MODEL

AA-1020

AKAI

ALSO APPLICABLE TO MODEL AA-1020L

I. SPECIFICATIONS

An asterisk next to a figure indicates the minimum guaranteed performance.

1. AMPLIFIER SECTION (Models AA-1020 and AA-1020L)

RATED OUTPUT		20 watts per channel (both channels driven). Minimum RMS, at 8 ohms load impedance from 20 to 20,000 Hz, with on more than 0.4% total harmonic distortion.
POWER BAND WIDTH (IHF)		10 to 60 kHz at 8 ohms, distortion within 0.4%.
INPUT SENSITIVITY	PHONO-1, 2	3 mV/50 k ohms (−48 ±1.5 dBm) with output 24.3 dBm, 8 ohms as standard.
	TAPE-1, 2	150 mV/80 k ohms (−14 ±1.5 dBm) with output 24.3 dBm, 8 ohms as standard.
	AUX	150 mV/80 k ohms (−14 ±1.5 dBm) with output 24.3 dBm, 8 ohms as standard.
RESIDUAL NOISE		Less than 1.4 mV (Less than −55 dBm)
SIGNAL TO NOISE RATIO (IHF)	PHONO-1, 2	Better than 80 dB (Less than −40 dBm, input shorted)
	TAPE-1, 2	Better than 90 dB (Less than −50 dBm, input open)
	AUX	Better than 90 dB (Less than −50 dBm, input shunted at 5 k ohms)
TONE CONTROL	BASS	10 ±1.5 dB, −10 ±1.5 dB at 100 Hz
	TREBLE	10 ±1.5 dB, −10 ±1.5 dB at 10 kHz
LOUDNESS CONTROL		10 ±1.5 dB at 100 Hz 6 ±1.5 dB at 10 kHz
FILTER	LOW CUT	−6 dB at 50 Hz *−8 ±1.5 dB at 50 Hz
	HIGH CUT	−9 dB at 10 kHz *−9 ±1.5 dB at 10 kHz
FREQUENCY RESPONSE (PHONO)		RIAA ±1 dB *13.11 ±1.0 dB at 100 Hz *−13.75 ±1.0 dB at 10 kHz
CHANNEL SEPARATION (IHF)		Better than 55 dB at 1,000 Hz *Better than 50 dB at 1,000 Hz
CROSS TALK (PHONO)		Better than 50 dB
L-R DEVIATION (PHONO)		Within 3 dB
RECORDING OUTPUT (PHONO)	PIN	150 mV (−14.3 ±2 dBm)
	DIN	26 mV (−28.2 ±2 dBm)

2. FM TUNER SECTION (Models AA-1020 and AA-1020L)

FREQUENCY RANGE	88 to 108 MHz *87.4 to 109 ±1 MHz
DIAL TRACKING ERROR	±250 kHz
SENSITIVITY (IHF)	2.0 μV *Less than 3.2 μV (10 dB)
SENSITIVITY DEVIATION	Within 3 dB
IMAGE REJECTION RATIO	Better than 65 dB at 98 MHz *Better than 50 dB (IHF)
IF REJECTION RATIO	Better than 90 dB at 98 MHz *Better than 80 dB (IHF)
CAPTURE RATIO (IHF)	Less than 2 dB
LIMITING SENSITIVITY	Less than 8 dB (Audio output −1 dB)
MUTING SENSITIVITY	15 to 30 dB
SELECTIVITY (IHF)	Better than 70 dB *Better than 65 dB
AM SUPPRESSION RATIO	Better than 45 dB
SIGNAL TO NOISE RATIO	Better than 68 dB *Better than 50 dB (STEREO) including carrier leak *Better than 60 dB (MONO)
DISTORTION FACTOR	Less than 0.5% (STEREO) *Less than 1.0% (STEREO) Less than 0.3% (MONO) *Less than 0.5% (MONO)
FREQUENCY RESPONSE	−13 ±1 dB at 10 kHz (US-A) −10.5 ±1 dB at 10 kHz (US-B)
STEREO SENSITIVITY	4.5 μV (15 ±3 dB)
STEREO SEPARATION	Better than 40 dB
L-R DEVIATION	Within 3 dB
RECORDING OUTPUT PIN	390 mV (−6 ±3 dBm)
RECORDING OUTPUT DIN	70 mV (−21 ±3 dBm)

3. AM, MW TUNER SECTION (Models AA-1020 and AA-1020L)

FREQUENCY RANGE		535 to 1,605 kHz *500 to 1,650 kHz
DIAL TRACKING ERROR		Within 2%
SENSITIVITY (IHF)		200 μV/m (Bar antenna) 5 μV/m (Ext antenna) *320 μV/m (Bar antenna)
SENSITIVITY DEVIATION		Within 6 dB
IMAGE REJECTION RATIO		Better than 50 dB at 1 MHz
IF REJECTION RATIO		Better than 45 dB at 1 MHz *Better than 50 dB at 1 MHz
SELECTIVITY		Better than 30 dB ±10 kHz
SIGNAL TO NOISE RATIO		Better than 50 dB *Better than 45 dB
DISTORTION FACTOR		Less than 0.8% *Less than 1.5%
FREQUENCY RESPONSE		–15 dB at 3 kHz
RECORDING OUTPUT	PIN	270 mV (–9 ±2 dBm)
	DIN	55 mV (–23 ±2 dBm)

4. AM, LW TUNER SECTION (Model AA-1020L only)

FREQUENCY RANGE		150 to 350 kHz
DIAL TRACKING ERROR		Within 2%
SENSITIVITY (IHF)		1 mV/m (Bar antenna) 15 μV (Ext antenna)
IMAGE REJECTION RATIO		Better than 30 dB at 240 kHz
IF REJECTION RATIO		Better than 30 dB at 240 kHz
SELECTIVITY (IHF)		Better than 30 dB ±10 kHz
SIGNAL TO NOISE RATIO		Better than 35 dB
DISTORTION FACTOR		Less than 3%
RECORDING OUTPUT	PIN	155 mV (–14 ±2 dBm)
	DIN	35 mV (–27 ±2 dBm)

5. GENERAL (Models AA-1020 and AA-1020L)

TRANSISTOR	2SA661(O)(Y) . . . 2	2SC1166(O)(Y) . . . 2
	2SA733(Q)(R) . . . 1	2SC1222(E)(F) . . . 10
	2SC536(E)(F) . . . 1	2SC1449(K)(L) . . . 1
	2SC930(E)(F) . . . 1	2SD371(O)(R) . . . 4
	2SC945L(K)(P) . . . 4	2SD571(L)(M) . . . 1
IC	μPC30C . . . 1	LA3350A . . . 1
	LA1230 . . . 1	
DIODE	10D1 . . . 2	1S2473 . . . 2
	1R5BZ61 . . . 4	VD1222 . . . 6
	WZ130 . . . 1	SEL102R . . . 2
POWER REQUIREMENTS	110 Volts/220 Volts/240 Volts, 50/60 Hz, Switchable 120 Volts, 60 Hz CSA 220 Volts, 50 Hz CEE	
DIMENSIONS	440(W) x 140(H) x 350(D) mm (17.3″ x 5.5″ x 13.8″) (Dimensions include all protruding parts)	
WEIGHT	12 kg (26.4 lbs.)	

NOTE: Specifications subject to change without notice.

IV. FM TUNER SECTION ADJUSTMENTS

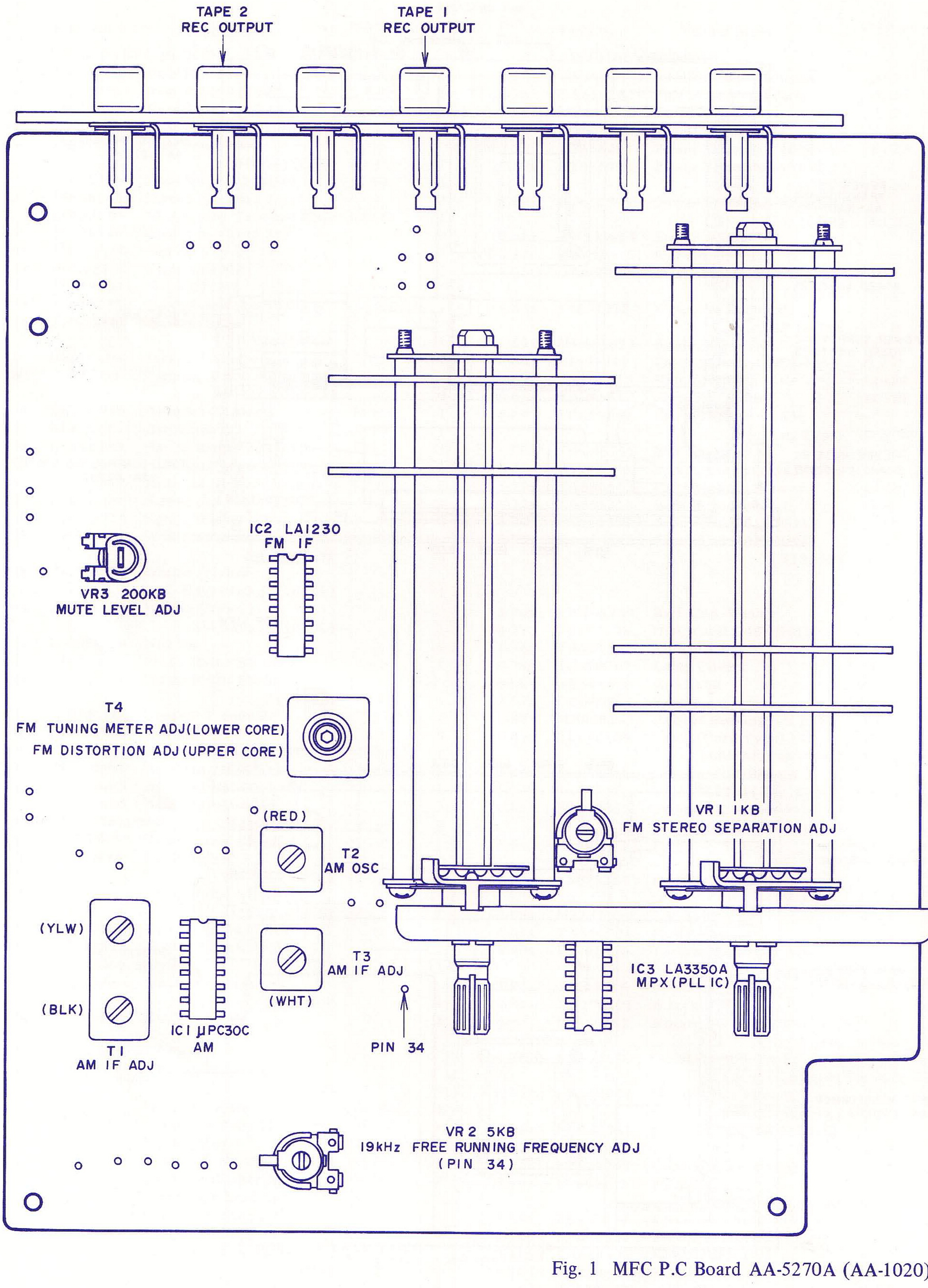


Fig. 1 MFC P.C Board AA-5270A (AA-1020)

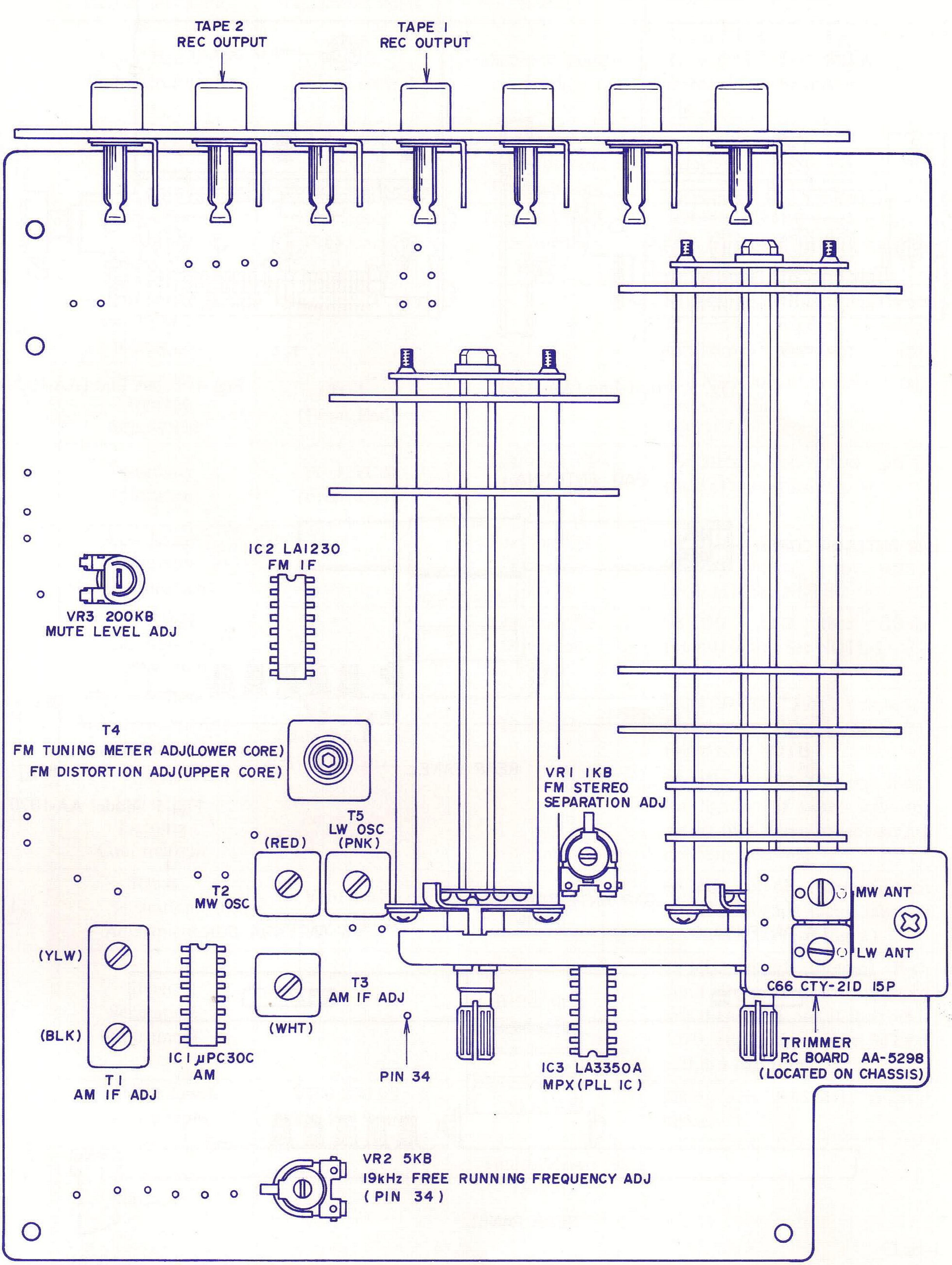


Fig. 2 MFC P.C Board AA-5270A (AA-1020L)

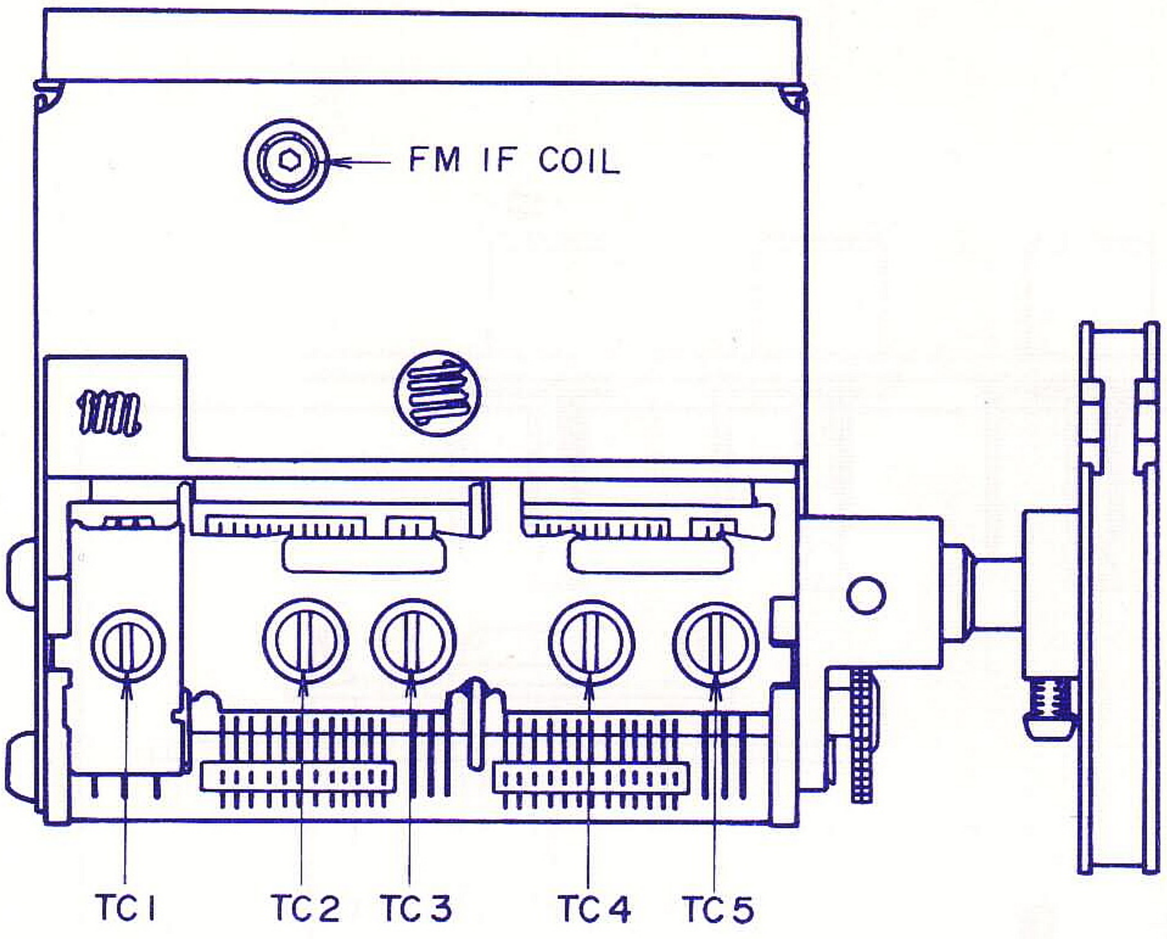


Fig. 3 Front End (AA-1020)

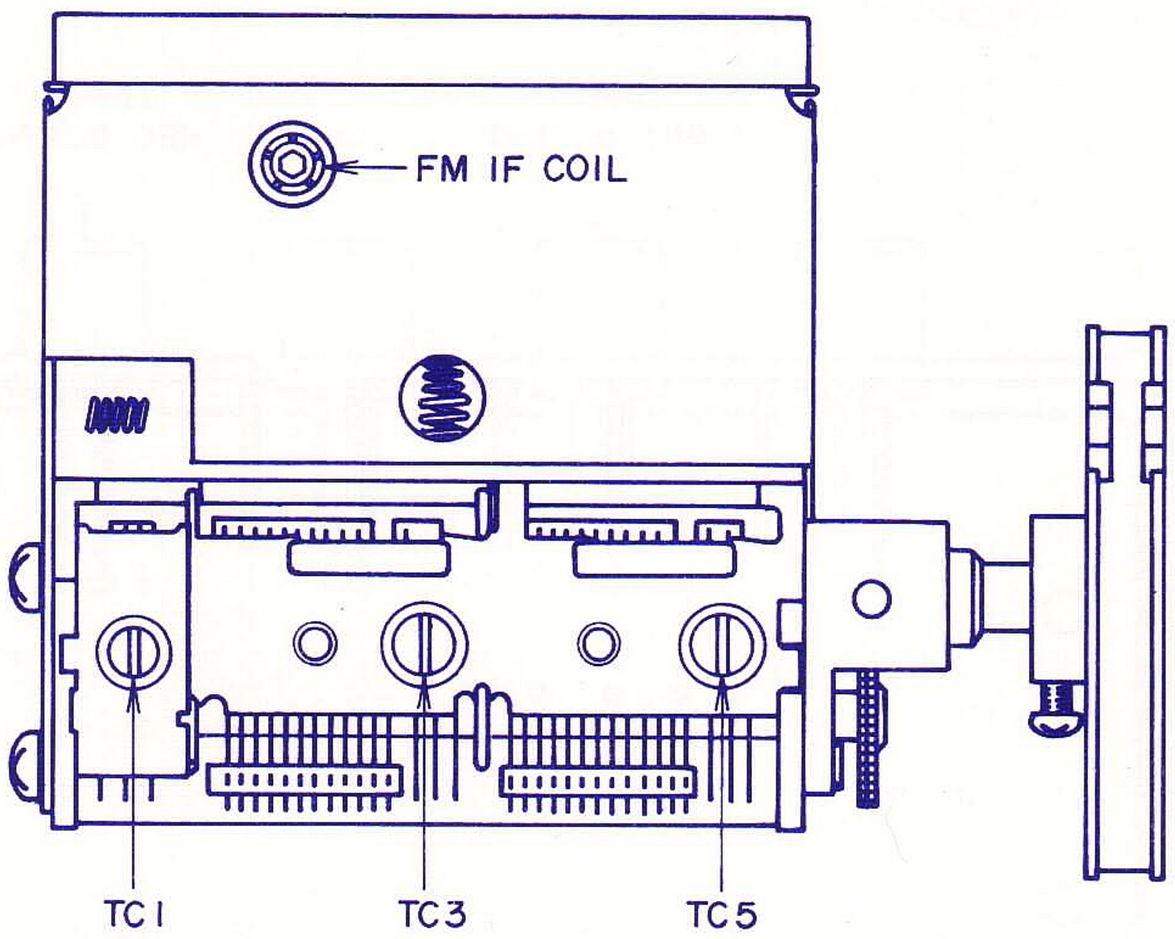


Fig. 4 Front End (AA-1020L)

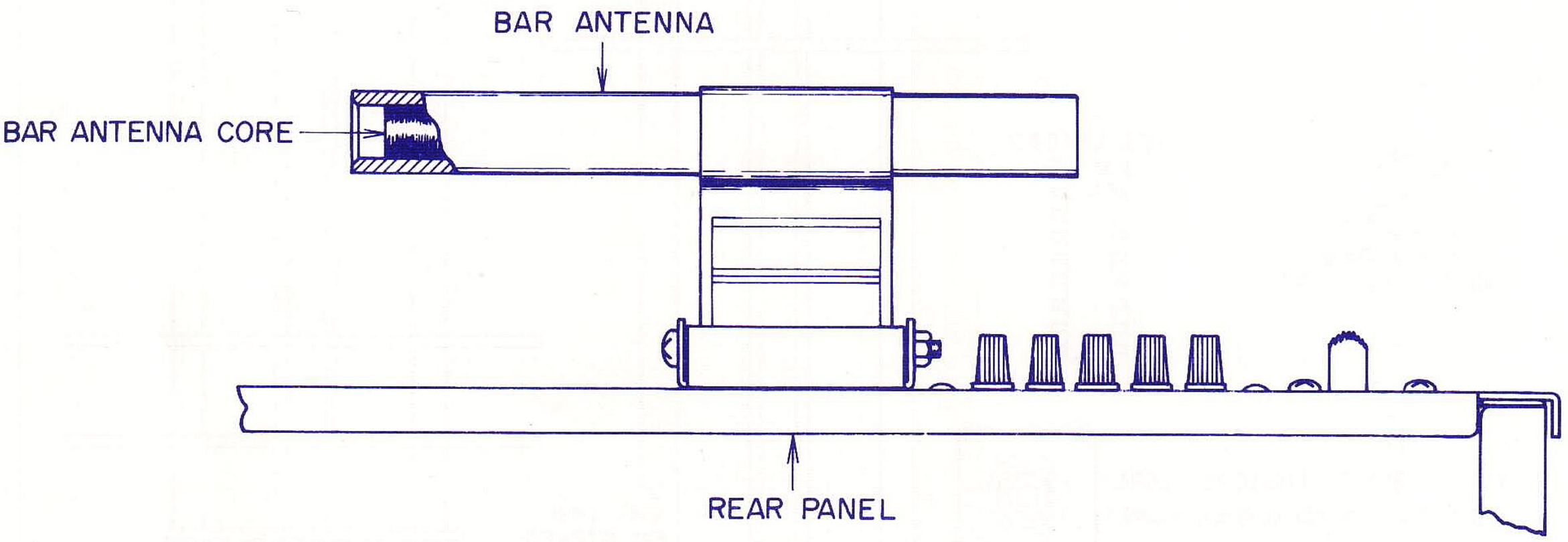


Fig. 5 Model AA-1020

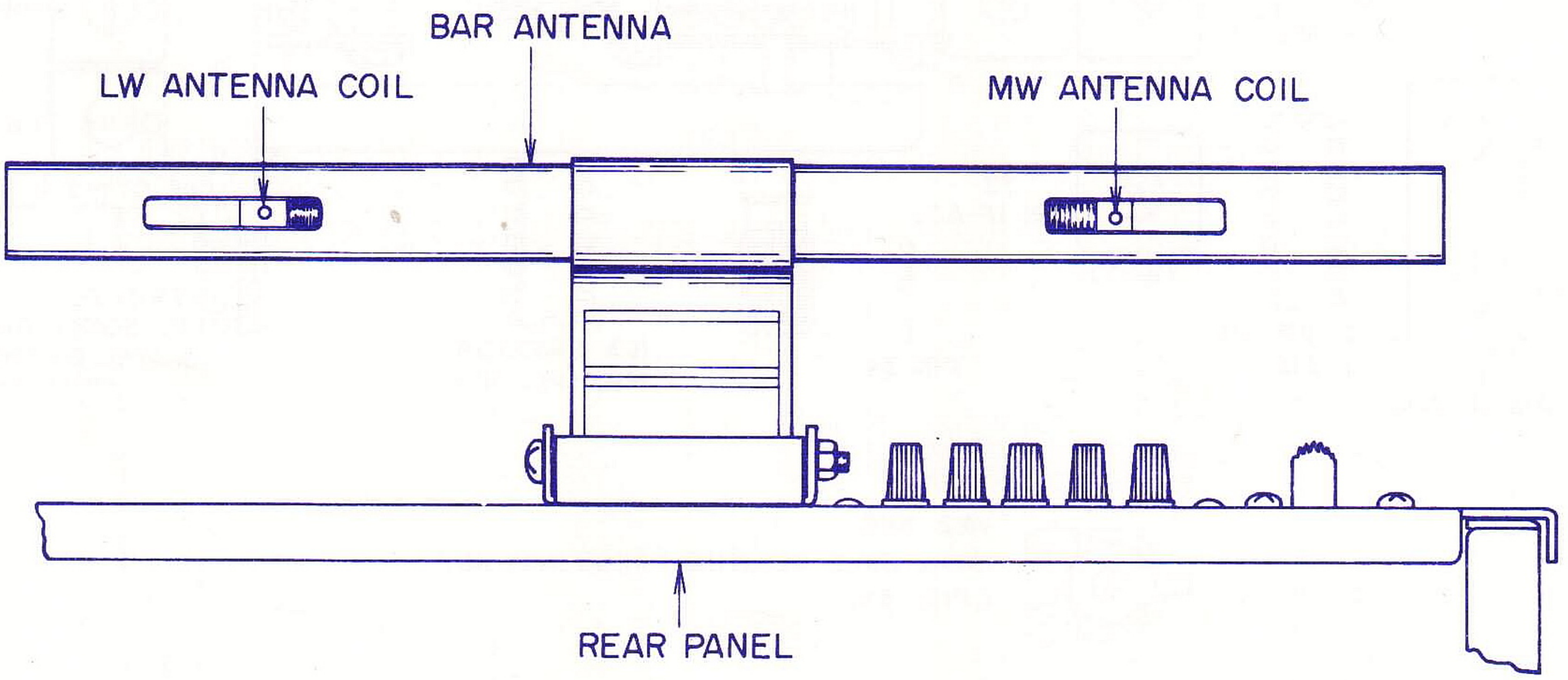


Fig. 6 Model AA-1020L

Step	Adjustment Item	Adjustment Point	Result	Remarks
1	Front End IF Coil Adjustment	IF Coil (Front End)	Maximum noise level	SELECTOR to "FM AUTO" Tune only noise without interference of broadcasting (See Fig. 3)
2	Tuning Meter Centering	T-4 Lower Side Core (MFC P.C Board)	Center Indication of Tuning Meter	Same as above (See Fig. 1)
3	Distortion Factor Adjustment	T-4 Upper Side Core (MFC P.C Board)	Less than 0.4% Distortion Factor	108 MHz, 60 dB (mono) input. Less than 0.4% on both channels (See Fig. 1)
4	Confirmation of Tuning Meter Indication			If Tuning Meter indication is not at center position, re-adjust STEPS 2 & 3 above.
5	Frequency Coverage Adjustment	TC-1 (Front End)		108 MHz, 60 dB (mono) input. Error: within ±250 kHz (See Fig. 3)
6	Sensitivity Adjustment	TC-3, TC-5 (Front End)	Less than 3% Distortion Factor	108 MHz, Less than 10 dB (mono) input (See Fig. 3)
7	Low Range Sensitivity Confirmation		Less than 3% Distortion Factor	88 MHz, Less than 10 dB (mono) input. Error within ±250 kHz See NOTE-1
8	Mid Range Sensitivity Confirmation		Less than 3% Distortion Factor	98 MHz, Less than 10 dB (mono) input. See NOTE-1
9	PLL IC Free Running Frequency Adjustment	VR-2 5 kB (MFC P.C Board)	19.00 kHz	Mute Switch "ON", Frequency Counter to PIN-34 (MFC P.C Board) See NOTE-2
10	Stereo Indicator Lighting Confirmation			98 MHz, 60 dB (Stereo) input No lighting of stereo indicator means that stereo broadcasts are not being received.
11	Stereo Separation Adjustment	VR-1 1 kB (MFC P.C Board)	Better than 40 dB	98 MHz, 60 dB (Stereo), L-ch input. Distortion factor must be less than 1.0% (See Fig. 1)
12	Stereo Separation Adjustment		Better than 40 dB	98 MHz, 60 dB (Stereo), R-ch input. Distortion factor must be less than 1.0% and if it exceeds 1.0%, adjust the coil in STEP-1 within a half-turn.
13	FM Mute Level Adjustment	VR-3 200 kB (MFC P.C Board)	20 ±3 dB	Mute "ON", 98 MHz (mono) input
14	Confirmation of Tuning Meter Indication		Tuning Meter: Center	

Chart-1

NOTE-1 In the event that the distortion factors in STEP-7 & 8 are not less than 3%, re-adjust Front End Trimmers TC-3 & TC-5 to obtain a minimum average distortion factor at 88, 98 & 108 MHz (same distortion factor at all 3 points).

NOTE-2 Free running frequency of the PLL IC must be an exact 19.00 kHz.

V. AM TUNER SECTION ADJUSTMENT(Model AA-1020)

Step	Adjustment Item	Adjustment Point	Result	Remarks
1	Low Range Frequency Coverage Adjustment	T-2 (RED) (MFC P.C Board)	Tracking error: Less than 2%	520 kHz optional input (See Fig. 1)
2	Sensitivity Adjustment	Bar Antenna Core T-1 (YLW, BLK) T-3 (WHT) (MFC P.C Board)	Maximum Sensitivity	520 kHz optional input (See Fig. 1)
3	High Range Frequency Coverage Adjustment	TC-2 (Front End)	Tracking error: Less than 2%	1,400 kHz optional input (See Fig. 3)
4	Sensitivity Adjustment	TC-4 (Front End)	Maximum Sensitivity	1,400 kHz optional input (See Fig. 3)

NOTE: Repeat procedures in steps from 1 to 4.

Chart-2

VI. AM(LW AND MW) TUNER SECTION ADJUSTMENT (Model AA-1020L)

1. LW SECTION ADJUSTMENT (Refer to Figs. 2,6)

Step	Adjustment Item	Adjustment Point	Result	Remarks
1	Low Range Frequency Coverage Adjustment	T5 (PNK) (MFC P.C Board)	Error: within 2%	160 kHz optional input
2	Sensitivity Adjustment	Bar Antenna LW Coil T-1 (YLW, BLK) T-3 (WHT) (MFC P.C Board)	Maximum Sensitivity	160 kHz optional input
3	High Range Frequency Coverage Adjustment	C-66 LW OSC Trimmer (MFC P.C Board)	Error: within 2%	340 kHz optional input
4	Sensitivity Adjustment	C-1 LW ANT Trimmer (Trimmer P.C Board)	Maximum Sensitivity	340 kHz optional input

Chart-3

2. MW SECTION ADJUSTMENT (Refer to Figs. 2,6)

Step	Adjustment Item	Adjustment Point	Result	Remarks
1	Low Range Frequency Coverage Adjustment	T-2 (RED) (MFC P.C Board)	Error: within 2%	520 kHz optional input
2	Sensitivity Adjustment	Bar Antenna MW Coil	Maximum Sensitivity	520 kHz optional input
3	High Range Frequency Coverage Adjustment	C-66 MW OSC Trimmer (MFC P.C Board)	Error: within 2%	1,400 kHz optional input
4	Sensitivity Adjustment	C-1 MW ANT Trimmer (Trimmer P.C Board)	Maximum Sensitivity	1,400 kHz optional input

Chart-4

VII. MAIN AMPLIFIER ADJUSTMENT

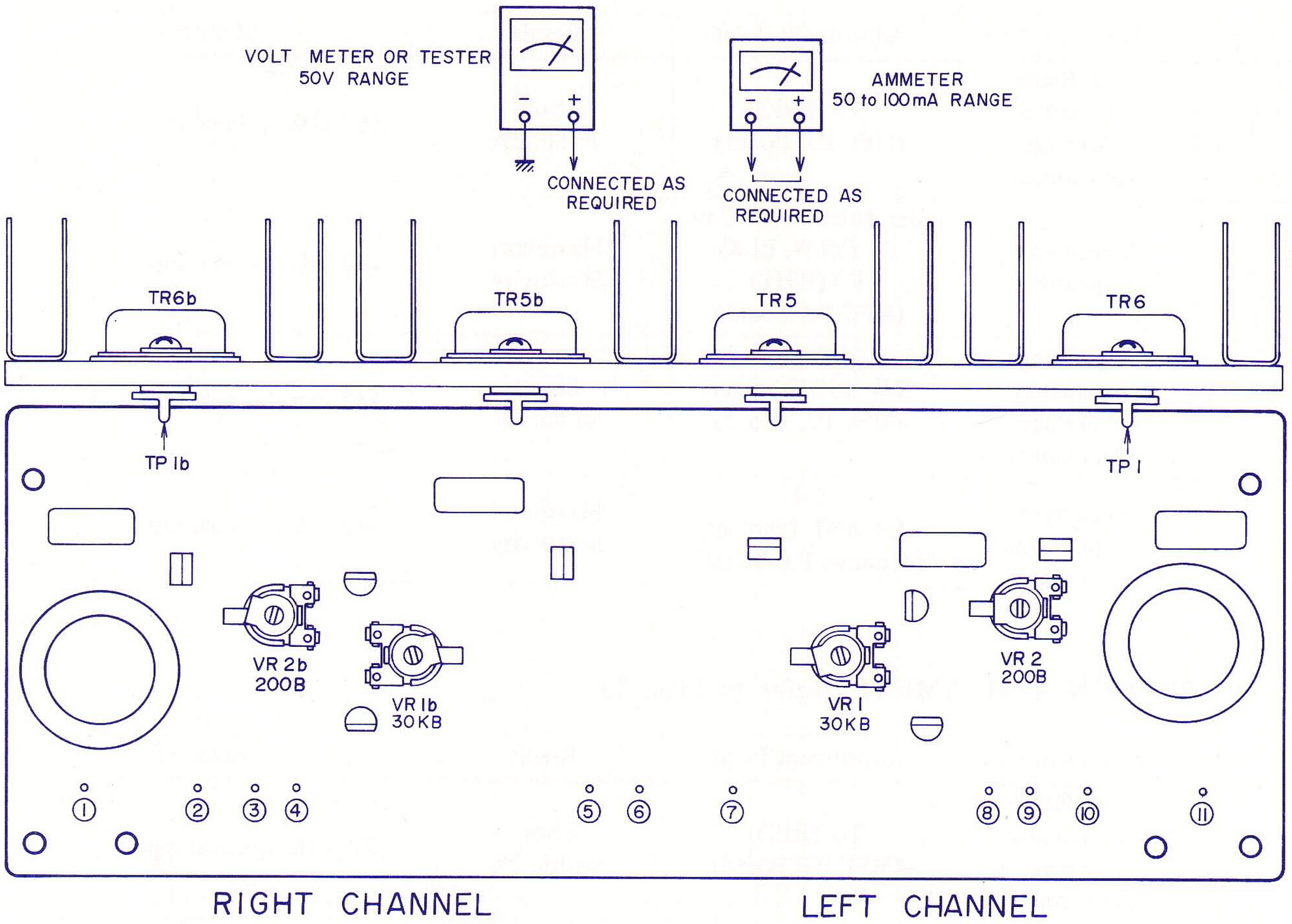


Fig. 7 Main Amp P.C Board AA-5275

1] Idling Current Adjustment (Refer to Fig. 7)

1) Disconnect the protection fuse (F-2, F-3) from the Protection Fuse Board.
2) Connect a 50 to 100 mA scale ampere meter to the place from which the fuse was removed in step above.
3) Adjust Main amplifier P.C Board semi-fixed resistors VR-2 200B (left), and VR-2b 200B (right) to obtain 40 mA on both channels.

2] DC Balance Adjustment (Refer to Fig. 7)

1) Set voltmeter or tester to 50V DC range and connect between TP-1 of Main amplifier P.C Board and chassis.
2) Adjust semi-fixed resistors VR-1 30 kB (left) and VR-1b 30 kB (right) to obtain half the value of the power supply voltage.

VIII. TUNING CORD THREADING

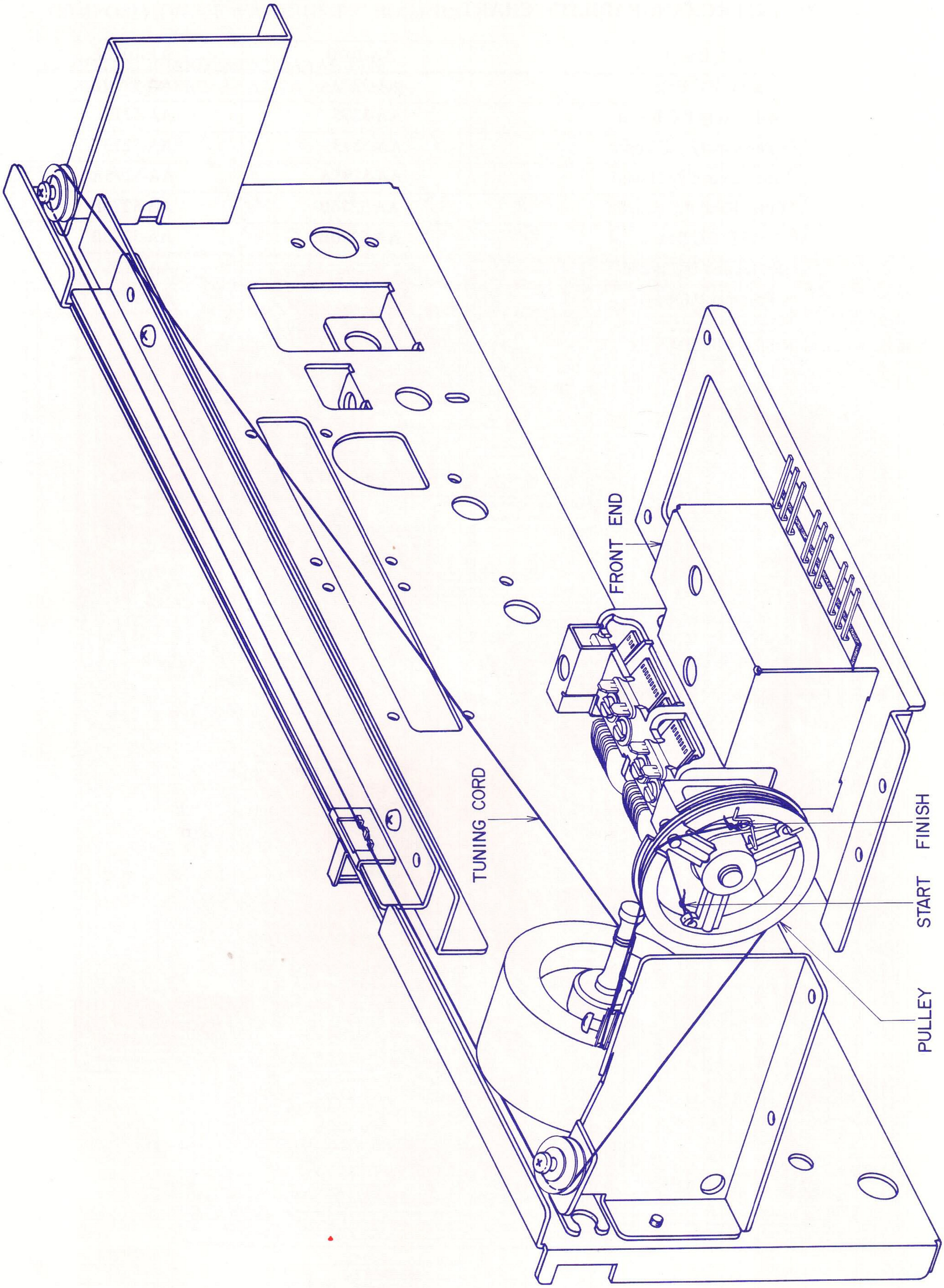
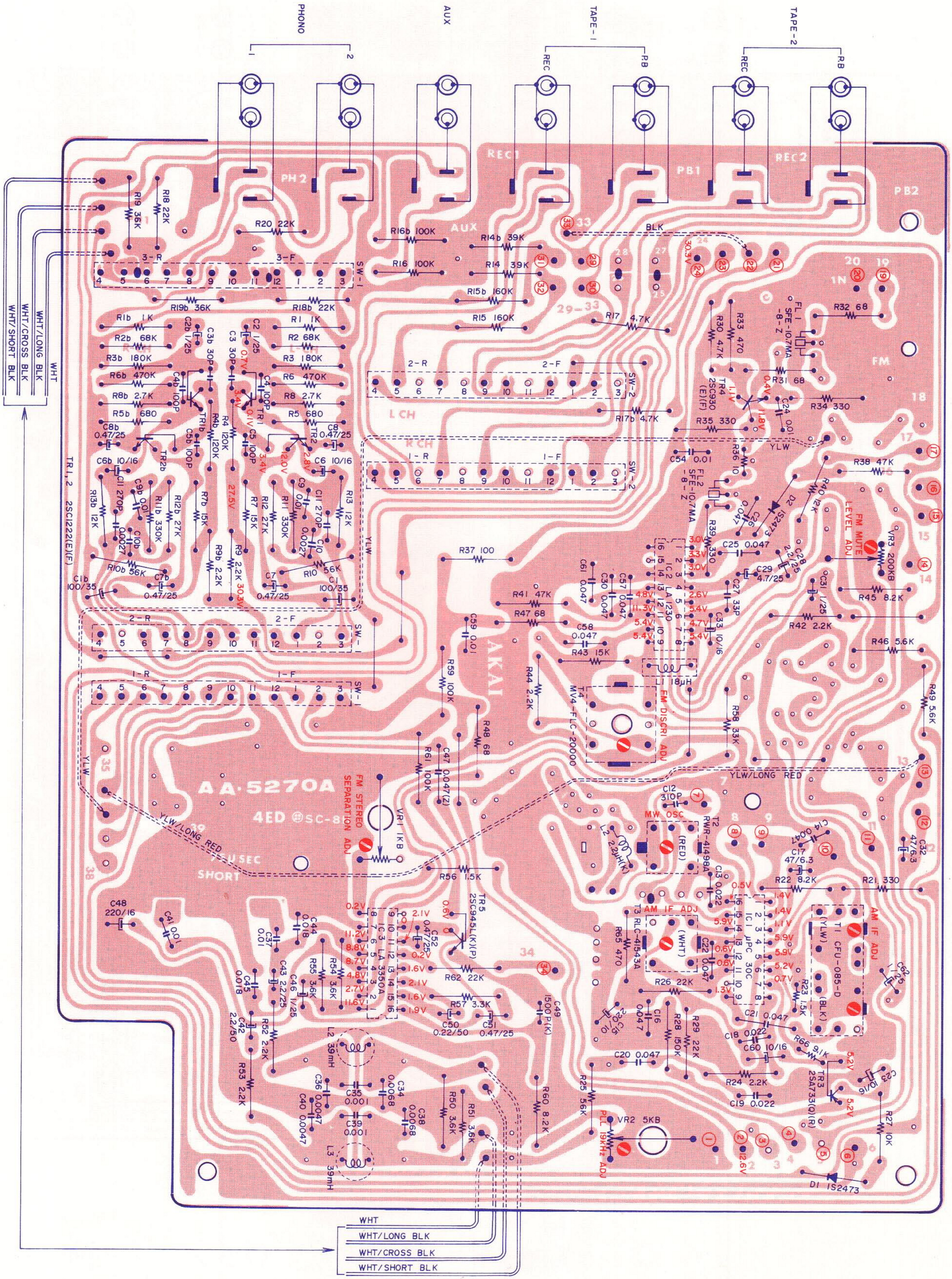


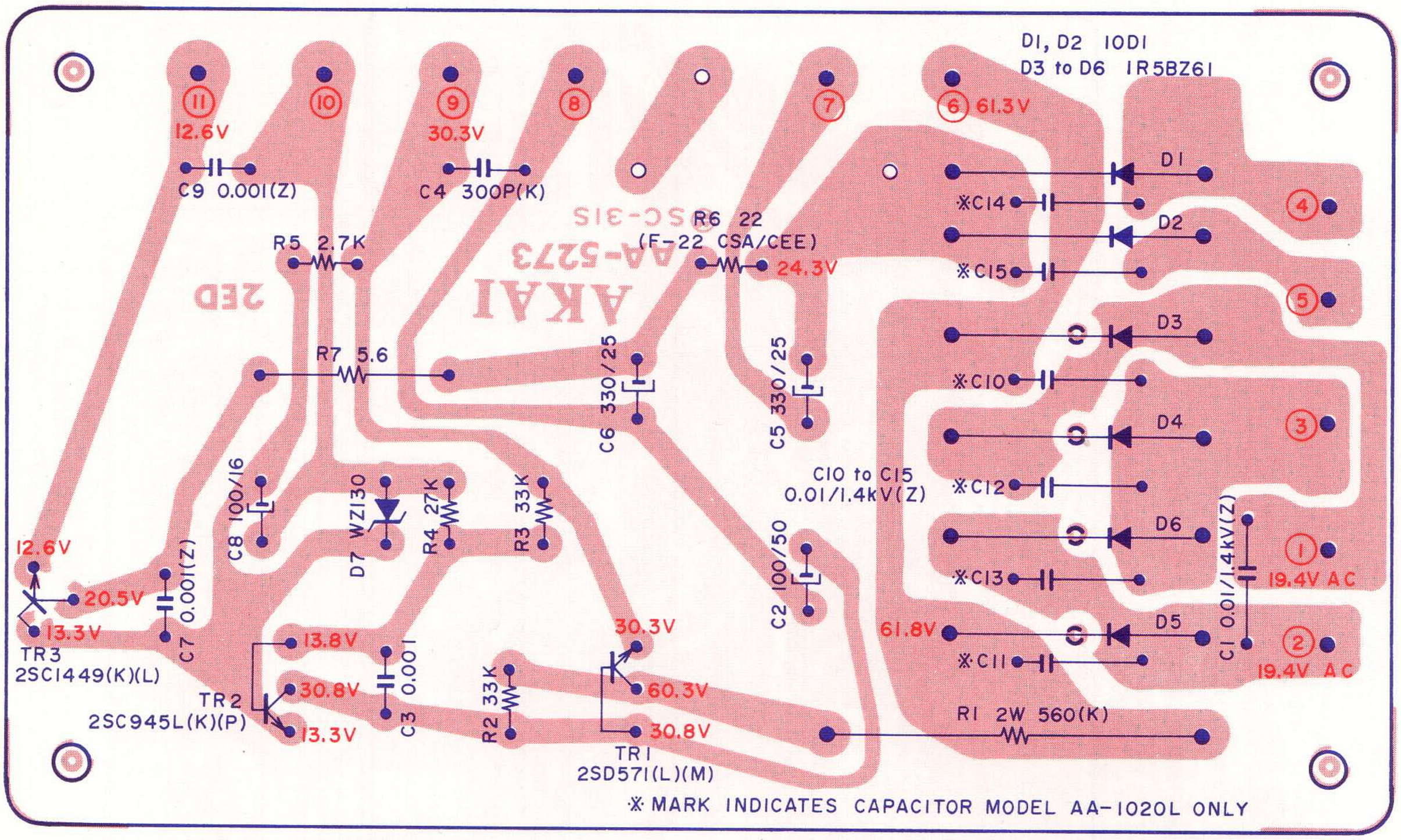
Fig. 8 Tuning Cord Threading

2. COMPOSITION OF VARIOUS P.C BOARDS

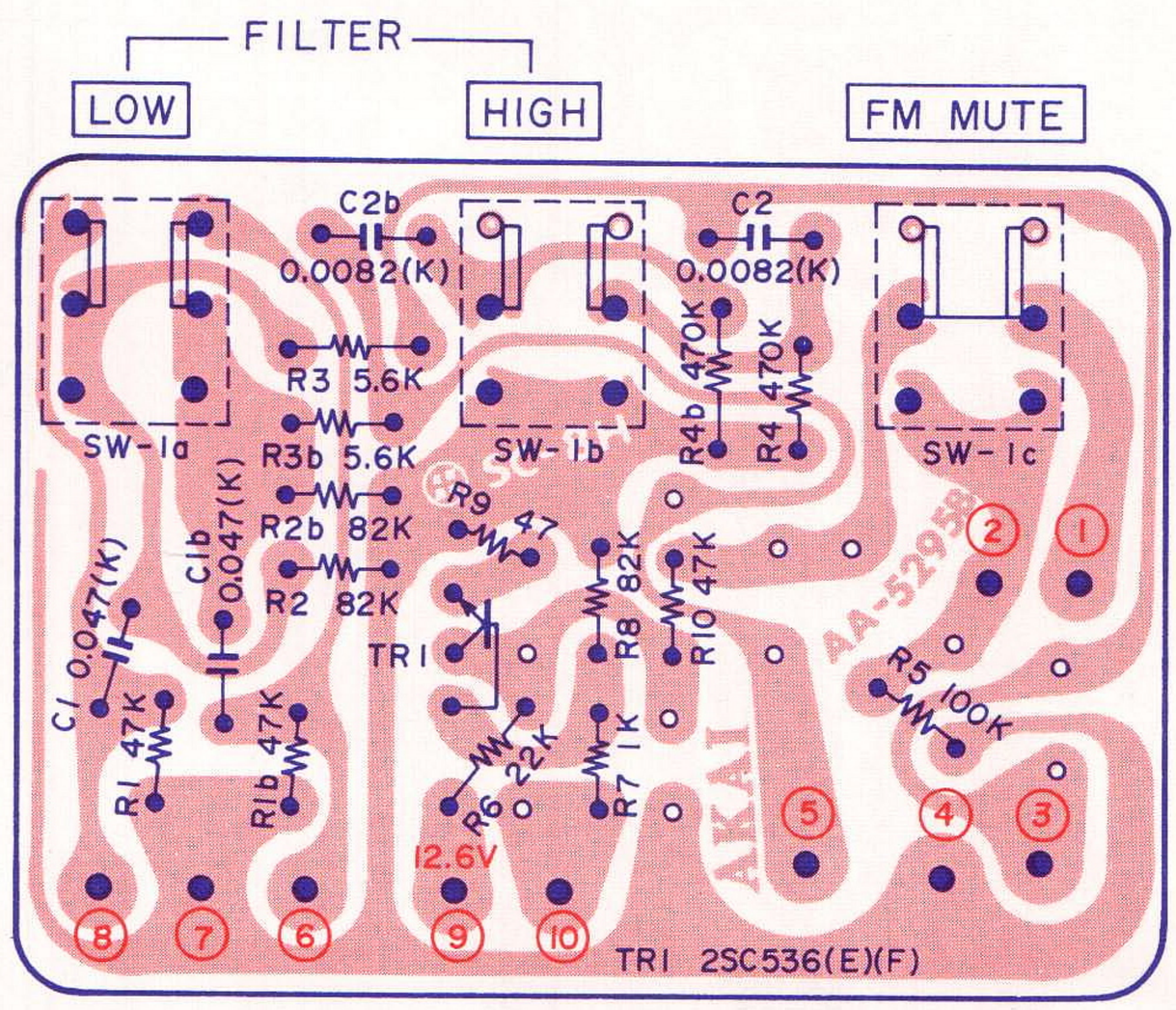
1) MFC P.C BOARD AA-5270A (AA-1020)
MFC P.C BOARD AA-5270A (AA-1020L)



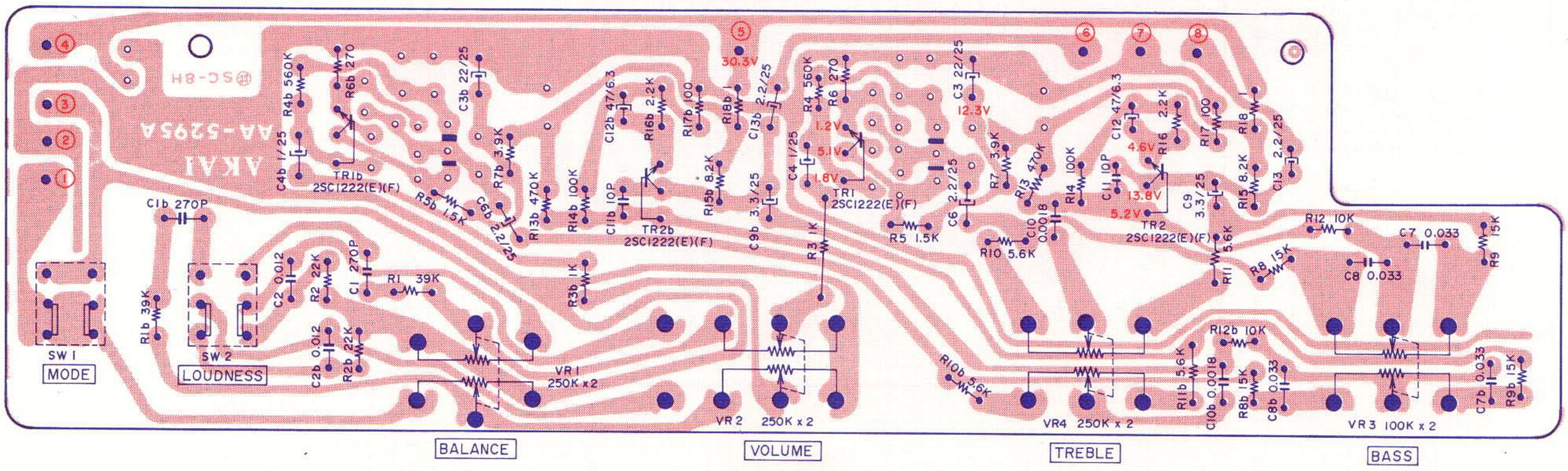
3) POWER SUPPLY P.C BOARD AA-5273

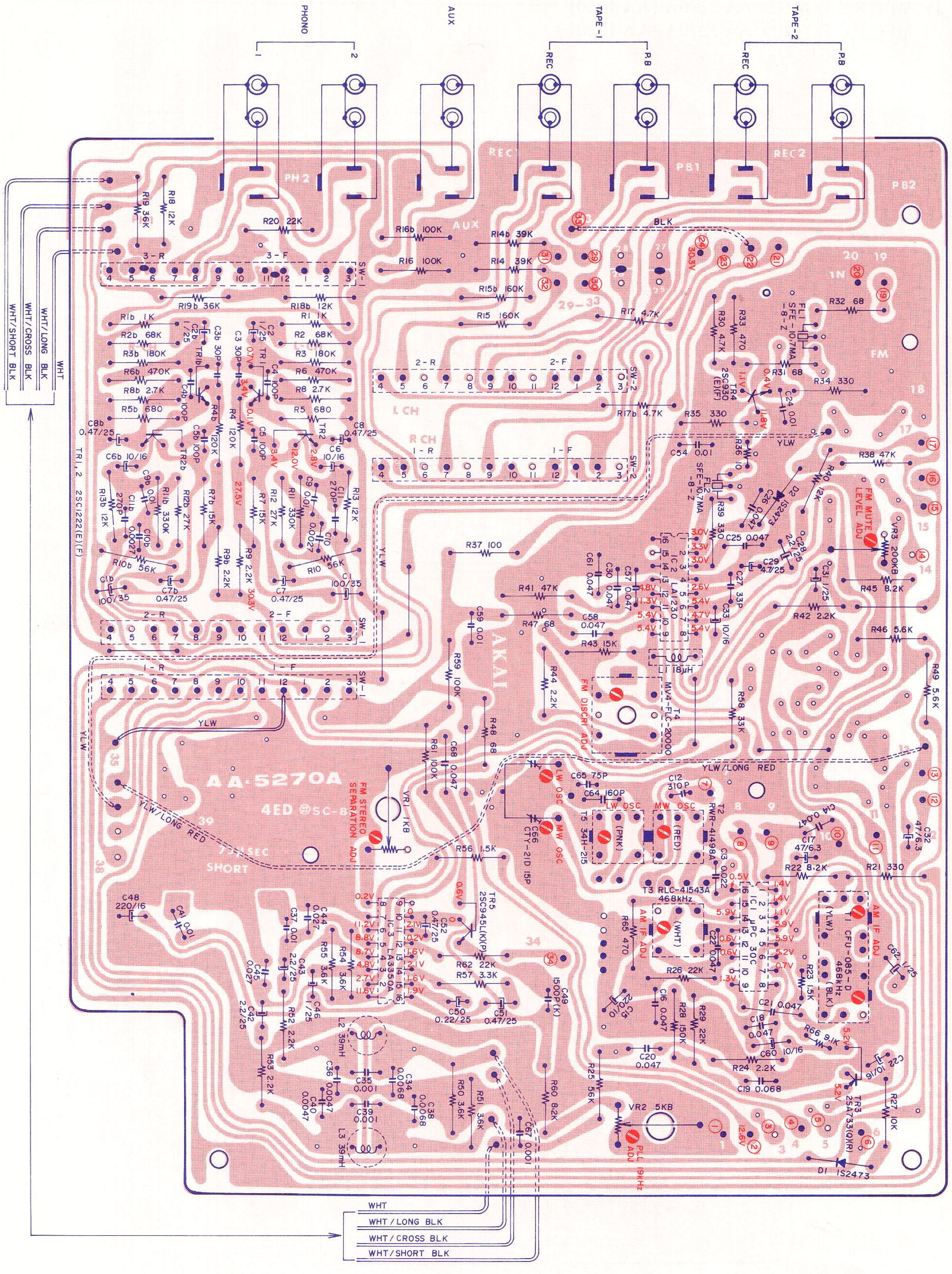


4) FILTER MUTE P.C BOARD AA-5295B

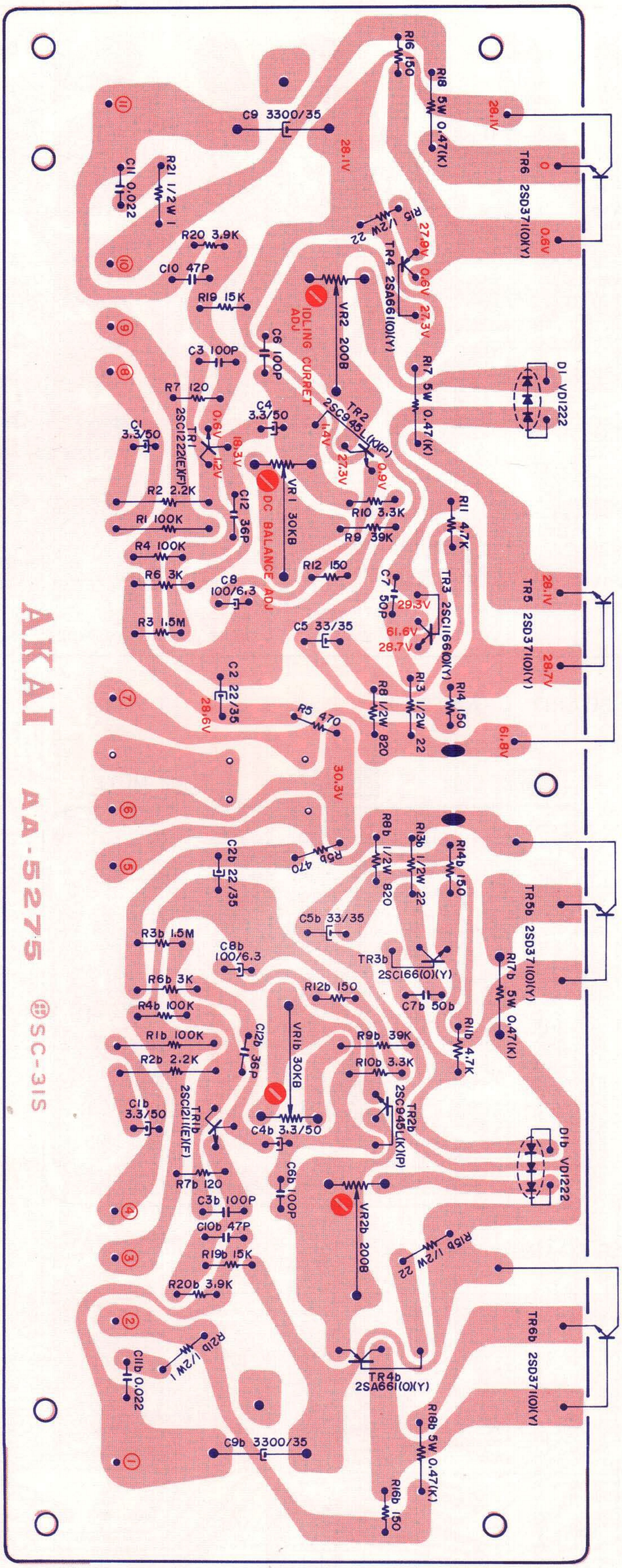


5) TONE CONTROL P.C BOARD AA-5295A

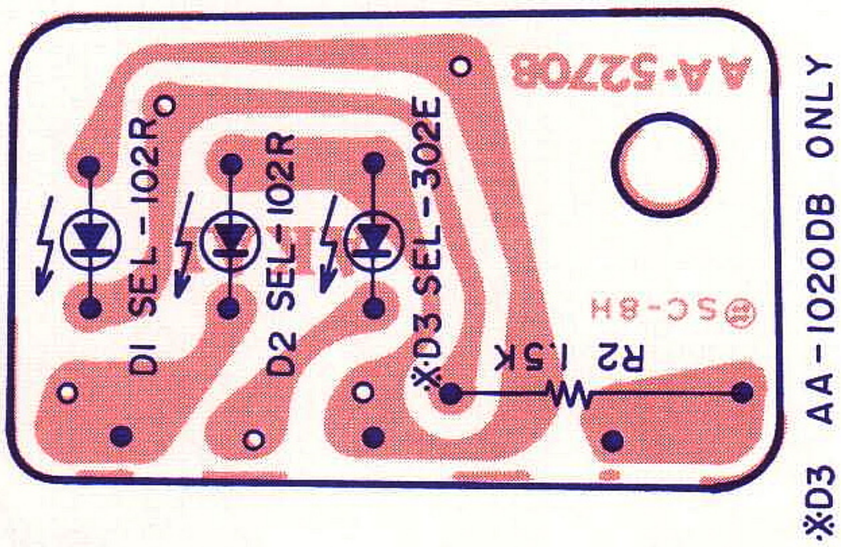



PHONO
1
2
AUX
TAPE-1
REC
P.B
TAPE-2
REC
P.B
PH 2
AUX
REC1
PB1
REC2
PB2
BLK
IN
FM
L CH
R CH
SW-1
SW-2
3-R
3-F
2-R
2-F
1-R
1-F
YLW
YLW/LONG RED
AKAI
AA-5270A
4ED SC-8
75μSEC
SHORT
FM STEREO SEPARATION ADJ
FM DISCRI ADJ
FM MUTE LEVEL ADJ
LW OSC
MW OSC
AM IF ADJ
PLL 19kHz ADJ
TR1, 2 2SC1222(E)(F)
TR3 2SA733(Q)(R)
TR4 2SC930 (E)(F)
TR5 2SC945L(K)(P)
IC1 μPC 30C
IC2 LA1230
IC3 LA3350A
T1 CFU-085-D 468kHz (BLK)
T2 RWR-41498A
T3 RLC-41543A 468kHz
T4 MV4-FLC-20000
T5 34H-215
C66 CTY-21D 15P
FL1 SFE-10.7MA-8-Z
FL2 SFE-10.7MA-8-Z
L1 18μH
L2 39mH
L3 39mH
D1 1S2473
D2 1S2473
VR1 1KB
VR2 5KB
VR3 200KB
WHT
WHT/LONG BLK
WHT/CROSS BLK
WHT/SHORT BLK

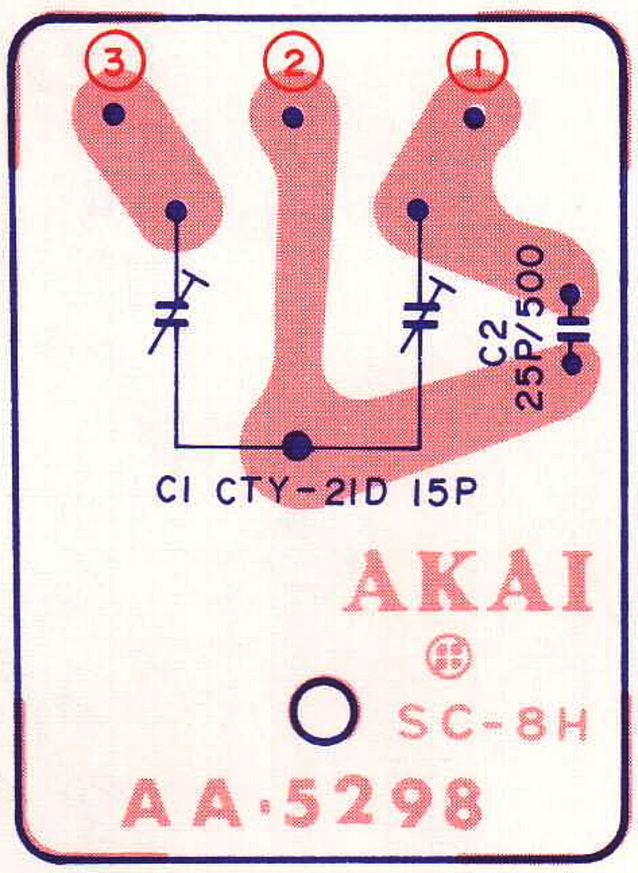
2) MAIN AMP P.C BOARD AA-5275



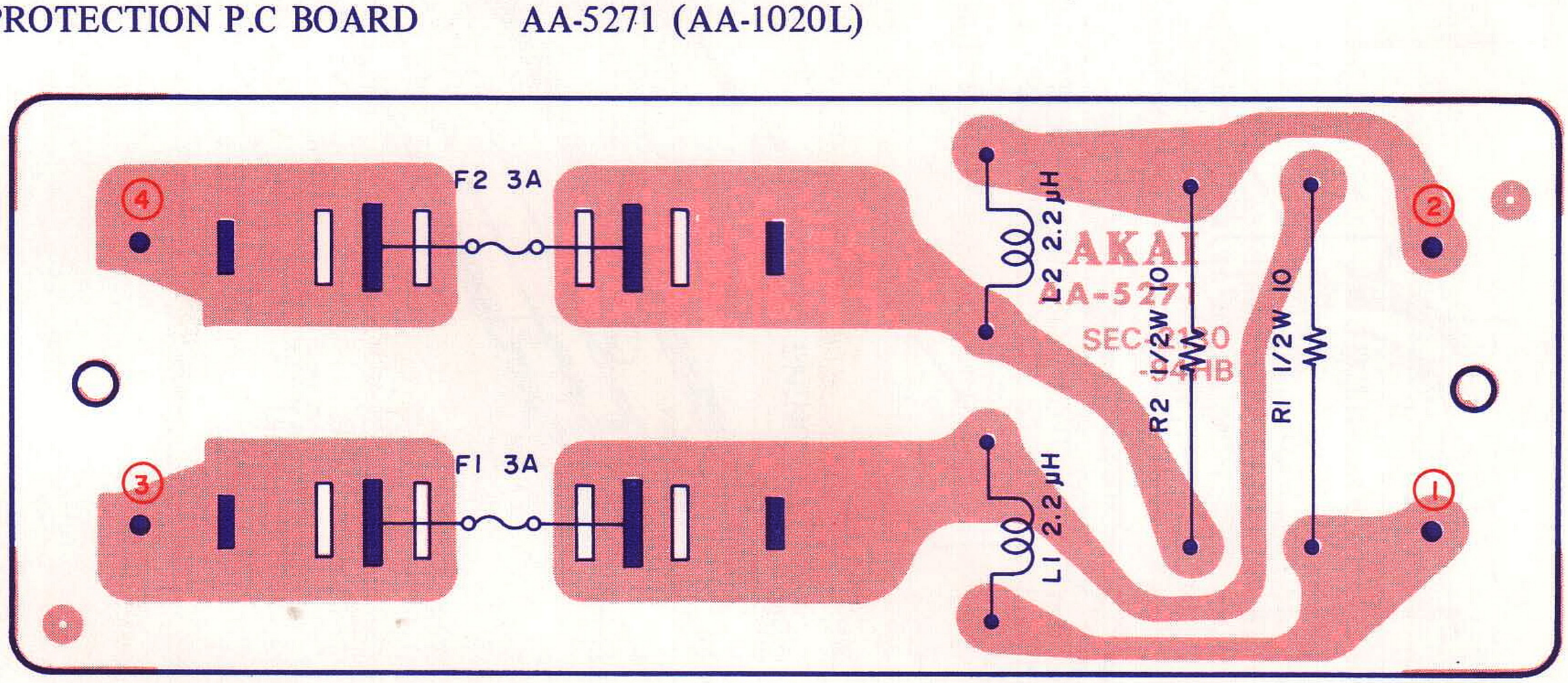
6) LED P.C BOARD AA-5270B



7) TRIMMER P.C BOARD AA-5298 (AA-1020L)



8) PROTECTION P.C BOARD AA-5271 (AA-1020L)



AA-1020

※R1 1.5k
※R2 1.5k
DIST ↔ LOC
SW1
300Ω
FM 75Ω
GND
AM
IN
IN
FRONT END
VC
OUT
OUT
B
VC
BAR ANTENNA ANTI
BLK
GRN
ORG
BLU
WHT

※	OTHER	CEE / CSA
R1	1/4W 1.5K	1/2W 1.5K
R2	1/4W 1.5K	1/2W 1.5K

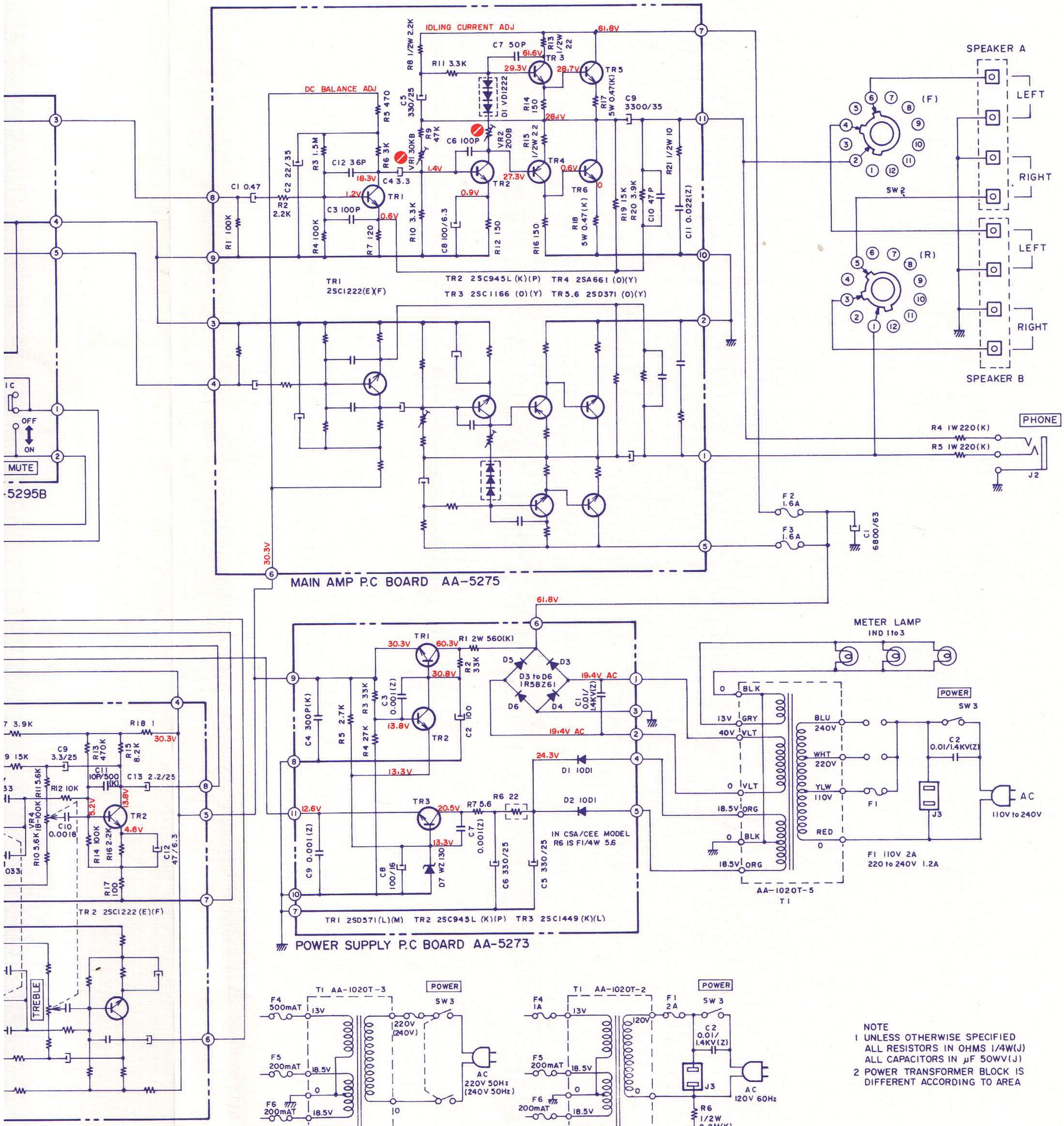
TUNING METER
MI
34 TP
10
PHONO 1
PHONO 2
AUX
L
REC TEPE 1 P B
REC TEPE 2 P B
MFC P.C BOARD AA-5270A
R
PHONO 1
PHONO 2
AUX
REC TEPE 1 P B
REC TEPE 2 P B
32 31 33 29 30
2 4 5 1 3
J1 (DIN)
12.6V
D1 SEL 102R
R2 1.5K
D2 SEL 102R
LED P.C BOARD AA-5270B
24 23 22 21
2 1 4
SW1
MONO ↔ STEREO
SW2
R2 22K
C2 0.012
VR1 250KZ
R1 39K
C1 270P
VR2 250KB
R3 1K
C3 22/25
R4 560K
C4 1/25
R6 270
C6 2.2/25
TR1
1.8V
5.1V
1.2V
R5 1.5K
R9 15K
C9 3.3/25
C7 0.033
C8 0.033
R8 15K
VR3 1B-100K
VR4 1B-100K
R10 3.6K
R11 5.6K
C10 0.0018
R12 10K
R13 470K
R15 8.2K
C11 10P/500 (K)
C13 2.2/25
TR2
5.2V
13.8V
4.6V
R14 100K
R16 2.2K
C12 47/6.3
R17 100
R7 3.9K
R18 1
12.3V
30.3V
OFF ↔ ON
LOUDNESS
TR1 2SC1222 (E)(F)
TR2 2SC1222 (E)(F)
MODE
VOLUME
BALANCE
BASS
TREBLE
TONE CONTROL P.C BOARD AA-5295A

C1 0.047
R3 5.6K
C2 0.0082
R1 47K
SW1a
R2 82K
SW1b
R4 470K
OFF ↔ ON
OFF ↔ ON
LOW
HIGH
9 12.6V
R6 22K
R10 47K
10
R7 1K
TR1
SW1C
R8 82K
R9 47
R5 100K
OFF ↔ ON
TR1 2SC536(E)(F)
FM MUTE
FILTER MUTE P.C BOARD AA-5295B

DC BALANCE ADJ
R5 470
C5 330/25
R8 1/2W 2.2K
C1 0.47
C2 22/35
R3 1.5M
C12 36P
R6 3K
VR1 30KB
18.3V
C4 3.3
1.2V
TR1
R2 2.2K
C3 100P
0.6V
R1 100K
R4 100K
R7 120
R10 3.3K
TR1 2SC1222(E)(F)
30.3V
MAIN AMP P.C BOARD

TR
30.3V
C4 300P(K)
R5 2.7K
R3 33K
C3 0.001(Z)
R4 27K
13.8V
13.3V
12.6V
C9 0.001(Z)
C8 100/16
TR1 2SD571(L)(M) TR2
POWER SUPPLY P.C B

T1 AA-1020T-3
F4 500mAT
13V
220V (240V)
F5 200mAT
18.5V
0
F6 200mAT
18.5V
40V
0
0
CEE AC
BEAB A

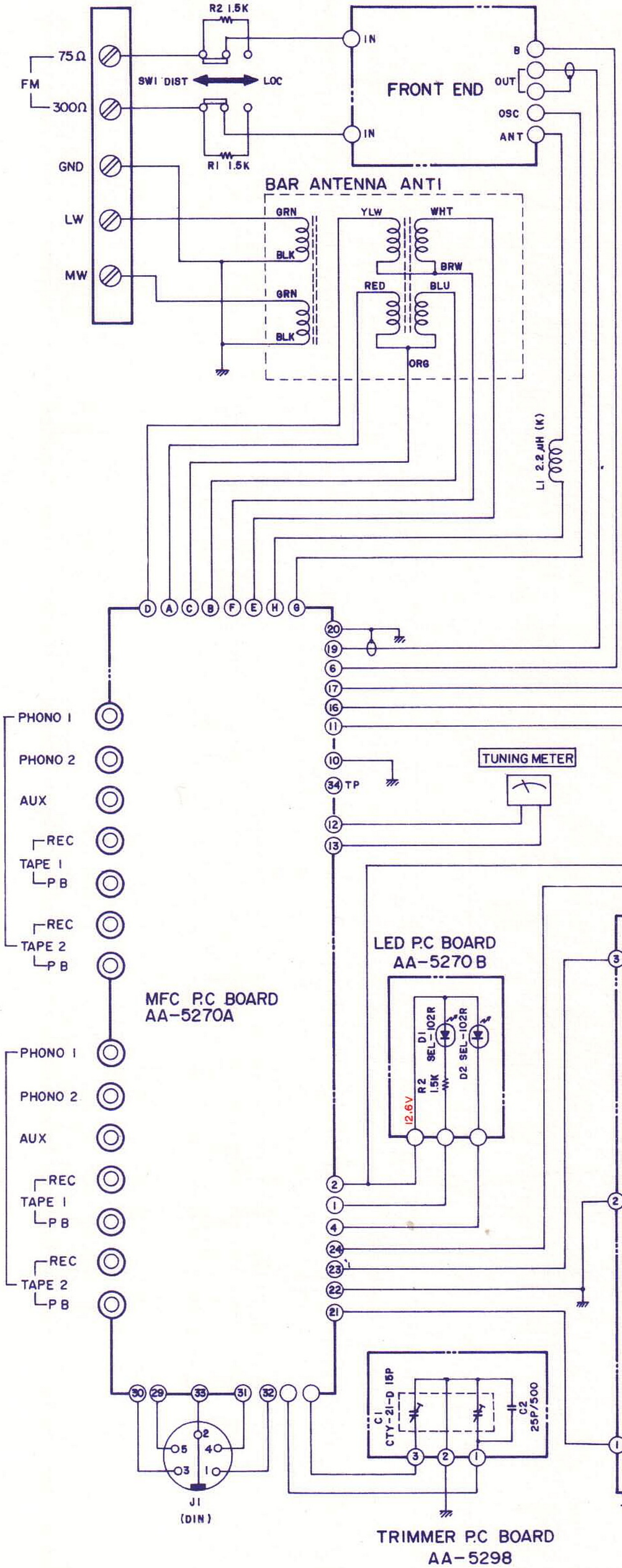


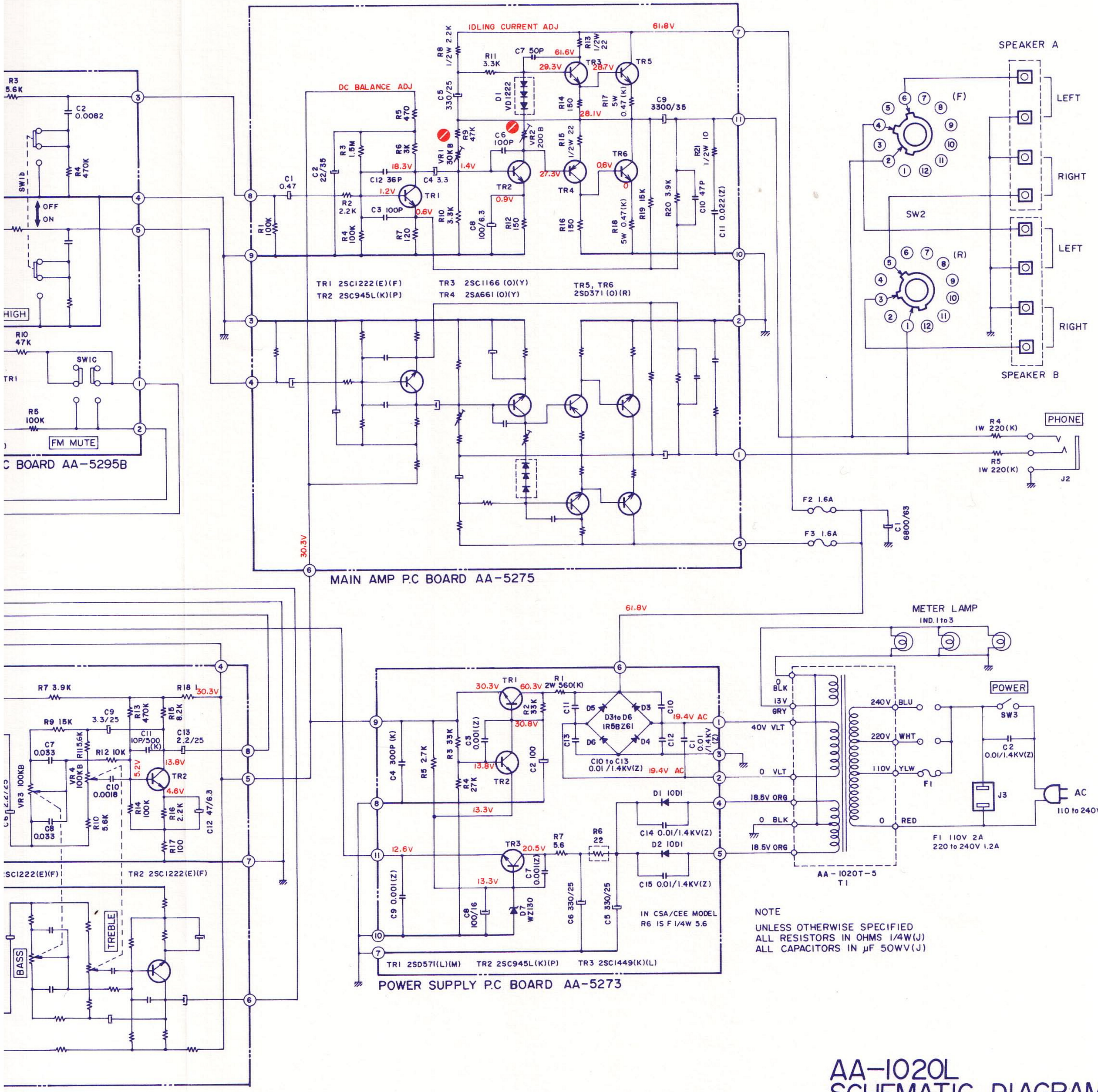
NOTE
1 UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μF 50WV(J)
2 POWER TRANSFORMER BLOCK IS DIFFERENT ACCORDING TO AREA

AA-1020 SCHEMATIC DIAGRAM

NO.4-1 1520226A

AA-1020L


R2 1.5K
75Ω
FM
300Ω
SW1 DIST
LOC
IN
IN
R1 1.5K
FRONT END
B
OUT
OSC
ANT
GND
LW
MW
BAR ANTENNA ANT1
GRN
YLW
WHT
BLK
BRW
GRN
RED
BLU
BLK
ORG
L1 2.2μH (K)
D A C B F E H G
20 19 6 17 16 11 10 34 TP 12 13
PHONO 1
PHONO 2
AUX
L
REC
TAPE 1
P B
REC
TAPE 2
P B
MFC P.C BOARD
AA-5270A
PHONO 1
PHONO 2
AUX
R
REC
TAPE 1
P B
REC
TAPE 2
P B
TUNING METER
J1
(DIN)
30 29 33 31 32
C1
CTY-21-D 15P
C2
25P/500
TRIMMER P.C BOARD
AA-5298
LED P.C BOARD
AA-5270B
D1
SEL-102R
D2
SEL-102R
R2
1.5K
12.6V
2 1 4 24 23 22 21
C1
0.047
R3
5.6K
C2
0.0082
R1
47K
SW1a
R2
82K
SW1b
R4
470K
OFF
ON
OFF
ON
LOW
HIGH
8 7 6 3 4 5 9
R6
22K
R10
47K
12.6V
9
SW1c
R7
1K
TR1
10
1
R8
82K
R9
47
R5
100K
2
TR1 2SC536(E)(F)
FM MUTE
FILTER MUTE P.C BOARD AA-5295B
C1
0.47
R1
100K
8
9
DC BALANCE ADJ
R5
470
C2
22/35
R3
1.5M
R6
3K
18.3V
C12 36P
C4
1.2V
TR
R2
2.2K
C3 100P
0.6V
R4
100K
R7
120
TR1 2SC1222(E)(F)
TR2 2SC945L(K)(P)
3
4
30.3V
6
MAIN AMP P.C BO
4
3
12.3V
R7 3.9K
R18 1
30.3V
C3 22/25
R5
1.5K
R9 15K
C9
3.3/25
R13
470K
R15
8.2K
C11
10P/500
(K)
C13
2.2/25
C7
0.033
R11 5.6K
R12 10K
R4
560K
5.1V
13.8V
TR2
5.2V
4.6V
VR4
100KB
C10
0.0018
VR3 100KB
C6 2.2/25
C8
0.033
R10
5.6K
R14
100K
R16
2.2K
C12 47/6.3
R17
100
TR1
1.8V
1.2V
R6
270
VR1
250K Z
R1
39K
C1
270P
VR2 250KB
SW1
SW2
C2
0.012
R2
22K
R3
1K
C4
1/25
MONO
STEREO
OFF
ON
LOUDNESS
TR1 2SC1222(E)(F)
TR2 2SC1222(E)(F)
MODE
BALANCE
VOLUME
BASS
TREBLE
9
C4 300P (K)
R5 2.7K
8
11
12.6V
C9 0.001(Z)
10
7
TR1 2SD571(
POWER SU
TONE CONTROL P.C BOARD AA-5295A



NOTE

UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μF 50WV(J)

AA-1020L SCHEMATIC DIAGRAM NO. 4-2 1520227A

AA-1020

PHONO(1)
PHONO(2)
AUX
REC(1)
P B(1)
REC(2)
P B(2)
L CH P B (30)
L CH REC (32)
GND (33)
R CH REC (31)
R CH PB (29)
PHONO (1)
PHONO(2)
AUX
REC (1)
P B(1)
REC(2)
P B(2)

SW1 3-F
SW1 3-R
SW1 2-F
SW1 2-R
SW2 2-F
SW2 1-F
SW2 1-

TR1 2SC1222(E)(F)
TR2 2SC1222(E)(F)

R11 330K
R12 27K
C10 0.0027
C9 0.01
R13 12K
C11 270P(K)
C6 10/16
R4 120K
R7 15K
R9 2.2K
27.5V
30.3V
C3 30P(K)
C5 100P(K)
*C7 0.47/25
3.4V
TR1
0.7V
0.1V
TR2
12.0V
2.8V
C2 1/25
R6 470K
C4 100P(K)
R1 1K
R18 12K
R20 22K
R15 180K
R14 39K
R2 68K
R3 180K
R5 680
C1 100/35
C8 0.47/25
R8 2.7K
R10 56K
R16 100K
R9 36K
R65 470
R26 22K
C60 10/16
R29 22K
R28 150K
R27 10K
C23 10/10
TR3
5.2V
R66 8.1K

T1
CFU-085-D 468KHz
R21 330
C16 0.047(Z)
C15 220/10
C14 0.047(Z)
R22 8.2K
R23 1.5K
C18 0.022(M)
R24 2.2K
C20 0.047(Z)
R25 56K
C17 47/6.3
C19 0.022(M)
C21 0.047(Z)
C22 0.047(Z)
C13 0.022(M)
C12 310P
T2
RWR-41498A
T3
RLC-41543A 468KHz
L4
2.2μH(K)

IC 1
μPC 30C
1.4V
1.1V
5.9V
5.2V
0.7V
1.3V
0.5V
0.6V

IC 2
LA 1230
3.0V
3.3V
3.0V
2.6V
5.4V
4.7V
4.8V
11.3V

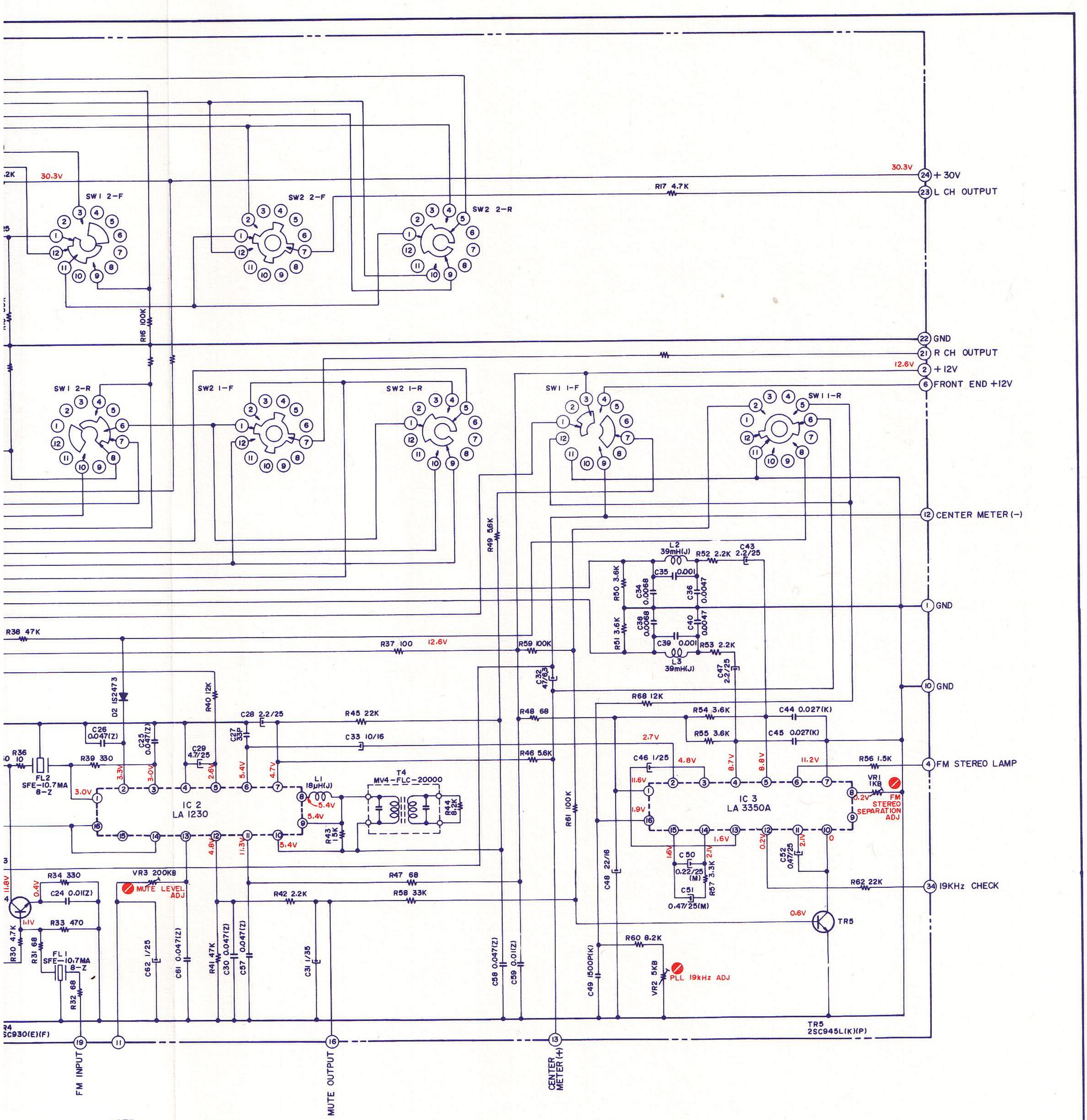
R38 47K
R37 100
D2 IS2473
R40 12K
C28 2.2/25
R45 22K
C33 10/16
C26 0.047(Z)
C25 0.047(Z)
C27 33P
C29 4.7/25
R35 330
R36 10
FL2
SFE-10.7MA
8-Z
R39 330
L1
18μH(J)
T4
MV4-FLC-
R43 1.5K
D1 IS2473
11.8V
0.4V
TR4
1.1V
R34 330
C24 0.01(Z)
R33 470
R30 4.7K
R31 68
FL1
SFE-10.7MA
8-Z
R32 68
VR3 200KB
MUTE LEVEL ADJ
C62 1/25
C61 0.047(Z)
R47 68
R42 2.2K
R58 3
R41 47K
C30 0.047(Z)
C57 0.047(Z)
C31 1/35
C54 0.01(Z)

AM INPUT (COLD) (9)
AM INPUT (HOT) (8)
OSC VC (7)
(40)
(41)
TR3 2SA733(Q)(R)
TR4 2SC930(E)(F)
GND (20)
MUT INPUT (17)
FM INPUT (19)
(11)
MUTE OUTPUT (16)

SWITCH POSITIONS

SW1 (SELECTOR)	SW2 (TAPE)
① AM	① 1→2
② FM MONO	② 1
③ FM AUTO	③ SOURCE
④ PHONO 1	④ 2
⑤ PHONO 2	⑤ 2→1
⑥ AUX	

NOTE
1. UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN ohms 1/4W(J)
ALL CAPACITORS IN μF 50WV(J)
2. *MARK INDICATES LOW LEAKAGE CAPACITORS



NOTE

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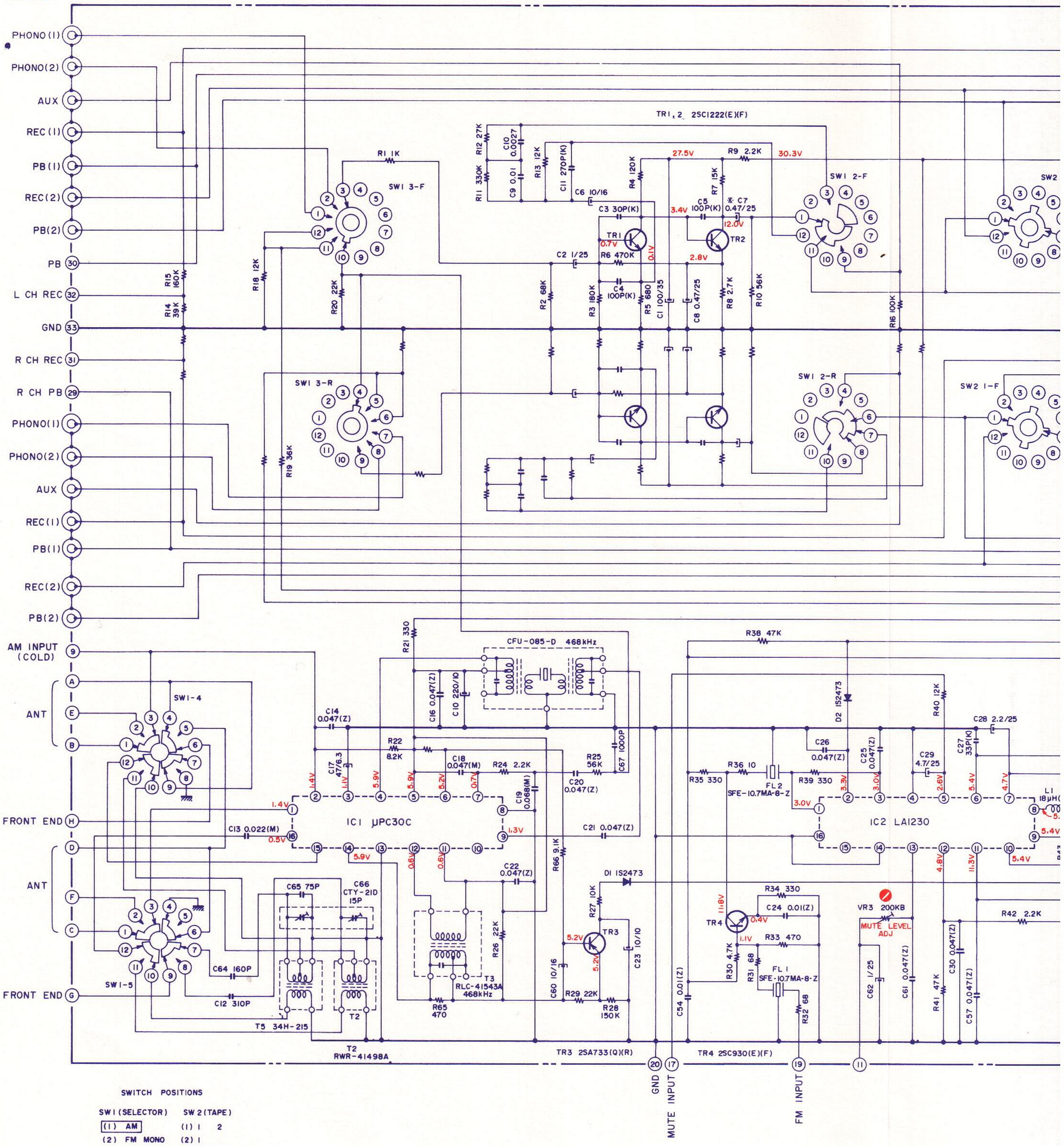
   ALL RESISTORS IN ohms 1/4W(J)
   ALL CAPACITORS IN μF 50WV(J)
2. ※MARK INDICATES LOW LEAKAGE CAPACITORS

AA-1020
SCHEMATIC DIAGRAM
NO.4-3 1520228A
2C

AA-1020L



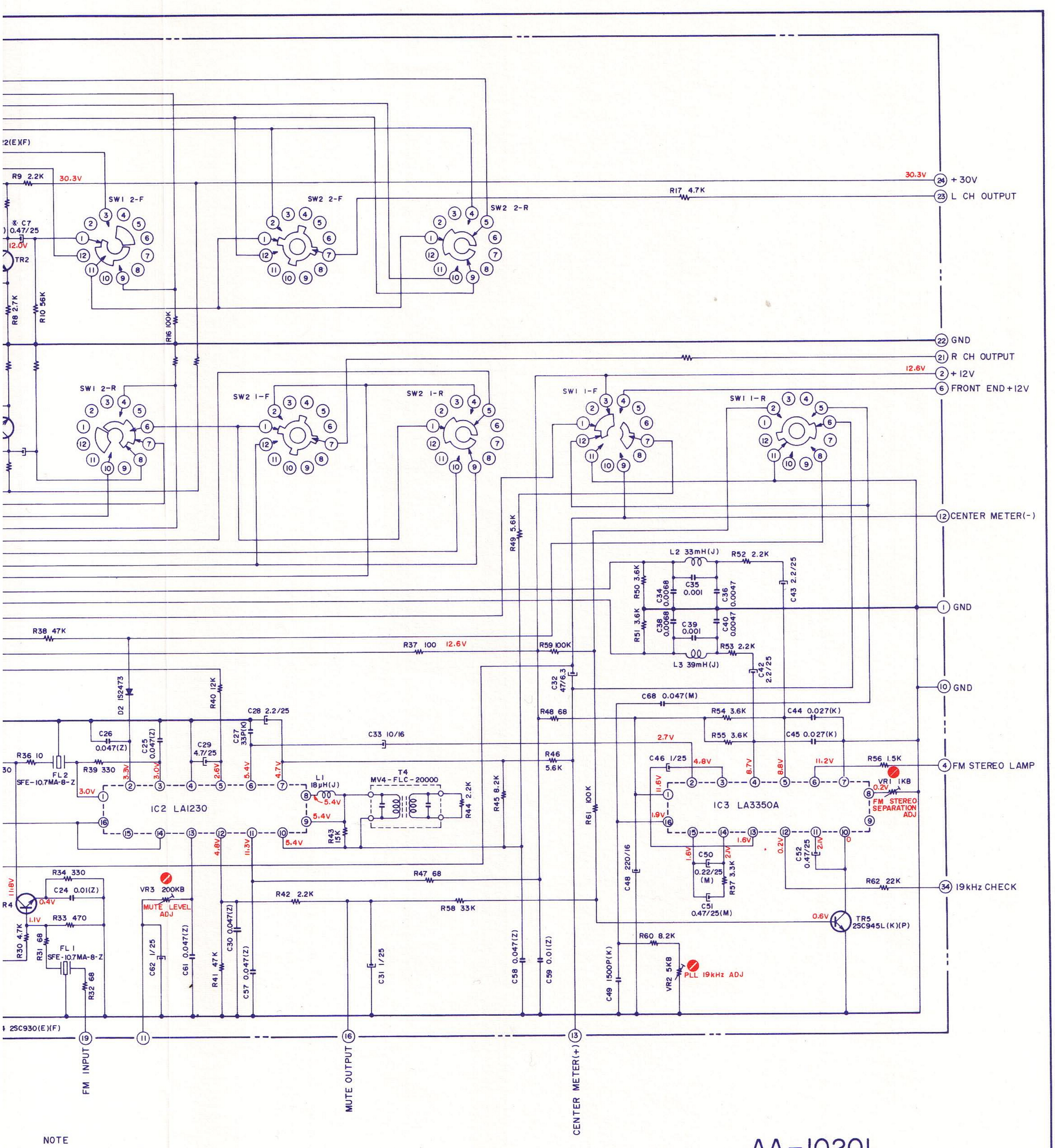
SWITCH POSITIONS

SW1 (SELECTOR)	SW2 (TAPE)
[(1) AM]	(1) 1 2
(2) FM MONO	(2) 1
(3) FM AUTO	[(3) SOURCE]
(4) PHONO 1	(4) 2
(5) PHONO 2	(5) 2 1
(6) AUX	

NOTE

1. UNELESS OTHERWISE SPECIFIED
   ALL RESISTORS ohms 1/4W (J)
   ALL CAPACITORS IN μF 50WV(J)

2. ※ MARK INDICATES LOW LEAKAGE CAPACITORS



NOTE

1. UNELESS OTHERWISE SPECIFIED
   ALL RESISTORS ohms 1/4W (J)
   ALL CAPACITORS IN μF 50WV(J)

2. ※ MARK INDICATES LOW LEAKAGE CAPACITORS

AA-1020L
SCHEMATIC DIAGRAM
NO. 4-4 1520229A
2C