω (B) BIAS ADJ.			
	MI	SCELLANEOUS	S		-	
	001-0501-00	Tinned wire	(0.5/S)			
	212-1014-05	Heat-proof tul				
	490-0007-05	-				
	P-6084	PD14BY2E102J PD14BY2E103J PD14BY2E123J PD14BY2E124J PD14BY2E101J PD14BY2E221J PD14BY2E22J RN14AB3A330K RN14AB3A331K SEN PO P-6084 P-6085 R12-0048-05 MI 001-0501-00 212-1014-05	PD14BY2E102J Carbon film PD14BY2E103J Carbon film PD14BY2E123J Carbon film PD14BY2E124J Carbon film PD14BY2E101J Carbon film PD14BY2E221J Carbon film PD14BY2E221J Carbon film PD14BY2E222J Carbon film PD14BY2E222J Carbon film RN14AB3A330K Metal film RN14AB3A331K Metal film SEMICONDUCTOR 2SC1000 (GR 2SC983 (O) o 2SA497 2SC1212A (B STV-3 1S1553V POTENTIOMETER P-6084 R12-3025-05 PC trimmer P-6085 R12-0048-05 PC trimmer MISCELLANEOUS MISCELLANEOUS 001-0501-00 Tinned wire Peat-proof tu	PD14BY2E102J Carbon film PD14BY2E103J Carbon film PD14BY2E123J Carbon film PD14BY2E124J Carbon film PD14BY2E101J Carbon film PD14BY2E221J Carbon film PD14BY2E221J Carbon film PD14BY2E222J Carbon film PD14BY2E222J Carbon film RN14AB3A330K Metal film Metal film Metal film	PD14BY2E102J Carbon film 1kΩ PD14BY2E103J Carbon film 10kΩ PD14BY2E123J Carbon film 12kΩ PD14BY2E124J Carbon film 120kΩ PD14BY2E101J Carbon film 100Ω PD14BY2E221J Carbon film 220Ω PD14BY2E221J Carbon film 2.2kΩ PD14BY2E22J Carbon film 4.7kΩ PD14BY2E22J Carbon film 2.2kΩ RN14AB3A330K Metal film 33Ω RN14AB3A331K Metal film 330Ω SEMICONDUCTORS SEMICONDUCTORS 2SC1000 (GR) or (BL) Toshiba 2SC983 (O) or (Y) Toshiba 2SC497 Toshiba 2SC497 Toshiba 2SC1212A (B) or (C) Hitachi s STV-3 Silicon STV-3 STV-3	PD14BY2E102J Carbon film 1kΩ ±5% PD14BY2E103J Carbon film 10kΩ ±5% PD14BY2E123J Carbon film 12kΩ ±5% PD14BY2E124J Carbon film 12kΩ ±5% PD14BY2E101J Carbon film 100Ω ±5% PD14BY2E21J Carbon film 220Ω ±5% PD14BY2E221J Carbon film 4.7kΩ ±5% PD14BY2E222J Carbon film 2.2kΩ ±5% PN14BY2E222J Carbon film 33Ω ±10% RN14AB3A330K Metal film 33Ω ±10% RN14AB3A331K Metal film 330Ω ±10% SEMICONDUCTORS SEMICONDUCTORS SEMICONDUCTORS PCSC12000 (GR) or (BL) Toshiba silicon 2SC497 Toshiba silicon 2SC497 Toshiba silicon 2SC497 Toshiba silicon 2SC497 Toshiba silicon 2SC1212A (B) or (C) Hitachi silicon STV-3 Silicon (1.66 ~1.75¹) 1S1553V Silicon (70V, 100m/ POTENTIOMETERS P-6084 R12-3025-05 PC trimmer 10kΩ (B) BIAS ADJ. P-6085 R12-0048-05 PC trimmer 100Ω (B) BIAS ADJ. MISCELLANEOUS MISCELLANEOUS Tinned wire (0.5/S) Heat-proof tube x 22

PREAMP UNIT(X08-1020-12)

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTION	N	
		·	CAPACITORS.			
Cd1, 2		CS04D1E2R2MorX	Tantalum	2.2µF	25WV	
Cd3, 4		CK45D1H561M	Ceramic	560pF	±20%	
Cd5, 6		CE04W0F101	Electrolytic	100μF	3.15WV	
Cd7, 8		CC45SL1H121K	Ceramic	120pF	±10%	
Cd9, 10		CQ93M1H153J	Mylar	0.015µF	±5%	
Cd11, 12		CQ93M1H472J	Mylar	0.0047µF	±5%	
Cd13, 14		CE04W0F470	Electrolytic	47µF	3.15WV	
Cd15, 16		CC45SL1H330K	Ceramic	33pF	±10%	
Cd17, 18		CE04W1H4R7	Electrolytic	4.7µF	50WV	
Cd19, 20		CE04W1H100	Electrolytic	10μF	50WV	
Cd21		CE04W0F101	Electrolytic	100μF	3.15WV	
Cd22		CQ93M1H682K	Mylar	0.0068µF	±10%	
			RESISTORS			
Rd1, 2		PD14BY2E222J	Carbon film	2.2kΩ	±5%	1/4W
Rd3, 4		PD14BY2E683J	Carbon film	68 kΩ	±5%	1/4W
Rd5, 6		PD14BY2E474J	Carbon film	470kΩ	±5%	1/4W
Rd7, 8		PD14BY2E331J	Carbon film	330Ω	±5%	1/4W
Rd9, 10		PD14BY2E334J	Carbon film	330 kΩ	±5%	1/4W

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER	DESCRIPTION				
Rd11, 12		PD14BY2E103J	Carbon film	10kΩ	±5%	1/4W	
Rd13, 14		PD14BY2E224J	Carbon film	220k Ω	±5%	1/4W	
Rd15; 16		PD14BY2E163G	Carbon film	16k Ω	±2%	1/4W	
Rd19, 20		PD14BY2E123J	Carbon film	12k Ω	±5%	1/4W	
Rd21, 22		PD14BY2E562J	Carbon film	5.6k Ω	±5%	1/4W	
Rd23, 24		PD14BY2E181J	Carbon film	180Ω	±5%	1/4W	
Rd25, 26		PD14BY2E273J	Carbon film	$27k\Omega$	±5%	1/4W	
Rd27, 28		PD14BY2E471J	Carbon film	470Ω	±5%	1/4W	
		SEN	MICONDUCTORS				
Qd1, 2		·	2SC458LG (C)	Hitachi sil	licon		
Qd3, 4			2SC1345 (E) or (F)	Hitachi sil	licon		
		PO	TENTIOMETER				
VRd1	P-6108	R12-1016-05	PC trimmer 3kΩ SEPARATION ADJ.				
		MIS	SCELLANEOUS				L-
		490-0007-05	Masking tape				
				· · · · · · · · · · · · · · · · · · ·			

■ TONE AMP UNIT(X11-1020-30)

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER			DESCRIPTIO	N		
			CAPACITORS					
Ci1~4		CS04E1ER47M	Tantalum		0.47µF	25WV		
Ci5~8		CE04W1E100	Electrolytic		10μF	25WV		
Ci9~12		CK45D1H471M	Ceramic		470pF	±20%		
Ci13~16		CQ93M1H472J	Mylar		0.0047μ F	±5%		
Ci17~20		CQ93M1H272J	Mylar	•	$0.0027 \mu F$	±5%		
Ci21~24		CQ08S1H331J	Polystyrene	* 1	330pF	±5%		
Ci25~28		CQ93M1H122J	Mylar		$0.0012\mu F$	+ 5%		
Ci29~32		CS04E1E010M	^t Tantalum		1μ F	25WV		
Ci33~36		CC45SL1H330K	Ceramic	*	33pF	±10%		
Ci37~40		CE04W0F101	Electrolytic	No. of the second	100μF	3.15WV		
Ci41~44		CE04W1E100	Electrolytic		10μF	25WV		
Ci45~52		CQ93M1H183J	Mylar	.•	0.018μF	± 5%		
Ci57		CE04W1C101	Electrolytic		100μF	16WV		
			RESISTORS	*	· · · · · · · · · · · · · · · · · · ·			. 1"
Ri1~4		PD14BY2E224J	Carbon film		220 kΩ	±5%	1/4W	· E.
Ri5~8		PD14BY2E474J	Carbon film		470k Ω	±5%	1/4W	
Ri9~12		PD14BY2E224J	Carbon film		$220 k\Omega$	±5%	1/4W	
Ri13~16		PD14BY2E562J	Carbon film	•	$5.6 \mathrm{k}\Omega$	±5%	1/4W	
Ri17~20		PD14BY2E473J	Carbon film		$47k\Omega$	±5%	1/4W	
Ri21~28		PD14BY2E153J	Carbon film		15k Ω	±5%	1/4W	
Ri29~36		PD14BY2E562J	Carbon film		5.6k Ω	±5%	1/4W	
Ri37~40		PD14BY2E273J	- Carbon film		27 kΩ	±5%	1/4W	
Ri41~44		PD14BY2E153J	Carbon film		15k Ω	±5%	1/4W	
Ri45~48		PD14BY2E562J	Carbon film		5.6 k Ω	±5%	1/4W	
Ri49~52		PD14BY2E153J	: Carbon film	₹ ``	15k Ω	±5%	1/4W	
Ri53~56		PD14BY2E394J	Carbon film	n	390k Ω	±5%	1/4W	

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER	DESCRIPTION				
Ri57~60		PD14BY2E823J	Carbon film	82kΩ	±5%	1/4W	
Ri61~64		PD14BY2E562J	Carbon film	5.6k Ω	±5%	1/4W	
Ri65~68		PD14BY2E821J	Carbon film	820Ω	±5%	1/4W	
Ri69~72		PD14BY2E102J	Carbon film	1kΩ	±5%	1/4W	
		SEN	VICONDUCTORS				
Qi1~4			2SC1345 (E) or (F)	Hitachi silicon			
Qi5~8			2SC1345 (E)	Hitachi silicon			
	1	PO	TENTIOMETERS				
VRi1	P-1188	R11-5002-05	Potentiometer	100kΩ (B)	4 gangs	(BASS)	
VRi2	P-1188	R11-5002-05	Potentiometer	100kΩ (B)	4 gangs	(MID)	
VRi3	P-1188	R11-5002-05	Potentiometer	100kΩ (B)	4 gangs	(TREBLE)	

PROTECTION UNIT(X13-1090-11)

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER	DESCRIPTION					
*			CAPACITORS					
Cs1		CE04W1H470	Electrolytic	47μF	50WV			
	-		RESISTORS					
Rs1, 2		PD14BY2E103J	Carbon film	10 kΩ	±5%	1/4W		
Rs3		PD14BY2E224J	Carbon film	220k $Ω$	±5%	1/4W		
Rs4		PD14BY2E273J	Carbon film	$27k\Omega$	±5%	1/4W		
Rs5, 6		PD14BY2E103J	Carbon film	10k Ω	±5%	1/4W		
Rs7		PD14BY2E331J	Carbon film	330Ω	±5%	1/4W		
Rs8		PD14BY2E273J	Carbon film	$27k\Omega$	±5%	1/4W		
Rs9		PD14BY2E103J	Carbon film	10kΩ	±5%	1/4W		
		SEN	MICONDUCTORS					
Qs1, 2			2SC945 (Q) or (R)	NEC silico	on			
Qs3			2SC1213A (B) or (C)	Hitachi sil	licon			
Ds1~4			1S1555 Silicon (35V, 100mA)					
		MI	SCELLANEOUS					
		E23-0047-04	PC board terminal x 8					

15dB AMP UNIT(X13-1100-30)

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER	DESCRIPTION				
			CAPACITORS				
Cu1, 2		CQ93M1H563J	Mylar	0.056µF	±5%		
Cu3, 4		CE04W1H4R7	Electrolytic	4.7μF	50WV		
Cu5, 6		CE04W1C220	Electrolytic	22μF	16WV		
Cu7, 8		CQ93M1H104J	Mylar	0.1μF	±5%		

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTION	ON	
Cu9, 10		CK45D1H561M	Ceramic	560pF	±20 %	
			RESISTORS			
Ru1, 2		PD14BY2E102J	Carbon film	1kΩ	±5%	1/4W
Ru4, 5		PD14BY2E124J	Carbon film	120k Ω	±5%	1/4W
Ru6, 7		PD14BY2E122J	Carbon film	$1.2 k\Omega$	±5%	1/4W
Ru8, 9		PD14BY2E821J	Carbon film	820Ω	±5%	1/4W
Ru10, 11		PD14BY2E472J	Carbon film	4.7 k Ω	±5%	1/4W
Ru12, 13		PD14BY2E684J	Carbon film	680 kΩ	±5%	1/4W
Ru15, 16		PD14BY2E563J	Carbon film	$56k\Omega$	±5%	1/4W
Ru18		PD14BY2E821J	Carbon film	820 Ω	±5%	1/4W
Ru19, 20		PD14BY2E563J	Carbon film	56k $Ω$	±5%	1/4W
Ru21		PD14BY2E821J	Carbon film	820Ω	±5%	1/4W
		SEN	IICONDUCTORS			
Qu1, 2			2SC1000BL	Toshiba si	ilicon	
		MI	SCELLANEOUS			
			E23-0047-04	PC board	terminal	

REMOTE CONTROL PRESETTER UNIT(X13-1120-30)

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER	DESCRIPTION				
		-	CAPACITORS			-	
Cw1,		CE04W1E100	Electrolytic	10μF	25WV		
€w2, 3		CK45F1H103Z	Ceramic	0.01µF	+80%	-20%	
			RESISTORS				
Rw1		PD14BY2E220J	Carbon film	22Ω	±5%	1/4W	
Rw2		PD14BY2E333J	Carbon film	33 k Ω	±5%	1/4W	
Rw3		PD14BY2E102J	Carbon film	1 k Ω	±5%	1/4W	
Rw4		PD14BY2E473J	Carbon film	$47k\Omega$	±5%	1/4W	
Rw5		PD14BY2E472J	Carbon film	$4.7 k\Omega$	±5%	1/4W	
Rw6		PD14BY2E153J	Carbon film	15k Ω	±5%	1/4W	
Rw7		PD14BY2E471J	Carbon film	470Ω	±5%	1/4W	
Rw8~13		PD14BY2E332J	Carbon film	3.3 k Ω	±5%	1/4W	
Rw14		PD14BY2E102J	Carbon film	$1k\Omega$	±5%	1/4W	
		SEI	MICONDUCTORS				
Qw1~9			2SC945 (Q) or (R)	NEC silico	on .		
Qw10			2SC971 (Y) or (G)	Fuji silico	n		
Qw11~13			HD2510P	Hitachi IC	;		
Dw1~7			1N60	Germaniu	m (25V, 50m	A)	
Dw8			WZ-061	Silicon (6	.1V, 500mA)	· -	
			RELAY	_			
Św1~6	R-8042	S51-1005-05	Reed relay				
	<u></u>	M	SCELLANEOUS		 		
		E23-0006-04	PC board terminal x 21			*	
		J19-0297-04	PC board stopper				
_		J21-0737-04					

REMOTE CONTROL RECEIVER UNIT(X13-1130-30)

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTIO	N	
			CAPACITORS			
Ch1, 2		CE04W1H010	Electrolytic	1μF	50WV	
Ch3		CQ08S1H472J	Polystyrene	0.0047µF	±5%	
Ch4		CE04W1H010	Electrolytic	1μF	50WV	
Ch5		CE04W1A100	Electrolytic	10μF	10WV	
Ch6		CQ08S1H472J	Polystyrene	0.0047µF	±5%	
Ch7		CQ09S1H472J(Z)	Polystyrene	0.0047µF	±5%	
Ch8, 9		CQ93M1H182K	Mylar	0.0018µF	±10%	
Ch10		CQ93M1H224K	Mylar	0.22μF	±10%	
Ch11		CE04W1H010	Electrolytic	0.22μ1 1μF	50WV	
Ch12		CK45F1H103Z	Ceramic	0.01µF	+80%	-20%
Ch13, 14		CE04W1H010	Electrolytic	0.01μ1 1μF	50WV	-2076
Ch15		CE04W1C470	Electrolytic	47μF	16WV	
Ch16		CQ09S1H472J(Z)	Polystyrene	0.0047µF	±5%	
Ch17		CC45SL1H470K	Ceramic	47pF	±10%	
Ch18	-	CC45SL1H101K	Ceramic	100pF	±10%	
Ch19		CE04W1H010	Electrolytic	1μF	50WV	
Ch20		CC45SL1H220K	Ceramic	22pF	±10%	
Ch21		CE04W1H010	Electrolytic	1μF	50WV	
Ch22		CE04W1E100	Electrolytic	10μF	25WV	
Ch23, 24		CK45F1H102Z	Ceramic	0.001µF	+80%	-20 %
Ch25		CE04W0F470	Electrolyitc	47μF	3.15WV	
Ch26 Ch27		CS04D1E2R2MorX CK45F1H102Z	Tantalum Ceramic	2.2μF	25WV +80%	-20%
Ch28~31		CE04W1H010	Electrolytic	0.001μF 1μF	50WV	-20%
		-	RESISTORS			
Rh1		PD14BY2E822J	Carbon film	8.2kΩ	±5%	1/4W
Rh2		PD14BY2E103J	Carbon film	10kΩ	±5%	1/4W
Rh3		PD14BY2E392J	Carbon film	3.9 k Ω	±5%	1/4W
Rh4	-	PD14BY2E223J	Carbon film	22 kΩ	±5%	1/4W
Rh5		PD14BY2E184J	Carbon film	180kΩ	±5%	1/4W
Rh6		PD14BY2E154J				
			Carbon film	150kΩ	±5%	1/4W
Rh7		PD14BY2E332J	Carbon film	3.3kΩ	±5%	1/4W
Rh8		PD14BY2E223J	Carbon film	22 kΩ	±5%	1/4W
Rh9		PD14BY2E563J	Carbon film	56kΩ	±5%	1/4W
Rh10		PD14BY2E104J	Carbon film	100kΩ	±5%	1/4W
Rh11		PD14BY2E563J	Carbon film	56kΩ	±5%	1/4W
Rh12		PD14BY2E154J	Carbon film	150kΩ	±5%	1/4W
Rh13		PD14BY2E564J	Carbon film		±5%	1/4W
Rh14				560kΩ		
		PD14BY2E222J	Carbon film	2.2kΩ	±5%	1/4W
Rh15		PD14BY2E103J	Carbon film	10kΩ	±5%	1/4W
Rh16		PD14BY2E121J	Carbon film	120Ω	±5%	1/4W
Rh17		PD14BY2E123J	Carbon film	12 kΩ	±5%	1/4W
Rh18		PD14BY2E223J	Carbon film	22 kΩ	±5%	1/4W
Rh19		PD14BY2E102J	Carbon film	1kΩ	±5%	1/4W
Rh20		PD14BY2E563J	Carbon film	56kΩ	±5%	1/4W
Rh21		PD14BY2E332J	Carbon film	3.3kΩ	±5%	1/4W
Rh22		PD14B12E3323				•
		. — — —	Carbon film	2.7kΩ	±5%	1/4W
Rh23		PD14BY2E680J	Carbon film	68Ω	±5%	1/4W
Rh24		PD14BY2E562J	Carbon film	5.6kΩ	±5%	1/4W
Rh25		PD14BY2E223J	Carbon film	22kΩ	±5%	1/4W
Rh26		PD14BY2E102J	Carbon film	1kΩ	±5%	1/4W
Rh27	,	PD14BY2E154J	Carbon film	. 150kΩ	±5%	1/4W
Rh28		PD14BY2E184J	Carbon film	180kΩ	±5%	1/4W
Rh29, 30		PD14BY2E222J	Carbon film	2.2kΩ	±5%	1/4W
		-				-
Dh21		PD14BY2E103J	Carbon film	10kΩ	±5%	1/4W
		DD440146464		1000	 0/	3 / 41/1
Rh32		PD14BY2E181J	Carbon film	180Ω	±5%	1/4W
Rh31 Rh32 Rh33		PD14BY2E181J PD14BY2E472J	Carbon film Carbon film	4.7kΩ	±5% ±5%	1/4W 1/4W

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTION	NC		
Rh35		PD14BY2E272J	Carbon film	2.7kΩ	±5%	1/4W	
Rh36		PD14BY2E683J	Carbon film	68 kΩ	±5%	1/4W	
Rh37, 38		PD14BY2E104J	Carbon film	100 kΩ	±5%	1/4W	
Rh39	,	PD14BY2E152J	Carbon film	1.5k Ω	±5%	1/4W	
Rh40, 41		PD14BY2E104J	Carbon film	100kΩ	±5%	1/4W	
Rh42		PD14BY2E152J	Carbon film	1.5 k Ω	±5%	1/4W	
Rh43		PD14BY2E683J	Carbon film	68kΩ	±5%	1/4W	
Rh44		PD14BY2E104J	Carbon film	100kΩ	±5%	1/4W	
Rh45		PD14BY2E683J	Carbon film	68 kΩ	±5%	1/4W	
Rh46		PD14BY2E152J	Carbon film	1.5k Ω	±5%	1/4W	
Rh47		PD14BY2E103J	Carbon film	10kΩ	±5%	1/4W	
Rh48		PD14BY2E152J	Carbon film	1.5k Ω	±5%	1/4W	
Rh49		PD14BY2E683J	Carbon film	68kΩ	±5%	1/4W	,
Rh50		PD14BY2E104J	Carbon film	100kΩ	±5%	1/4W	
Rh51		PD14BY2E683J	Carbon film	68kΩ	±5%	1/4W	
Rh52		PD14BY2E152J	Carbon film	1.5kΩ	±5%	1/4W	
		PD14BY2E332J	Carbon film	3.3kΩ	±5%	1/4W	
Rh53			MICONDUCTORS	0.0 (0)			
A. A		SEI		NEC cilia			
Qh1			2SC945R	NEC silico			
Qh2			2SC1335E	Hitachi sil			
Qh3			3SK30GR	Hitachi Fl			
Qh4, 5			2SC945 (Q) or (R)	NEC silico			
Qh6			2SC458C	Hitachi sil			
Qh7, 8			2SC945 (Q) or (R)	NEC silico			
Qh9			2SC945R	NEC silico			
Qh10~17			2SC945 (Q) or (R)	NEC silico			
Qh18			2SC1213A (B) or (C)	Hitachi sil			
Qh19			2SA673 (A) or (C)	Hitachi sil			
Qh20			2SC1213A (B) or (C)	Hitachi si			
Qh21			2SA673 (A) or (C)	Hitachi si	licon		٠
Dh1, 2			1S1555 Silicon	(35V, 100mA)			
Dh3, 4			1N60 Germanium	(25V, 50mA)			
Dh5, 6			1S1555 Silicon	(25V, 50mA)			
Dh7			1N60 Germanium	(25V, 50mA)			
Dh8~10			1S1555 Silicon	(25V, 50mA)			
Dh11, 12			1N60 Germanium	(25V, 50mA)			
Dh15			1S1555 Silicon	(25V, 59mA)			
			COILS				
Lh1, 2	CA-2714	L31-0254-05	Tuning coil (40 kHz, 3.	36mA, 47000pF)		
Lh3	CA-2715	L31-0255-05	Tuning coil (40 kHz, 3.	36mA, 47000pF)		
Lh4	CA-2714	L31-0254-05	Tuning coil (40 kHz, 3.	36mA, 47000pF)		
		M	ISCELLANEOUS				
		E23-0047-04	PC board terminal x 9				

REMOTE CONTROL TRANSMITTER UNIT(X13-1140-30)

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTION	
		•	CAPACITORS		
Cq1		CQ08S2B391J	Polystyrene	390pF ±5%	

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTIO	N	
Cq2	-	CQ08S2B181J	Polystyrene	180pF	±5%	
Cq3		CQ09S1H472J(X)	Polystyrene	$0.0047 \mu F$	±5%	
Cq4		CK45F1H103Z	Ceramic	$0.01 \mu F$	+80%	-20 %
Cq6		CK45F1H103Z	Ceramic	$0.01\mu F$	+80%	-20 %
Cq7		CE04W1H010	Electrolytic	1μF	50WV	
			RESISTORS			•
Rq1		PD14BY2B154J	Carbon film	150kΩ	±5%	1/8W
Rq2		PD14BY2B184J	Carbon film	180k Ω	±5%	1/8W
Rq3		PD14BY2B471J	Carbon film	470Ω	±5%	1/8W
Rq4		PD14BY2E223J	Carbon film	$22k\Omega$	±5%	1/4W
		SEI	MICONDUCTORS			
Qq1			2SC945 (R)	NEC silicon		
Qq2			2SA733 (R)	NEC silicon		
			COIL/TRANS			
Lq1	CA-2714	L31-0254-05	Tuning coil	(40 kHz, 3	.36mH, 470	00pF)
Lq2	CA-2716	L33-0124-05	Ferri-inductor	(39 mH, 8	0 mA)	
Tq	S-4341	T95-0001-05	Transducer			
			SWITCH			
Sq1	S-7071	S39-2001-05	Pushbutton			
		MI	SCELLANEOUS			-
	Z-0912	A02-0025-03	Top case			
	Z-0913	A02-0026-03	Bottom case			
	Z-1091	B04-0044-04	Screen			
	B-0217	E91-0014-05	Battery clip			
_		F15-0125-04	Dust sheet			
_		J19-0237-04	Screen stopper			
		J19-0238-04	Screen stopper board			
_		J19-0239-04	Battery holder			
		J21-0951-14	L shaped hardware			
_	K-1085 (A)	K29-0106-04	Knob (A) (UP, DOWN) x	2		
_	K-1085 (B)	K29-0107-04	Knob (B) (SELECT)			

POINTER UNIT(X13-1280-30)

RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTI	ON	- -
		RESISTORS			
	PD14BY2E562J	Carbon film	5.6kΩ	±5%	1/4W
	PD14BY2E332J	Carbon film	3.3 k Ω	±5%	1/4W
	PD14BY2E102J	Carbon film	1kΩ	±5%	1/4W
	SEN	VICONDUCTORS			
		2SC945 (Q) or (R)	NEC silic	on	
		PART NUMBER PART NUMBER PD14BY2E562J PD14BY2E332J PD14BY2E102J	PART NUMBER RESISTORS PD14BY2E562J Carbon film PD14BY2E332J Carbon film PD14BY2E102J Carbon film SEMICONDUCTORS	PART NUMBER DESCRIPTION RESISTORS PD14BY2E562J Carbon film 5.6kΩ PD14BY2E332J Carbon film 3.3kΩ PD14BY2E102J Carbon film 1kΩ SEMICONDUCTORS	PART NUMBER DESCRIPTION

REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTION
Qx2 Dx1			2SC971 (B) RV-1	Fuji silicon Silicon (50V, 1A)
	•	M	ISCELLANEOUS	
		E23-0046-04 J21-1019-14 N84-3008-46	PC board terminal x PC board mounting Pan head tap tight se	hardware

■ PUSHBUTTON SWITCH UNIT(X13-1290-30)

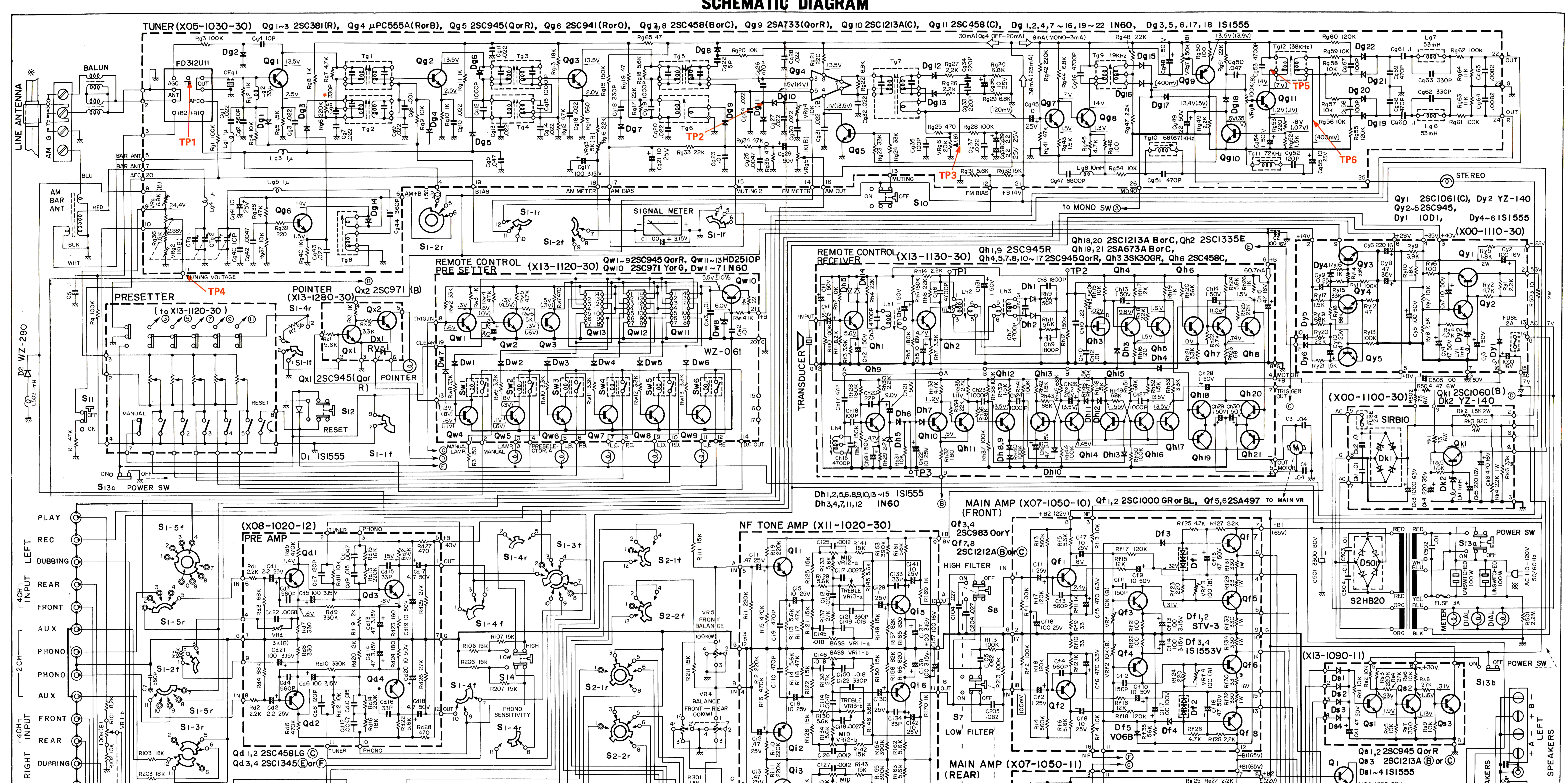
REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTIO	N		
	-		CAPACITORS				
C1		CE04W0F101	Electrolytic	100μF	3.15WV		
C101		CC45SL1H331K	Ceramic	330pF	±10%		
C103		CQ93M1H683K	Mylar	0.068µF	±10%		
C104		CQ93M1H273K	Mylar	$0.027 \mu F$	±10%		
C105		CQ93M1H823K	Mylar	$0.082\mu F$	±10%		
C201		CC45SL1H331K	Ceramic	330pF	±10%		
C202		CQ93M1H683K	Mylar	0.068µF	±10%		. ~
C204		CQ93M1H273K	Mylar	$0.027 \mu F$	±10%	•	•
C205		CQ93M1H823K	Mylar	$0.082 \mu F$	±10%		
C302		CQ93M1H683K	Mylar	0.068µF	±10%		
C303		CQ93M1H273K	Mylar	$0.027\mu F$	±10%		
C304		CQ93M1H823K	Mylar	0.082µF	±10%		
C401		CQ93M1H683K	Mylar	0.068µF	±10%		
C403		CQ93M1H273K	Mylar	0.027µF	±10%		
C404		CQ93M1H823K	Mylar	$0.082 \mu F$	±10%		
			RESISTORS				
R1	-	PD14BY2E473J	Carbon film	47kΩ	±5%	1/4W	
R104, 105		PD14BY2E103J	Carbon film	10k Ω	±5%	1/4W	
R112		PD14BY2E472J	Carbon film	4.7 k Ω	±5%	1/4W	
R113		PD14BY2E104J	Carbon film	100kΩ	±5%	1/4W	
R204, 206		PD14BY2E103J	Carbon film	10 kΩ	±5%	1/4W	
R212		PD14BY2E472J	Carbon film	$4.7k\Omega$	±5%	1/4W	
R213		PD14BY2E104J	Carbon film	100k Ω	±5%	1/4W	
R302		PD14BY2E472J	Carbon film	$4.7k\Omega$	±5%	1/4W	
R303		PD14BY2E104J	Carbon film	100k Ω	±5%	1/4W	,
R402		PD14BY2E472J	Carbon film	4.7k Ω	±5%	1/4W	
R403		PD14BY2E104J	Carbon film	100kΩ	±5%	1/4W	
		SEI	MICONDUCTORS				
D1	-		1S1555	Silicon (39	5V, 100mA)		7
D2			WZ-280	Silicon (28	3V, 500mA)		
		·	SWITCH	£.	:		
S5~12	S-7068	S40-8001-05	Pushbutton (8-push)				
		· · · · · · · · · · · · · · · · · · ·	COIL	,			
L502	CA-2790	L33-0104-05	Ferri-inductor (1mH, 50m.	A)			
		MI	SCELLANEOUS				
_	.5	E23-0047-04	PC board terminal x 41				

■ SQ-DECODER UNIT(X15-1080-01)

REF. NÖ.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTIO	N	
*			CAPACITORS			
Cz1		CS04E1V010XorM	Tantalum	1μF	35WV	
Cz2		CQ93M1H224J	Mylar	0.22μF	±5%	
Cz3		CQ93M1H123J	Mylar	0.012μF	±5%	
		CQ93M1H392J	Mylar	0.012µ1	±5%	
Cz4						
Cz5		CE04W1H100	Electrolytic	10μF	50WV	
Cz6, 7		CE04W1H010	Electrolytic	1μF	50WV	
Cz8		CQ93M1H563J	Mylar	0.056μ F	±5%	
Cz9		CQ93M1H392J	Mylar	0.0039µF	±5%	
Cz10		CQ93M1H102J	Mylar	$0.001 \mu F$	±5%	
Cz11, 12		CE04W1H010	Electrolytic	1μF	50WV	
Cz13		CS04E1V010XorM	Tantalum	1μF	35WV	
Cz14		CQ93M1H563J	Mylar	0.056μF	±5%	
Cz15		CQ93M1H392J	Mylar	0.0039µF	±5%	
Cz16		CQ93M1H102J	Mylar	$0.001 \mu F$	±5%	
Cz17, 18		CE04W1H010	Electrolytic	1μF	50WV	
Cz19		CQ93M1H224J	Mylar	0.22μF	±5%	
Cz20		CQ93M1H123J	Mylar	0.012µF	±5%	
Cz21		CQ93M1H392J	Mylar	0.0039µF	±5%	
Cz22~24		CE04W1H010	Electrolytic	0.0033μ1 1μF	_5/0 50W∨	
Cz25		CE04W1V470	Electrolytic	47μF	35WV	
C225		CEU4VVIV470	Liectionytic	47μΓ		
			RESISTORS			
Rz1		PD14BY2E334J	Carbon film	$330 k\Omega$	±5%	1/4W
Rz2		PD14BY2B154J	Carbon film	150kΩ	±5%	1/8W
Rz3, 4		PD14BY2B472J	Carbon film	4.7 k Ω	±5%	1/8W
Rz5		PD14BY2B363J	Carbon film	36 kΩ	±5%	1/8W
Rz6, 7		PD14BY2B392J	Carbon film	3.9 k Ω	±5%	1/8W
Rz8		PD14BY2B363J	Carbon film	36 kΩ	±5%	1/8W
Rz9, 10		PD14BY2B332J	Carbon film	$3.3 \mathrm{k}\Omega$	±5%	1/8W
Rz11		PD14BY2B822J	Carbon film	8.2 k Ω	±5%	1/8W
Rz12, 13		PD14BY2B124J	Carbon film	120 kΩ	±5%	1/8W
Rz14		PD14BY2B222J	Carbon film	2.2kΩ	±5%	1/8W
Rz15, 16		PD14BY2B392J	Carbon film	3.9kΩ	±5%	1/8W
Rz17		PD14BY2B563J	Carbon film	56kΩ	±5%	1/8W
Rz18		PD14BY2E105J		1MΩ	±5%	1/4W
Rz19		PD14BY2B224J	Carbon film	220kΩ	±5%	1/4W
Rz20, 21			Carbon film		±5%	1/8W
-		PD14BY2B472J	Carbon film	4.7kΩ		
Rz22		PD14BY2B104J	Carbon film	100kΩ	±5% +=%	1/8W
Rz23		PD14BY2B333J	Carbon film	33kΩ	±5%	1/8W
Rz24, 25		PD14BY2B392J	Carbon film	3.9kΩ	±5%	1/8W
Rz26		PD14BY2B303J	Carbon film	30kΩ	±5%	1/8W
Rz27, 28		PD14BY2B332J	Carbon film	3.3kΩ	±5%	1/8W
Rz29		PD14BY2B682J	Carbon film	6.8 k Ω	±5%	1/8W
Rz30		PD14BY2B683J	Carbon film	68 kΩ	±5%	1/8W
Rz31		PD14BY2B154J	Carbon film	150kΩ	±5%	1/8W
Rz32		PD14BY2E334J	Carbon film	330 kΩ	±5%	1/4W
Rz33		PD14BY2B224J	Carbon film	220 kΩ	±5%	1/8W
Rz34		PD14BY2E105J	Carbon film	$1M\Omega$	±5%	1/4W
Rz35, 36		PD14BY2B472J	Carbon film	4.7 k Ω	±5%	1/8W
Rz37		PD14BY2B104J	Carbon film	100kΩ	±5%	1/8W
Rz38		PD14BY2E334J	Carbon film	330kΩ	±5%	1/4W
Rz39		PD14BY2B154J	Carbon film	150kΩ	±5%	1/8W
		PD14B12B1343 PD14BY2B472J	Carbon film		±5%	1/8W
Rz40, 41				4.7kΩ		-
Rz42		PD14BY2B333J	Carbon film	33kΩ	±5%	1/8W
Rz43, 44		PD14BY2B392J	Carbon film	3.9 k Ω	±5%	1/8W
Rz45		PD14BY2B303J	Carbon film	30 kΩ	±5%	1/8W

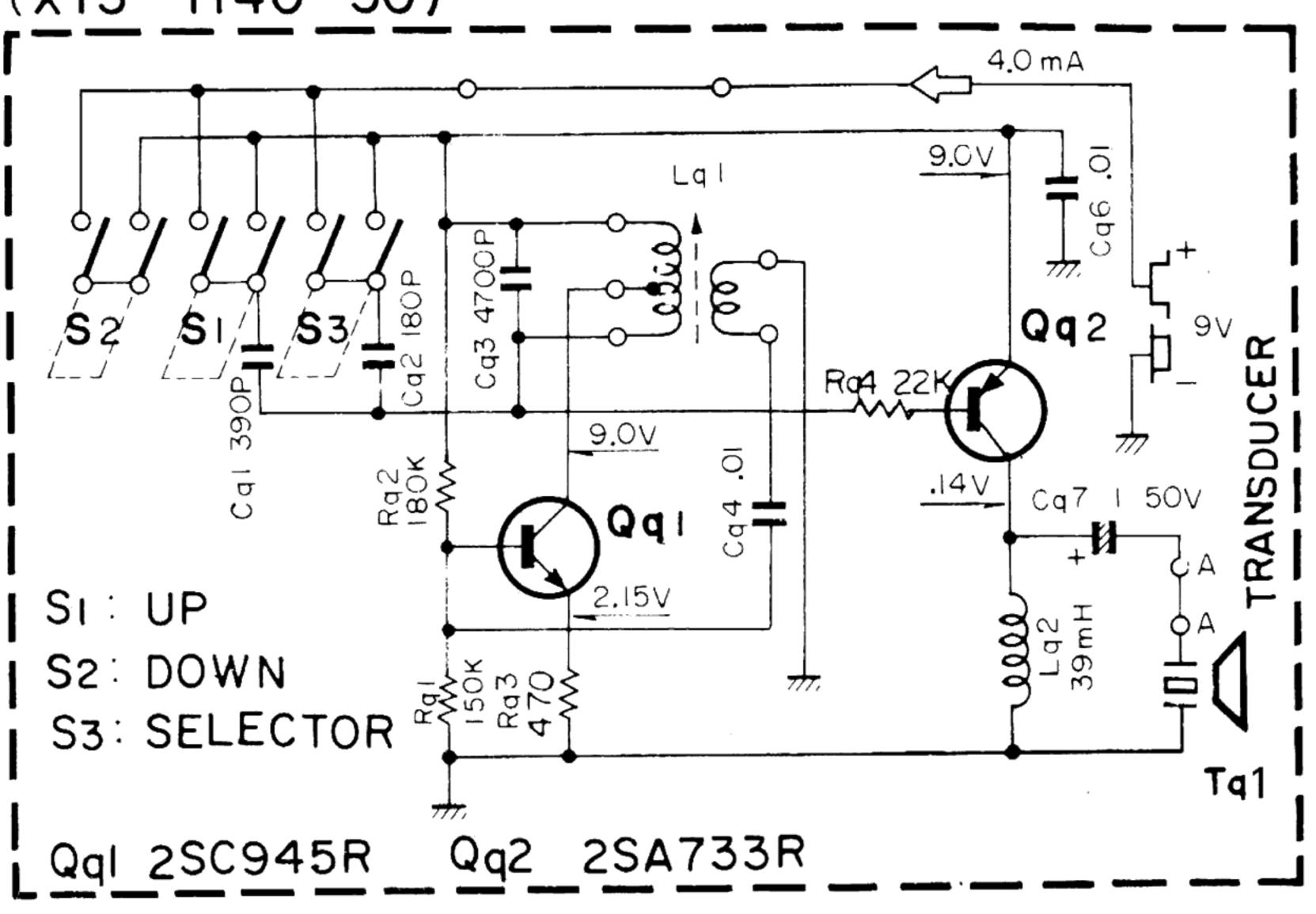
REF. NO.	RS PART NUMBER	MFR'S PART NUMBER		DESCRIPTIO	N		
	, AIII NONDEIL			2.21.2	±=0/	4 /014	
Rz46, 47		PD14BY2B332J	Carbon film	3.3kΩ	±5%	1/8W	
Rz48		PD14BY2B682J	Carbon film	0.0	±5%	1/8W	
Rz49		PD14BY2B683J	Carbon film	68kΩ	±5%	1/8W	
Rz50		PD14BY2B154J	Carbon film	150kΩ	±5%	1/8W	1
Rz 51		PD14BY2E105J	Carbon film	1ΜΩ	±5%	1/4W	
Rz52		PD14BY2B224J	Carbon film	220 kΩ	±5%	1/8W	
Rz53, 54		PD14BY2B472J	Carbon film	4.7kΩ	±5%	1/8W	
Rz55		PD14BY2B104J	Carbon film	100 kΩ	±5%	1/8W	
Rz56		PD14BY2B363J	Carbon film	36 kΩ	±5%	1/8W	
Rz57, 58		PD14BY2B392J	Carbon film	3.9kΩ	±5%	1/8W	
Rz59		PD14BY2B363J	Carbon film	36 k Ω	±5%	1/8W	
Rz60, 61		PD14BY2B332J	Carbon film	3.3 k Ω	±5%	1/8W	
Rz62	•	PD14BY2B822J	Carbon film	8.2 k Ω	±5%	1/8W	
Rz63, 64	,	PD14BY2B124J	Carbon film	120k $Ω$	±5%	1/8W	
Rz65	•	PD14BY2B683J	Carbon film	. 68kΩ	±5%	1/8W	Ì
Rz66		PD14BY2B224J	Carbon film	220kΩ	±5%	1/8W	
Rz 6 7		PD14BY2E105J	Carbon film	$1M\Omega$	±5%	1/4W	
Rz68, 69		PD14BY2B472J	Carbon film	$4.7 k\Omega$	±5%	1/8W	
Rz70		PD14BY2B104J	Carbon film	100kΩ	±5%	1/8W	
	I	SEN	VICONDUCTORS			,	
Qz1~15		- 7	2SC1345 (E) or (F)	Hitachi sil	licon	-	
		M	ISCELLANEOUS				
		E23-0047-04	PC board terminal x 9				
		L23-0047-04			•		
				· ·			
				,			
				P ₁			

SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM

REMOTE CONTROL TRANSMITTER (X13-1140-30)



NOTE: In this schematic diagram, small letters (e, g, h, etc.) are added to the alphabetic designators on the various blocks of the schematic. These are not shown on the actual PCB's.



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