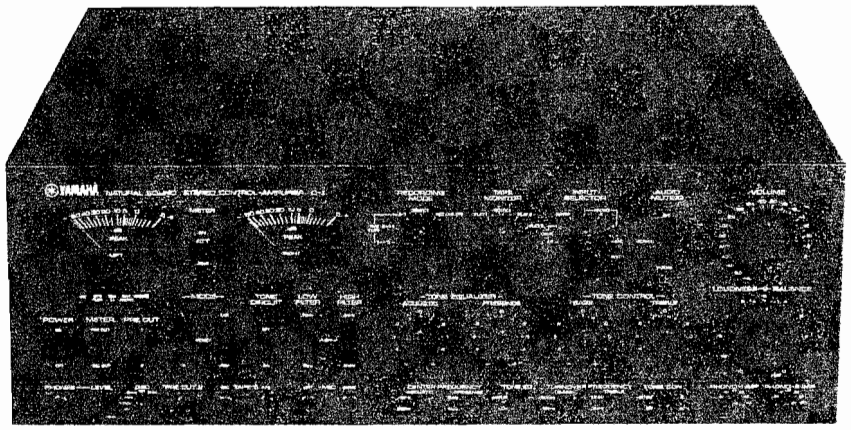
Service News E-101

SERVICE MANUAL

C-1

CONTROL AMPLIFIER



SINCE 1887 YAMAHA

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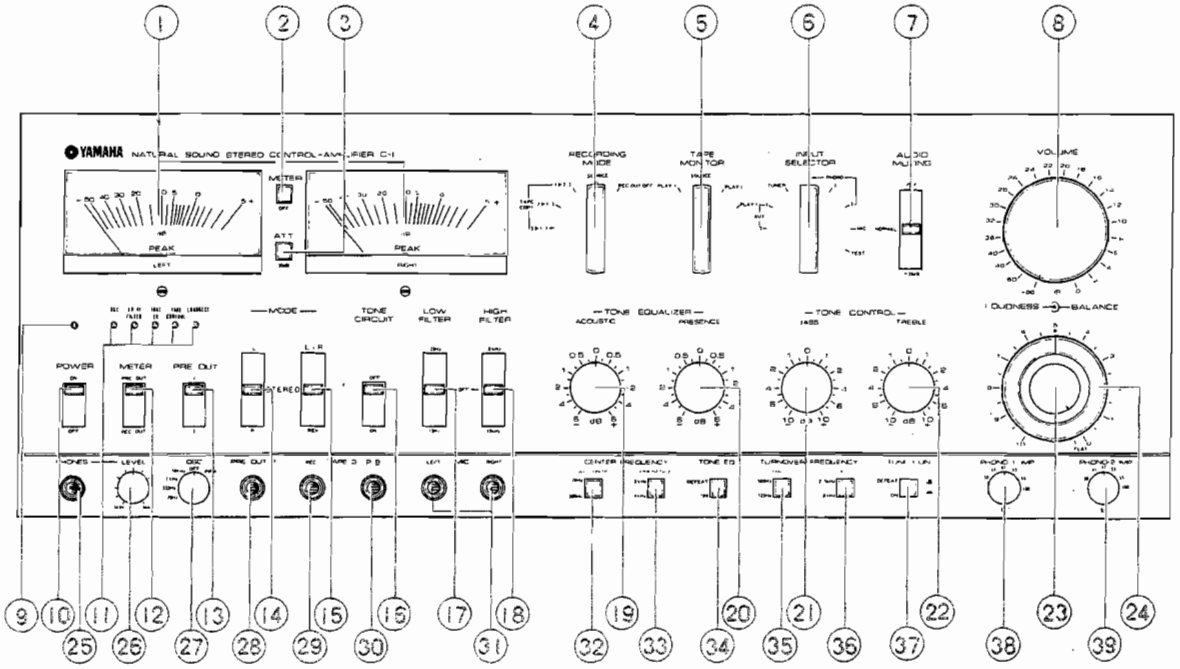
CONTENTS

CONSTITUTION AND METHOD OF CIRCUIT 3
SPECIFICATIONS 4
PRINTED SPECIAL CHARACTERISTIC 5
CIRCUIT DESCRIPTIONS 8
COMPONENTS LOCATION
    TOP VIEW 11
    BOTTOM VIEW 11
PARTIAL DISASSEMBLY 12
ADJUSTMENT
    ADJUSTMENT OF EACH CIRCUIT BOARD 18
    OVERALL ADJUSTMENT 23
PRINTED CIRCUIT BOARD 25
PACKAGE 45
TERMINAL CONNECTION 46
BLOCK DIAGRAM · LEVEL DIAGRAM · SCHEMATIC DIAGRAM

Hosiej connector LB60175.
LB60174.

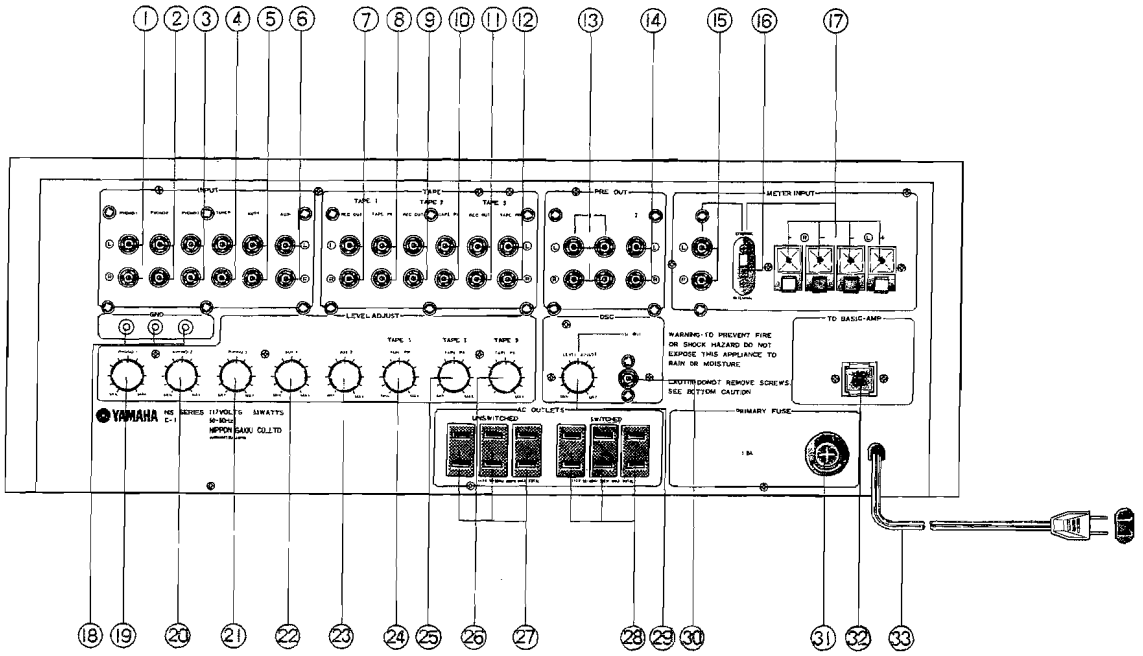
FRONT PANEL



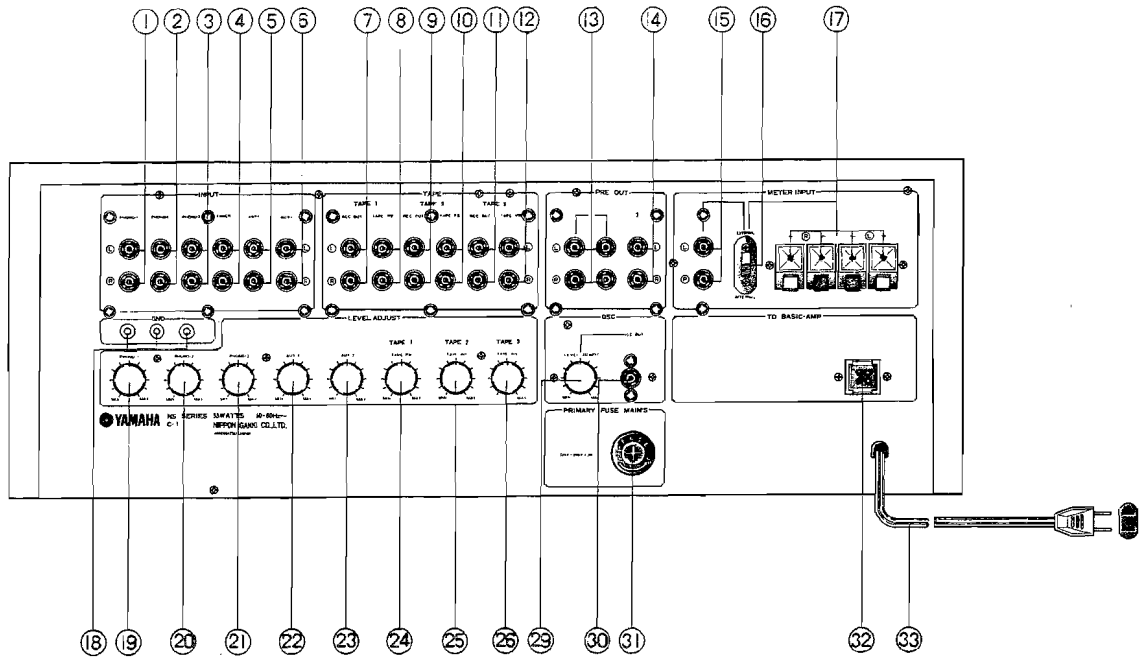
1. PEAK METER
2. METER SWITCH
3. METER ATTENUATOR SWITCH
4. RECORDING MODE SELECTOR SWITCH
5. TAPE MONITOR SWITCH
6. INPUT SELECTOR SWITCH
7. AUDIO MUTING SWITCH
8. VOLUME CONTROL
9. POWER INDICATOR
10. POWER SWITCH
11. MONITOR INDICATOR
12. METER FUNCTION SWITCH
13. PRE OUT SELECTOR SWITCH
14. MODE SELECTOR SWITCH 1
15. MODE SELECTOR SWITCH 2
16. TONE CIRCUIT SWITCH
17. LOW FILTER SWITCH
18. HIGH FILTER SWITCH
19. TONE EQUALIZER (ACOUSTIC CONTROL)
20. TONE EQUALIZER (PRESENCE CONTROL)
21. TONE CONTROL (BASS)
22. TONE CONTROL (TREBLE)
23. LOUDNESS CONTROL
24. BALANCE CONTROL
25. HEADPHONE JACK
26. HEADPHONE LEVEL CONTROL
27. OSCILLATOR FREQUENCY SELECTOR SWITCH
28. PRE OUT 2 JACK
29. TAPE-3 REC OUT JACK
30. TAPE-3 PB JACK
31. MIC JACKS
32. CENTER FREQUENCY SELECTOR SWITCH (ACOUSTIC)
33. CENTER FREQUENCY SELECTOR SWITCH (PRESENCE)
34. TONE EQUALIZER SWITCH
35. TURN OVER FREQUENCY SELECTOR SWITCH (BASS)
36. TURN OVER FREQUENCY SELECTOR SWITCH (TREBLE)
37. TONE CONTROL SWITCH
38. PHONO-1 IMPEDANCE SELECTOR SWITCH
39. PHONO-2 IMPEDANCE SELECTOR SWITCH

REAR PANEL

▼U.S. & CANADIAN MODELS



▼GENERAL AND EUROPEAN MODEL



1. PHONO-1 INPUT JACKS
2. PHONO-2 INPUT JACKS
3. PHONO-3 INPUT JACKS
4. TUNER INPUT JACKS
5. AUX-1 INPUT JACKS
6. AUX-2 INPUT JACKS
7. TAPE-1 REC OUT JACKS
8. TAPE-1 PB JACKS
9. TAPE-2 REC OUT JACKS
10. TAPE-2 PB JACKS
11. TAPE-3 REC OUT JACKS
12. TAPE-3 PB JACKS
13. PRE OUT-1 JACKS
14. PRE OUT-2 JACKS
15. METER INPUT JACKS
16. METER INPUT SWITCH
17. METER INPUT TERMINAL
18. GROUND TERMINAL
19. PHONO-1 LEVEL CONTROL
20. PHONO-2 LEVEL CONTROL
21. PHONO-3 LEVEL CONTROL
22. AUX-1 LEVEL CONTROL
23. AUX-2 LEVEL CONTROL
24. TAPE-1 PB LEVEL CONTROL
25. TAPE-2 PB LEVEL CONTROL
26. TAPE-3 PB LEVEL CONTROL
27. AC OUTLET (UN SWITCHED)
28. AC OUTLET (SWITCHED)
29. OSCILLATOR OUT LEVEL ADJUST
30. OSCILLATOR OUT JACK
31. PRIMARY FUSE
32. BASIC AMP REMOTE CONNECTOR
33. AC CORD

CONSTITUTION AND METHOD OF CIRCUIT

- **PHONO EQUALIZER AMP.**
  This amplifier incorporates two unit amps (primary stage differential amp and final stage SRPP (all-stage FET circuitry), forming a CR type RIAA equalizer (supply voltage: +100V, −110V).
- **AUXILIARY INPUT BUFFER AMP.**
  This is a unit amp construction: primary stage differential amp and final stage source follower (all-stage FET).
- **TONE CONTROL AMP.**
  A primary stage differential amp and final stage SRPP (all-stage FET) construction form an NF type precision tone control amp (defeat: absolutely flat response).
- **ACOUSTIC/PRESENCE AMP.**
  An NF type attenuator amp formed with a differential primary stage and SRPP final stage (all-stage FET).
- **PRE-OUT BUFFER AMP.**
  A unit amp construction featuring differential primary stage and source-follower final stage (all-stage FET).
- **HEADPHONE AMP.**
  A primary stage differential amp and final stage SEPP complementary construction (all solid state). state).
- **PEAK METER AMP.**
  A meter amp composed of logarithm constrict 50dB amp, peak hold circuit and buffer amp.
- **OSCILLATOR**
  A bridge provides 70, 333, 1K and 10KHz sine waves as well as pink noise in the oscillator, which is combined with a buffer amp.
- **OTHER FEATURES**

  Volume ..... Both input and output controlled at the same time for reduced control error. The VR provides the same low error as an attenuator.

  Continuous Loudness ..... Match the loudness effect to any volume level.

  Phono Input Impedance ..... Permits controlling the phono input impedance to provide the ideal load for any cartridge. Six positions.

  Tone Circuit Switch ..... Bypasses tone controls, equalizer, filters and Loudness.

  Monitor Indicators ..... LED indicators light to show the following functions: Osc. Low, High Filter, Tone, Eq., Tone Control, Loudness when any of these controls are set to a position other than Off or Defeat.

SPECIFCATIONS

■ INPUT SENSITIVITY/IMPEDANCE/MAX. INPUT CAP.

INPUT TERMINAL	SENSITIVITY (RATED)	IMPEDANCE	MAXIMUM INPUT CAPACITY
PHONO 1, 2	2 ~ 8 mV (adjustable)	30, 41, 47, 53, 59 100 kΩ	25 ~ 100 mV (20 Hz) 200 ~ 800 mV (1 KHz) 800 ~ 3,200 mV (10 KHz)
PHONO 3	2 ~ 8 mV (adjustable)	47 kΩ	Same as above
AUX 1, 2 TUNER TAPE.P/B1, 2, 3	150 mV ~ ∞ (adjustable)	50 kΩ	12V
MIC	2 mV	50 kΩ	200 mV
EXT. METER	775 mV/0 dB	110 kΩ	

■ OUTPUT LEVEL/IMPEDANCE/MAX. OUTPUT LEVEL

OUTPUT TERMINAL	OUTPUT LEVEL	IMPEDANCE	MAXIMUM OUTPUT LEVEL
PRE-OUT 1, 2	775 mV	300Ω	7.75V
REC-OUT 1, 2, 3	150 mV	1 kΩ	12V
HEAD-PHONE	50 mW/8Ω	47Ω	
OSC	775 mV	180Ω	

■ FREQUENCY CHARACTERISTICS

INPUT		RATING
PHONO 1, 2, 3	30 ~ 15 KHz	0 ± 0.2 dB (Deviation from RIAA)
AUX 1, 2, TUNER TAPE 1, 2, 3	5 ~ 100 KHz	$0\ ^{+0}_{-1.5}$ dB
MIC	20 ~ 20 KHz	0 ± 0.5 dB

■ NOISE LEVEL, S/N

INPUT	RATING
PHONO 1, 2, 3 TUNER AUX 1, 2	70 dB (IHF A NETWORK)
TAPE 1, 2, 3	90 dB (IHF A NETWORK)
MIC	60 dB (IHF A NETWORK)
HEAD-PHONE	0.019 μW / 8Ω
RESIDUAL NOISE	7.75 μV at Volume MIN 15.5 μV at Volume –30 dB

■ DISTORTION

INPUT	CONDITIONS	RATING
PHONO 1, 2, 3	775 mV 20 ~ 20 KHz	Less than 0.02%
	5 V 20 ~ 20 KHz	Less than 0.02%
TUNER AUX 1, 2	775 mV 20 ~ 20 KHz	Less than 0.02%
TAPE 1, 2, 3	5 V 20 ~ 20 KHz	Less than 0.02%
MIC	775 mV 20 ~ 20 KHz	Less than 0.02%

■ TONE CONTROL CHARACTERISTICS

BASS	fto = 125 Hz and 500 Hz	0, ±0.5, ±1, ±1.5, ±2.0, ±3.0, ±4.0, ±5.0 ±6.0, ±8.0, ±10.0 dB, (at 20 Hz)
TREBLE	fto = 2.5 KHz and 8 KHz	Same as above (at 20 KHz)
		Note: Completely flat at 0 setting.

■ TONE EQUALIZER CHARACTERISTICS

ACOUSTIC	fc = 70 Hz 300 Hz	0 ± 0.5 ± 1.0 ± 2.0 ± 4.0 ± 6.0dB
PRESENCE	fc = 2 KHz 4 KHz	Same as Above Note: Completely flat at O setting.

■ FILTER CHARACTERISTICS

LOW FILTER	fc = 15 Hz	–12 dB/OCT
	70 Hz	–12 dB/OCT
HIGH FILTER	fc = 8 Hz	–12 dB/OCT
	12 Hz	–12 dB/OCT

■ OSCILLATOR CHARACTERISTICS

FREQUENCY	70, 333, 1K, 10 KHz. PINK NOISE. Switchable
OUTPUT LEVEL	REC OUT 150 mV PRE OUT 775 mV EXT OUT 0~775 mV (adjustable)

■ LEVEL METER CHARACTERISTICS

INDICATION RANGE	–50 dB ~ +5 dB	
INDICATION ERROR	–20 dB ~ +5 dB	± 1 dB
	–20 dB ~ –40 dB	± 2 dB
	–40 dB ~ –50 dB	± 3 dB
FREQUENCY CHARACTERISTICS	20Hz ~ 20 KHz	± 1 dB
RESPONSE TIME	100 μs	
DECAY TIME	1 sec	
ATT	–30 dB	
EXT. METER IN SENSITIVITY/IMPEDANCE	775mV (0 dB)/110 kΩ	

■ OTHERS

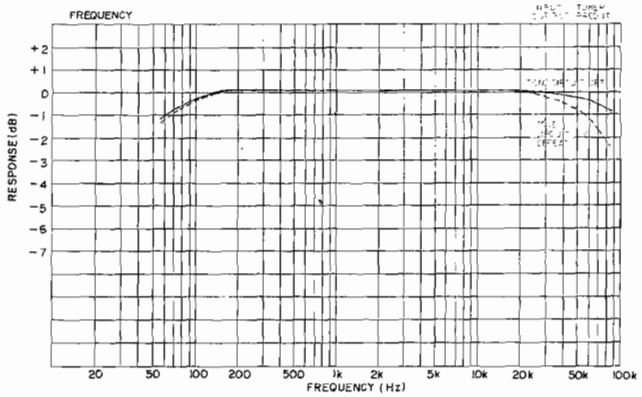
AUDIO MUTING		–20 dB, OFF	
CONTINUOUS VOLUME ACCURACY	STEP ERROR	0 ~ –15 dB	± 0.5 dB
		–15 ~ –30 dB	± 1 dB
		–30 ~ –70 dB	± 1.5 dB
	GANG ERROR	0 ~ –15 dB	± 0.5 dB
		–15 ~ –30 dB	± 1.0 dB
		–30 ~ –70 dB	± 1.5 dB

■ OTHERS

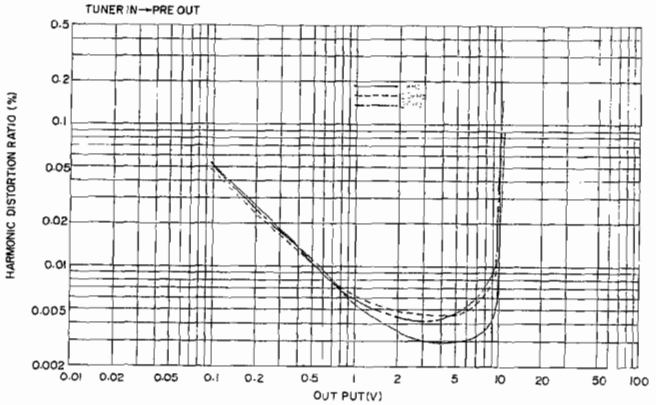
SEMICONDUCTORS USED	FET	110
	Transistor	143
	Zener Diodes	2
	Diode	58
	IC	4
	LED	6
POWER CONSUMPTION	55W	
AC OUTLET	SWITCHED 200W UNSWITCHED 400W	
DIMENSIONS	W461 x H170 x D389 m/m (18-¼" x 6-¾" x 15-¼")	
WEIGHT	17 kg (37.49 lbs.)	
ACCESSORIES	Pin Plug Cords	2
	Hexagonal Allen Wrench	1
	Spare Fuses	2

PRINTED SPECIAL CHARACTERISTIC

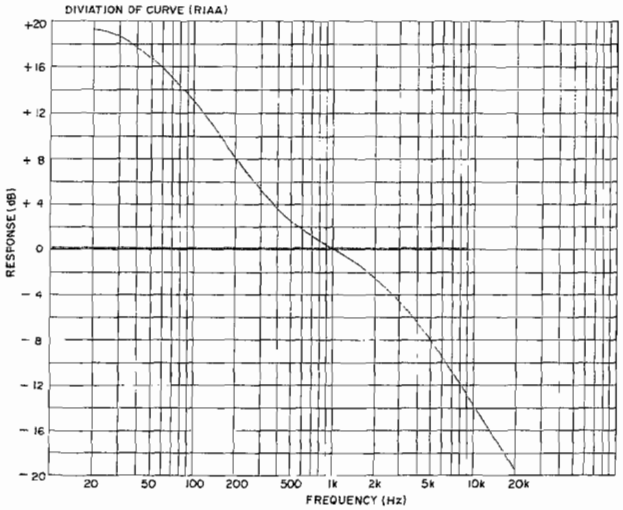
FREQUENCY



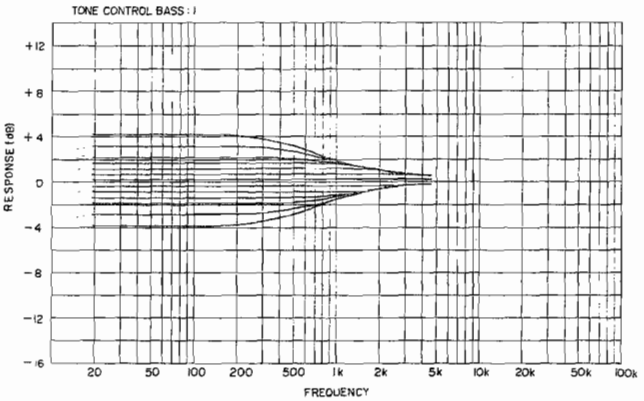
TUNER IN→PRE OUT



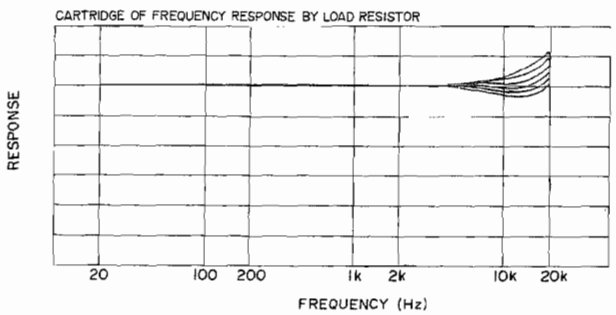
DIVIATION OF CURVE (RIAA)



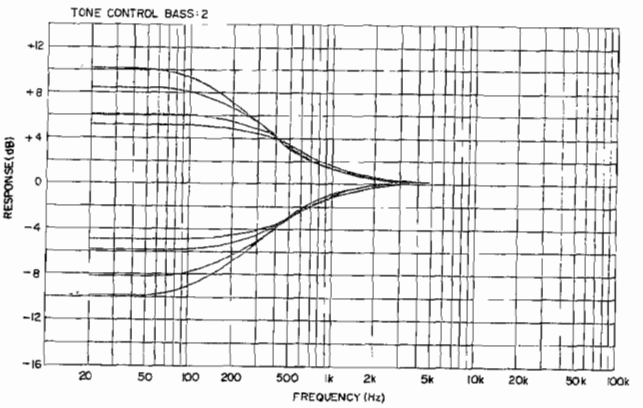
TONE CONTROL BASS:1



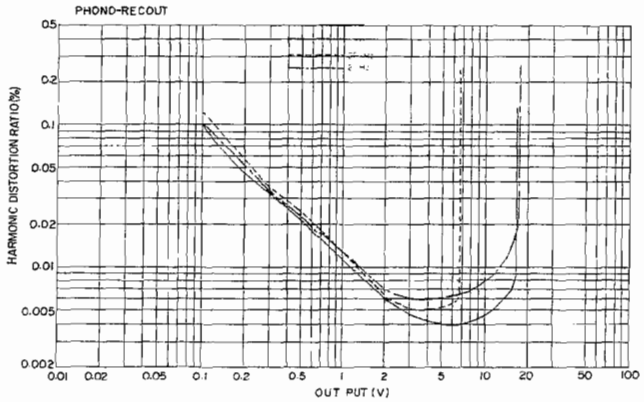
CARTRIDGE OF FREQUENCY RESPONSE BY LOAD RESISTOR



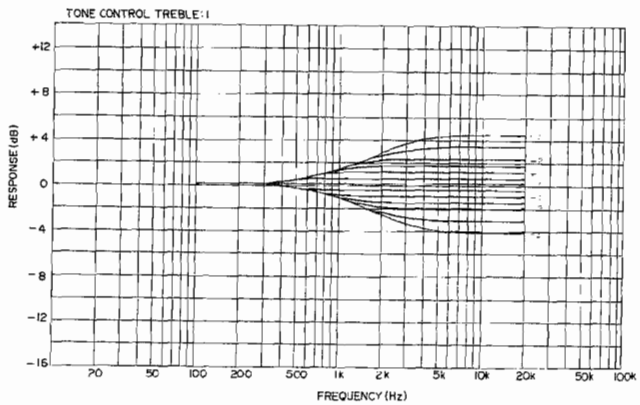
TONE CONTROL BASS:2



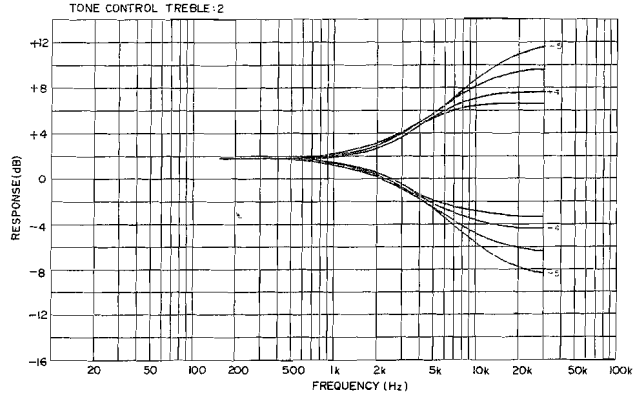
PHOND-RE OUT



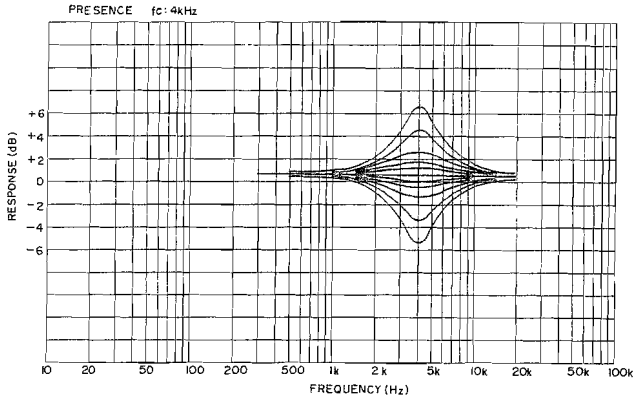
TONE CONTROL TREBLE:1



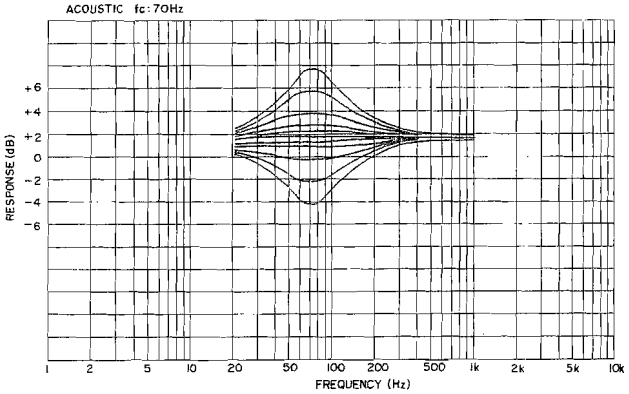
TONE CONTROL TREBLE:2



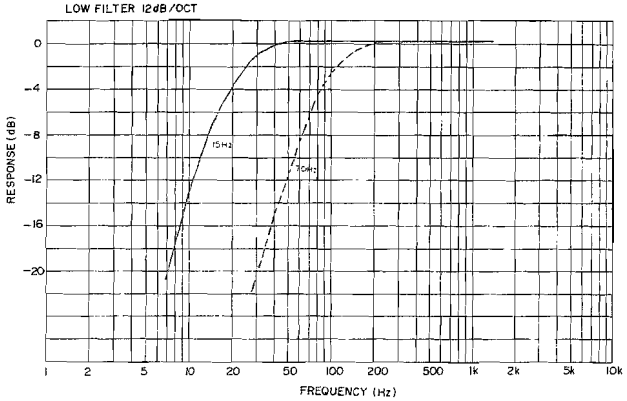
PRESENCE fc:4kHz



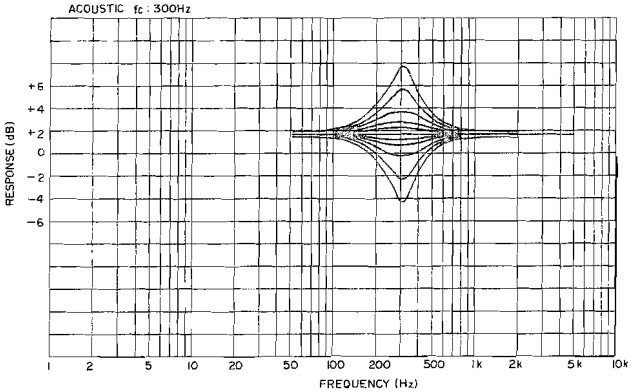
ACOUSTIC fc:70Hz



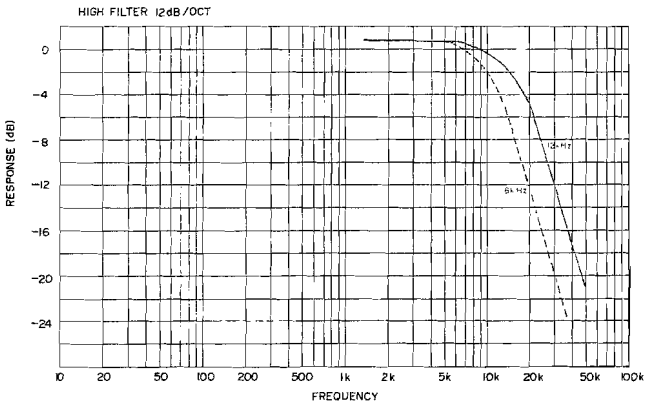
LOW FILTER 12dB/OCT



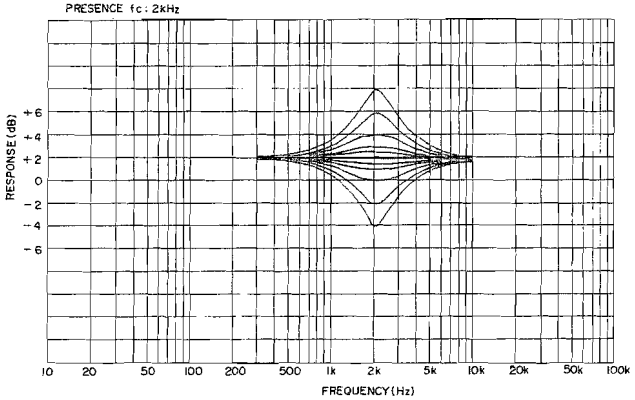
ACOUSTIC fc:300Hz



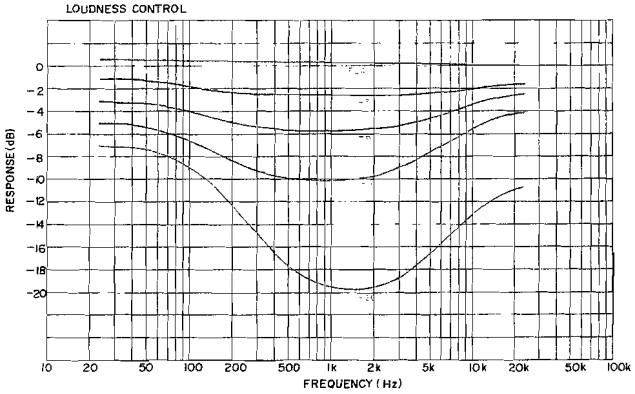
HIGH FILTER 12dB/OCT



PRESENCE fc:2kHz



LOUDNESS CONTROL



CIRCUIT DESCRIPTIONS

EXPLANATION OF CIRCUITS FEATURING VARIOUS FETs

In the amps with comparatively high gain (equalizer, tone control, acoustic & presence control) a three stage direct coupled unit amp A is used. This amp incorporates an N-channel differential amp in the primary stage, a P-channel source ground in the second stage and an N-channel SRPP circuit in the final stage. It has high input impedance and low output impedance (see Fig. 1).

Unit amp B, used as a buffer amp for the Aux input, TAPE. PB and Pre Out, etc., where high gain is not required, has an N-channel differential amp as its primary stage, a P-channel source ground as its secondary, and a source follower in the final stage; these three stages are also direct coupled (see Fig. 2).

These unit amps feature excellent frequency, phase and distortion characteristics, from ultra-low bass zones to super-high trebles, for minimum transient and phase distortion.

Moreover, thanks to the direct coupled design and the stable negative feedback applied to the direct current, DC stability is excellent.

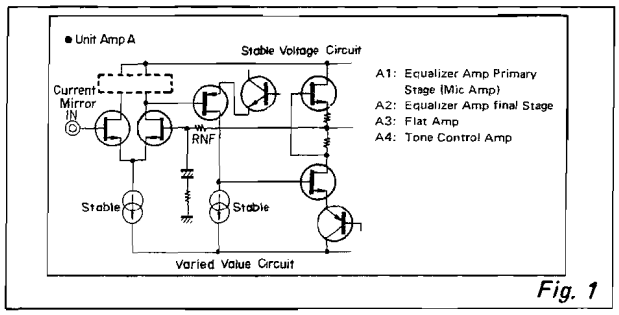


Fig. 1

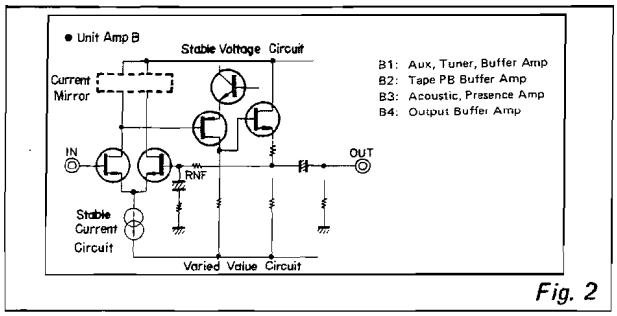


Fig. 2

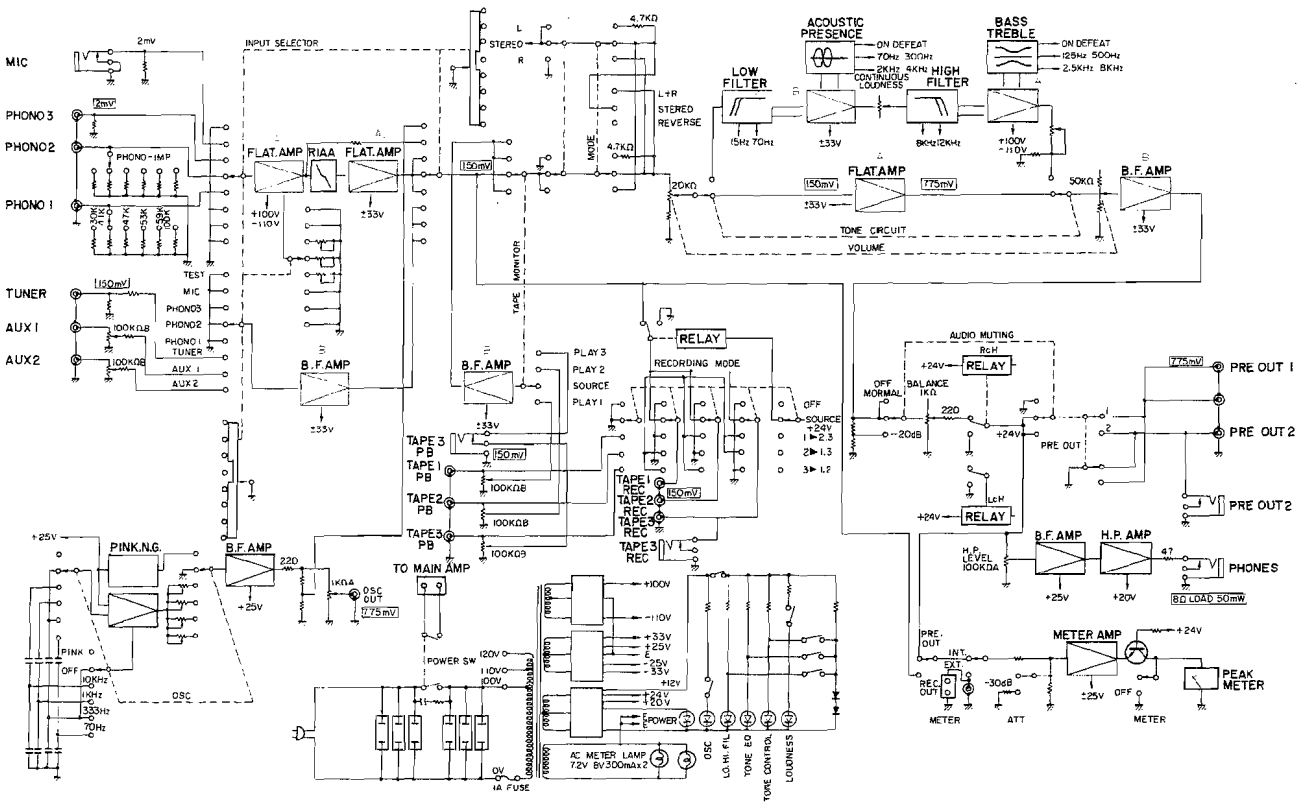


Fig. 3

OPERATION

As the block diagram (Fig. 3) shows, unit amp A is used where high gain is necessary, while the B type is used when only limited gain is needed; unit amp B also served as an impedance converter.

The Phono input passes through the pure CR type equalizer (incorporating a CR filter), which is installed between unit amps A1 and A2. Then, like the Aux and Tuner signals which pass via unit amp B1, it is fed to the input selector.

The Mic signal is fed out after A1.

Tape PB signal routes, like Aux, incorporate buffer amp B2. The tone circuit, composed of Low and High Filters, Tone Equalizer, Continuous Loudness and the Tone Controls has volume controls at both input and output for improved signal-to-noise characteristics.

With the Tone Circuit switch shut off, the signal bypasses this entire tone control circuit, passing through A3 instead.

Unit amp B4 is used in the output.

Other circuits, such as pink noise and sine wave oscillator, headphone amp and meter amp are provided for full versatility of functions.

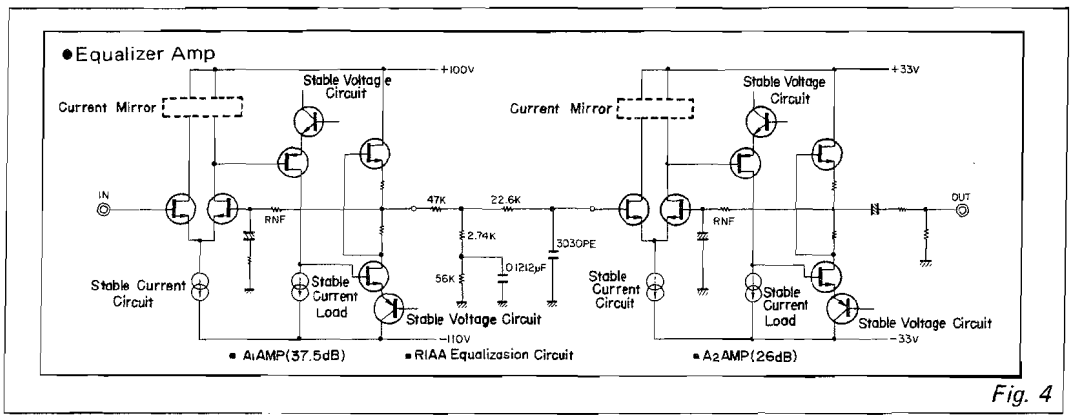


Fig. 4

PURE CR EQUALIZER

By employing a pure CR type equalizer circuit and two unit amps, the equalizer amplifier becomes a CR type, instead of the conventional NF type, thus solving problems of NF instability caused by a feedback circuit time factor.

The cartridge output is amplified by the unit amp of the first stage (A1), passes through the RIAA equalizer circuit composed of condensors and resistors, and is then amplified by the final stage unit amp (A2).

In order to increase the rated input and S/N ratio in the first stage unit amp, +100V and −110V high voltage is supplied, providing better than 60Vrms output with very low distortion.

By using the level control at the same time, at a rating of 2mV~8mV the rating becomes:

25mV~100mV at 20Hz, 200mV~800mV at 1KHz, and 800mV~3200mV at 10KHz.

Thanks to the use of ±1% accurate metal film resistors, ±1% accuracy moisture-resistant styrol condensers and ±2% accurate mylar condensers. This assures excellent moisture resistance and hence differential characteristics near zero.

TONE EQUALIZER CIRCUIT WITH ACOUSTIC AND PRESENCE CONTROLS

The Acoustic Control (Bass) and Presence Control (Mid and Treble) make it possible to match the sound characteristics in every range to those of the listening room.

The Presence control is especially useful in adjusting the balance, tone color and relative volume during vocal selections, for fuller, more natural overall response.

Center frequency for the Acoustic control is switched to either 70Hz or 300Hz, while Presence settings are 2KHz and 4KHz.

HIGH-PRECISION FOUR-GANG CONTROLS

Using a special four-gang control which adjusts input and output at the same time, S/N ratio is improved by 14dB during normal use, with the 6~14dB control fully closed. (Residual noise: 7.75μV. Residual noise at rated output: 100dB)

In addition, the use of precision circuit design and parts provides outstanding accuracy. Meter accuracy is less than 0.5dB and gang error is also less than 0.5dB, in ordinary ranges. This is complemented by attenuator type controls which provide sensitive inter-stage settings not available in complete step type controls.

PINK NOISE AND SINE WAVE OSCILLATORS

A pink noise oscillator with constant energy in the octave bands and a 70Hz, 333Hz. 1KHz. 10KHz sine wave oscillator are built in. Used with the wide range peak level meters these signals can be used to check the C-I performance, and the signals can be fed out to check other audio equipment as well.

MONITOR INDICATOR

LED monitor indicators light to show when the following functions are being used: Oscillator; Low/High Filter; Tone Equalizer; Tone Control; Loudness.

TAPE CIRCUIT

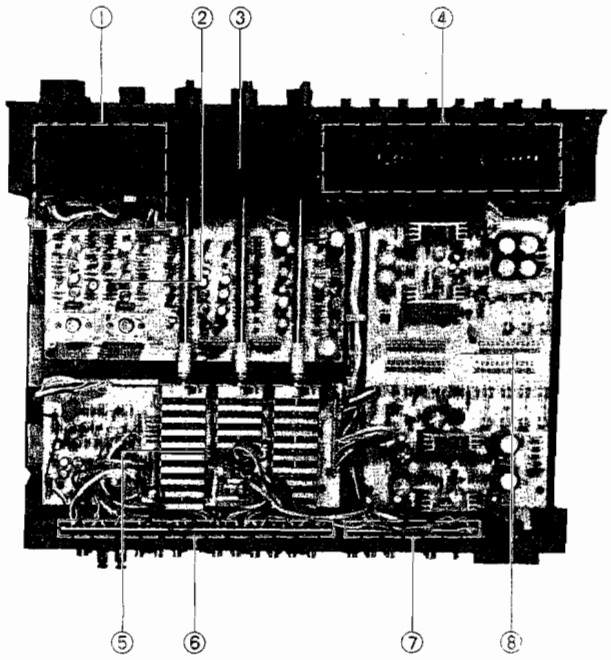
This circuit makes it possible to connect three tape decks and to record on all three or copy one tape on the other two decks. Out Off selector position cuts all signals to the Rec. Out terminals. This avoids sound quality deterioration caused by capacitance in the shielded cable combined with a drop in deck input impedance when the power is turned off which can create a load effect on the signal circuit.

Furthermore, since the Tape Monitor and Recording Mode selectors are independent, it is possible to record while playing back, or independent source play and tape copies can be made simultaneously.

In addition, dubbing can be carried out entirely independent of signal source selection.

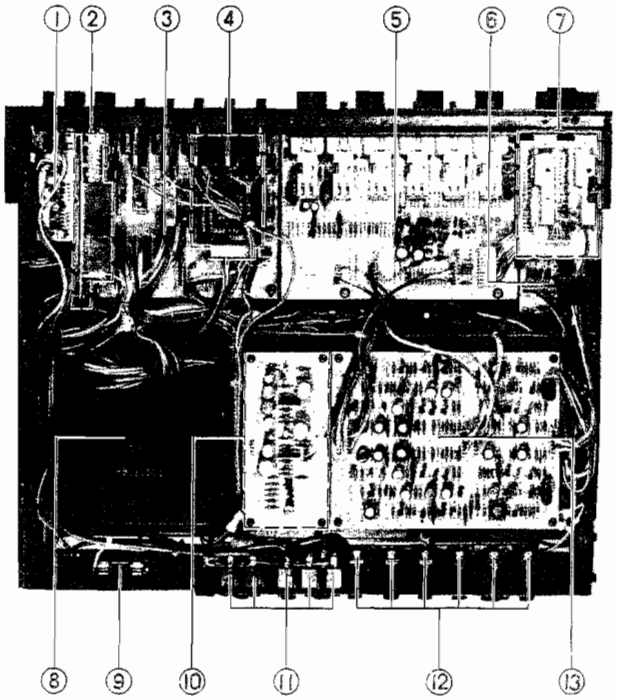
CONPONENTS LOCATION

1. TOP VIEW



① MUTING CIRCUIT BOARD (NA06722)
② FLAT AMP CIRCUIT BOARD (NA06717)
③ SHIELD PLATE
④ METER AMP CIRCUIT BOARD (NA06725)
⑤ FUNCTION CIRCUIT BOARD (NA06716)
⑥ PIN JACK CIRCUIT BOARD (NA06733)
⑦ SLIDE SWITCH CIRCUIT BOARD (NA06734)
⑧ POWER SUPPLY CIRCUIT BOARD
(US & CANADIAN MODELS: NA06745)
(EUROPEAN MODEL: NA06724)

2. BOTTOM VIEW



⑨ HEAD PHONE VR CIRCUIT BOARD (NA06729)
⑩ OSC CIRCUIT BOARD (NA06728)
⑪ LEVER SWITCH CIRCUIT BOARD (NA06731)
⑫ FILTER CIRCUIT BOARD (NA06730)
⑬ TONE PUSH SW CIRCUIT BOARD (NA06721)
⑭ LOUDNESS CIRCUIT BOARD (NA06718)
⑮ IMPEDANCE SELECTOR CIRCUIT BOARD (NA06732)
⑯ POWER TRANSFORMER
(US & CANADIAN MODELS: GA60811)
(EUROPEAN MODEL: GA60812)
⑰ FUSE
⑱ PINK NOISE OSC CIRCUIT BOARD (NA06739)
⑲ AC OUTLETS
⑳ INPUT LEVEL CONTROLS
㉑ TONE AMP CIRCUIT BOARD (NA06719)

PARTINAL DISASSEMBLY

CAUTION: Be sure the power is turned OFF!

1. FLAT AMP CIRCUIT BOARD REMOVAL

a. Loosen joint fixing screws (1) to (3) as shown in Photo 1; use the hexagonal allen wrench. Then slide toward the rear panel and at the same time slide the various switch joints toward the front panel. Then, as shown in Photo 2, twist the switch extension shafts and switches apart and tilt the switches toward the muting sheet.

b. Remove connectors #16 and #15 as shown in Photo 1.

c. Remove flat amp circuit board fixing screws (4) to (9) as shown in Photo 1.

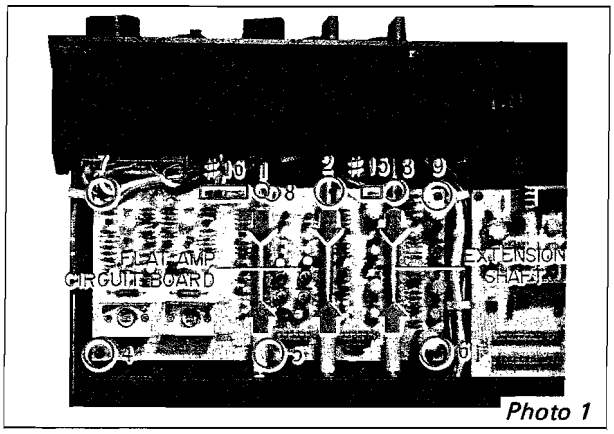


Photo 1

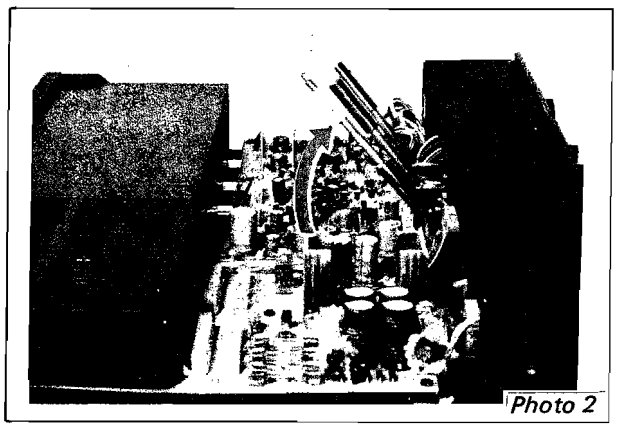


Photo 2

d. When removing the circuit board be careful to gently separate chassis connectors #13 and #14 as shown in Photo 3, and carefully lift the circuit board out.

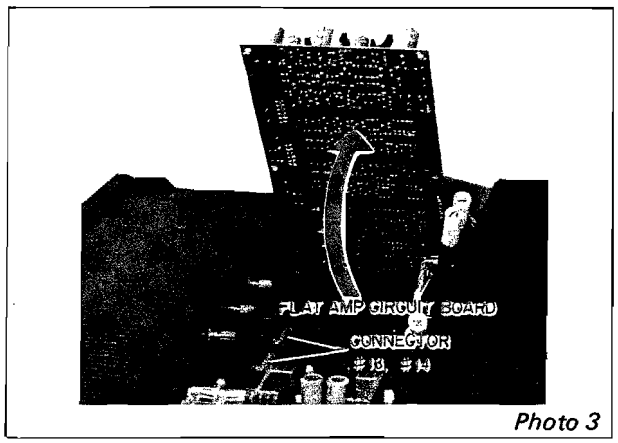


Photo 3

2. POWER CIRCUIT BOARD REMOVAL

a. Remove screws (1) to (5) in Photo 4.

b. Remove the rear panel side shield plate.

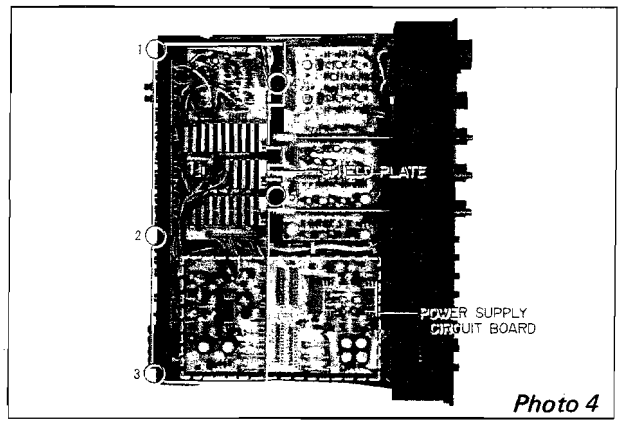


Photo 4

c. Remove screws (1) to (5) shown in Photo 5.

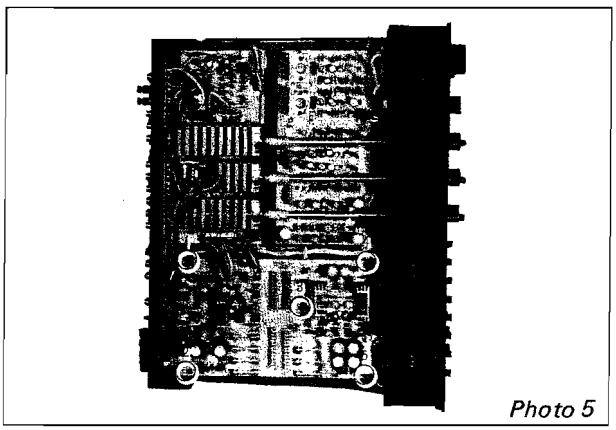


Photo 5

d. When removing the circuit board be careful to gently separate chassis connectors #17 to #20 as shown in Photo 6, and carefully lift the circuit board out.

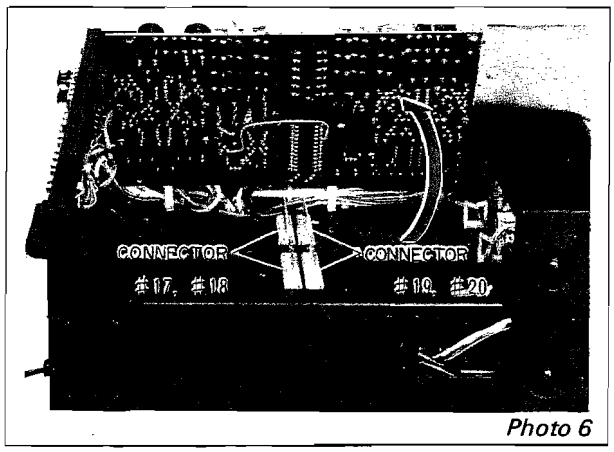


Photo 6

3. FUNCTION CIRCUIT BOARD REMOVAL

a. Remove the rear panel side shield plate. (see steps 2a and b above)
b. Slide the extension shaft joints toward the front panel as shown in Photo 7, and disconnect them from the switches.
c. Remove connectors #1, #2, #4 to #4 and #8 to #12 as shown in Photo 7.
   Note: When reconnecting, be sure to match the number on the connector with that on the circuit board.
d. Remove circuit board fixing screws (1) to (5) as shown in Photo 7.
e. When removing the circuit board be careful to gently separate chassis connectors #3 and #7 and then carefully lift the circuit board out.

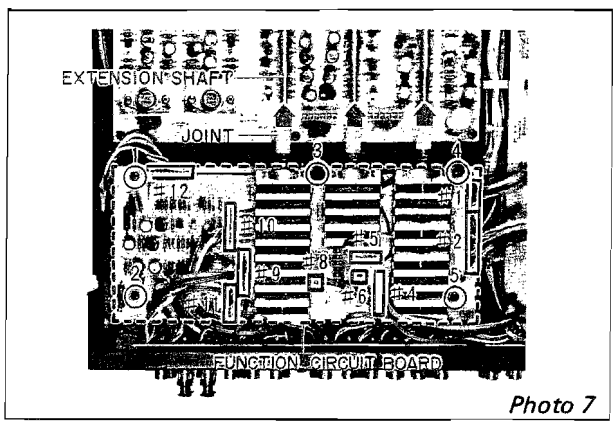


Photo 7

4. EQUALIZER CIRCUIT BOARD REMOVAL

a. Remove the bottom cover.
b. Remove the two screws from the pink noise tone amp circuit board fixing metal.
c. Lift up both the tone amp and pink noise circuit fixing metals as shown in Photo 8.

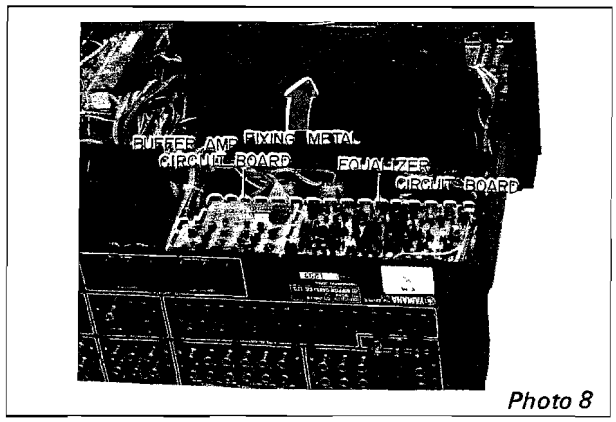


Photo 8

d. Remove connectors #51, #52 and #58 as shown in Photo 9.
e. Remove circuit board fixing screws (1) to (4).
f. When removing the circuit board be careful to gently separate chassis/circuit board connector #50, then carefully lift the circuit board out.

5. BUFFER AMP CIRCUIT BOARD REMOVAL

a. Remove the tone amp and pink noise circuit board fixing metals as explained in steps a-c above.
b. Remove connector #56 shown in Photo 9.
c. When removing the circuit board gently separate chassis/circuit board connector #55, then carefully lift the circuit board out.

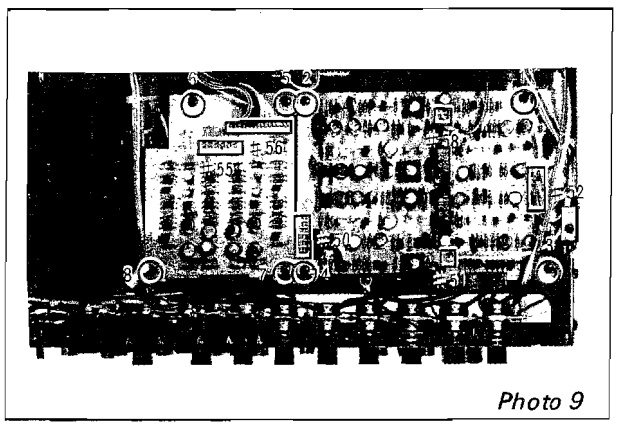


Photo 9

6. FRONT PANEL REMOVAL

a. Remove the top cover and bottom cover.
b. Remove the four front panel shield fixing screws on both the right and left sides, as shown in Photo 10.
c. Lift the shield plate up and out.
d. Remove the LED circuit board cord connector as shown in Photo 10.

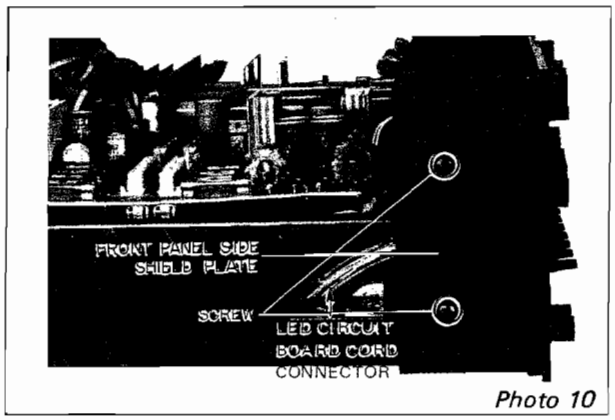


Photo 10

e. Remove knobs (1) to (9) shown in Photo 11.
f. Use a hexagonal allen wrench to remove knobs (10) to (12) shown in Photo 11.

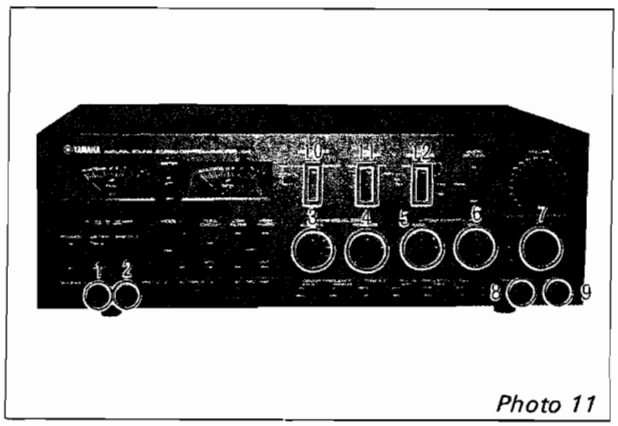


Photo 11

g. To remove the Volume and Balance knobs, first loosen them with the hexagonal allen wrench as shown in Photo 12.

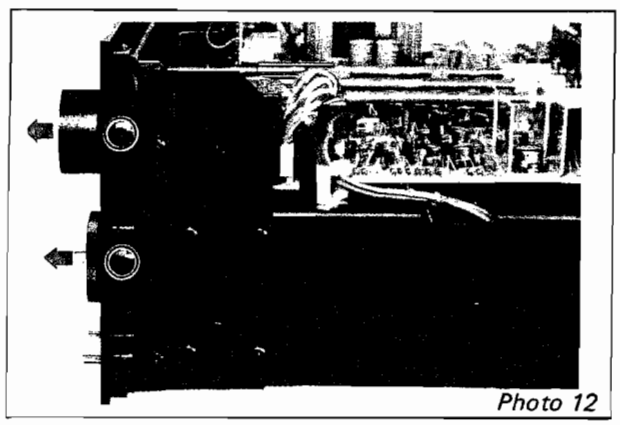


Photo 12

h. Remove fixing screws (1) to (3) in Photo 13 and (4) to (6) in Photo 14.
i. Gently pull the front panel away from the chassis.

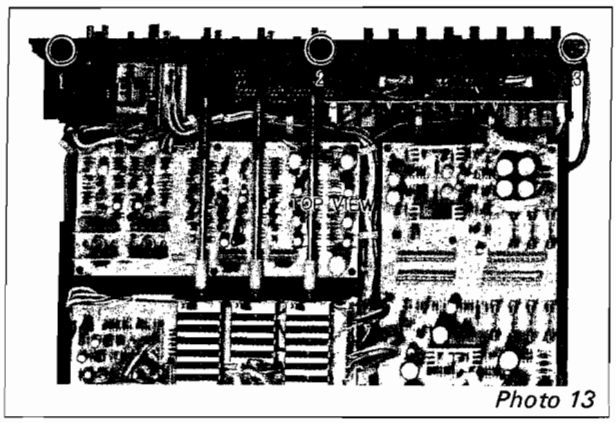


Photo 13

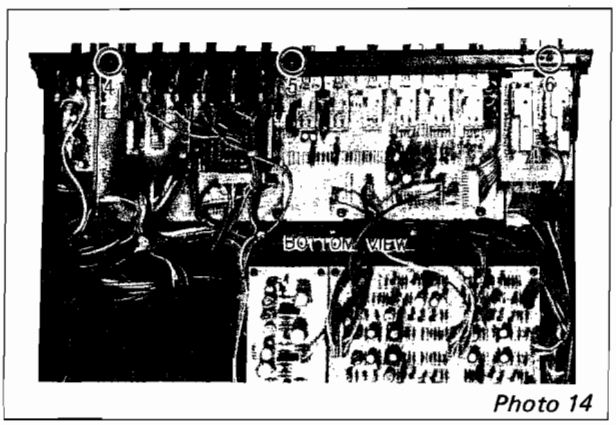


Photo 14

7. METER AMP CIRCUIT BOARD REMOVAL

a. Remove the front panel as explained above.
b. Remove screws (1) to (4) shown in Photo 15.

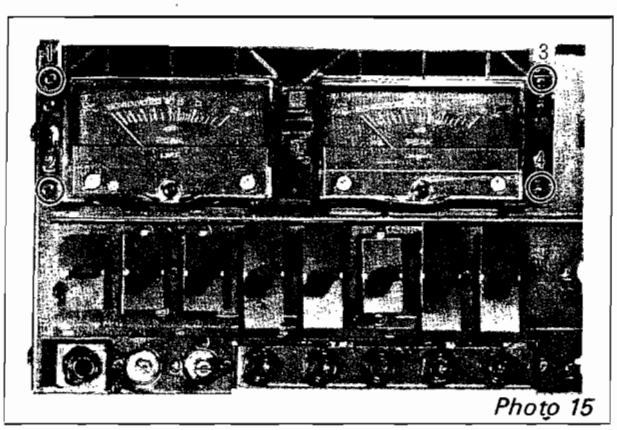


Photo 15

c. Remove the connectors # 53 and #54 shown in Photo 16.
d. Remove the circuit board and meters together by pulling forward.
Note: Be careful not to damage the meter leads at this time.

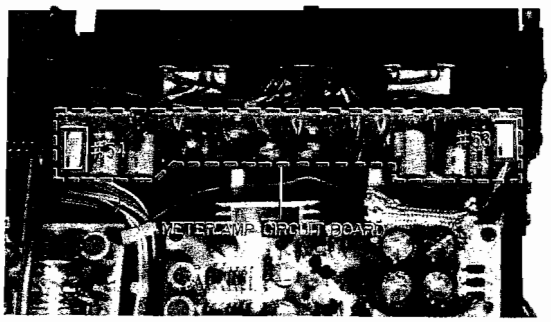
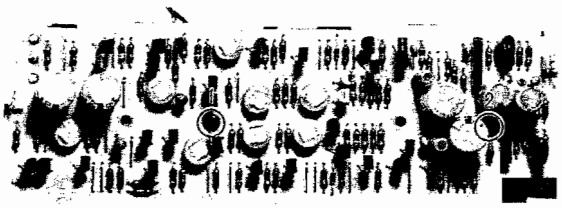


Photo 16

e. To separate the meter amp circuit board and the meters remove screws (1) and (2) shown in Photo 17.


METER AMP CIRCUIT BOARD
Photo 17

8. TONE CONTROL CIRCUIT BOARD REMOVAL

a. First to remove the tone push-switch circuit board.
b. Remove screws (1) to (5) in Photo 18.

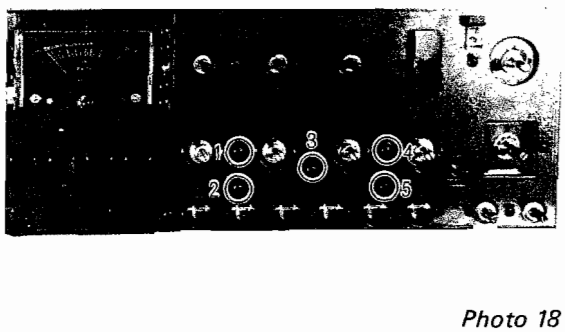


Photo 18

c. As shown in Photo 19, slide the circuit board inside the chassis so as to remove it together with its fixing metal.
Note: When removing the circuit board, be careful not to damage its leads.

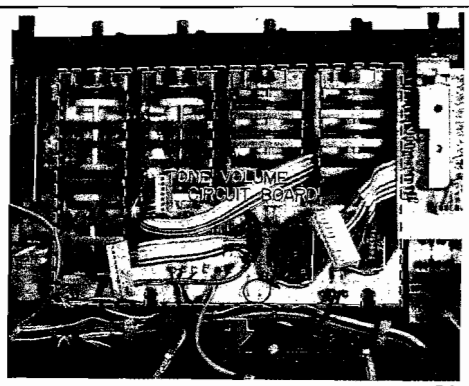


Photo 19

9. HEADPHONE VR CIRCUIT BOARD REMOVAL

a. Remove the front panel as explained above.
b. Remove screws (1) to (3) in Photo 20.

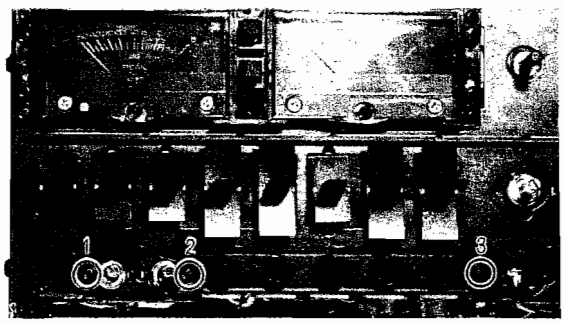


Photo 20

c. Remove the connector #31 in Photo 21.

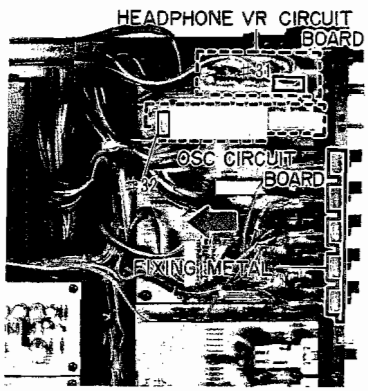


Photo 21

d. The circuit board should be removed together with the OSC circuit board and jack fixing metal by first sliding it inside the chassis. If the Level control nut is removed from the fixing metal, the control can also be removed (see (A) in Photo 22).

10. PHONES, PRE OUT 2, TAPE 3, MIC JACK REMOVAL

a. See step 9 concerning headphone level control circuit board removal. Remove the fixing metal as shown in Photo 22.

b. Remove the nut for each jack: Phones, Pre Out 2, Tape 3, Mic.

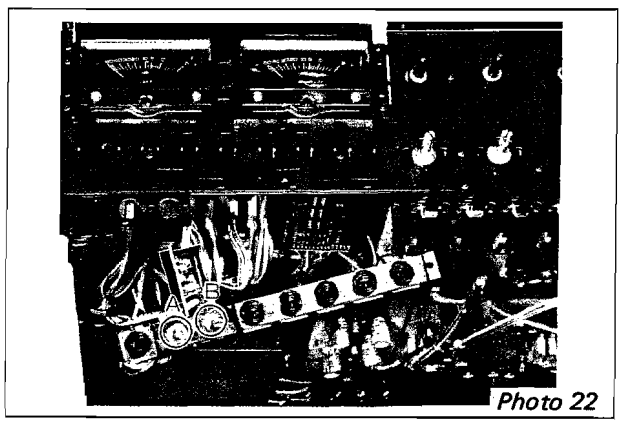


Photo 22

11. FILTER CIRCUIT BOARD REMOVAL

a. See the explanation on headphone level control circuit board removal. Then remove the headphone level control, OSC circuit board and jack fixing metal (see step 9).

b. Remove the connector #35 shown in Photo 23.

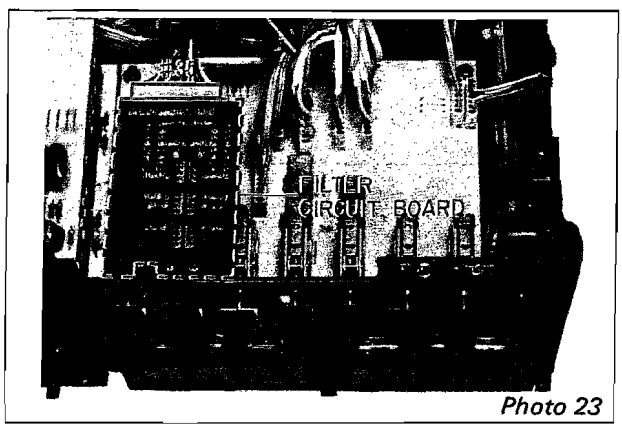


Photo 23

c. Remove the lever switch knob shown in Photo 24.

d. Remove screws (1) and (2) in Photo 24, then take out the circuit board.

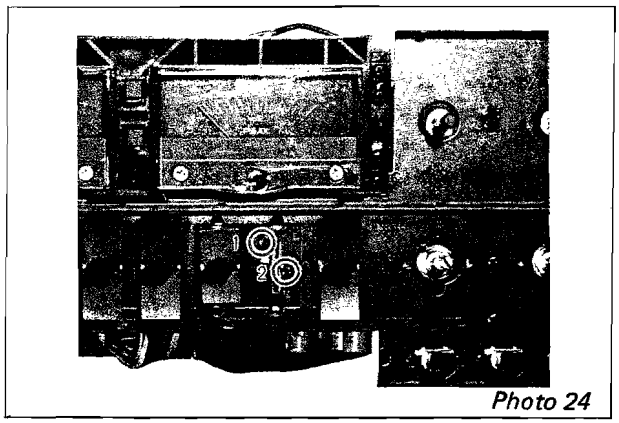


Photo 24

12. LEVER SWITCH CIRCUIT BOARD REMOVAL

a. Remove the filter circuit board (see step 11).

b. Remove lever switch knobs (1) to (6) shown in Photo 25.

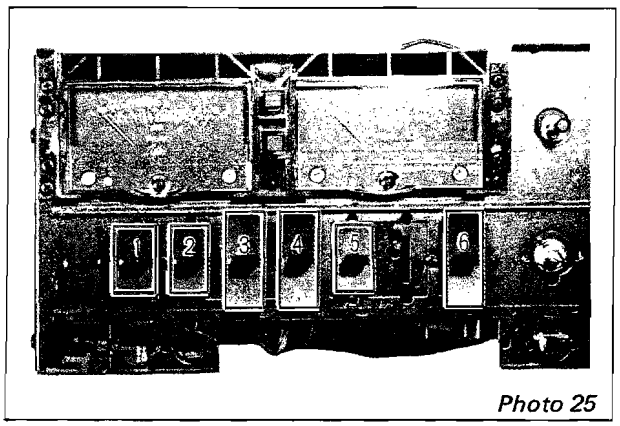


Photo 25

c. Remove the connectors #34 to #41 shown in photo 26.

d. Remove screws (A) and (B) in Photo 27.

e. Remove screws (1) and (2) in Photo 26, then take out the circuit board.

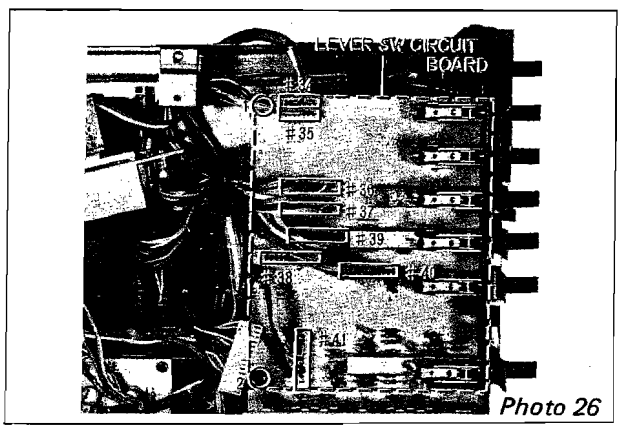


Photo 26

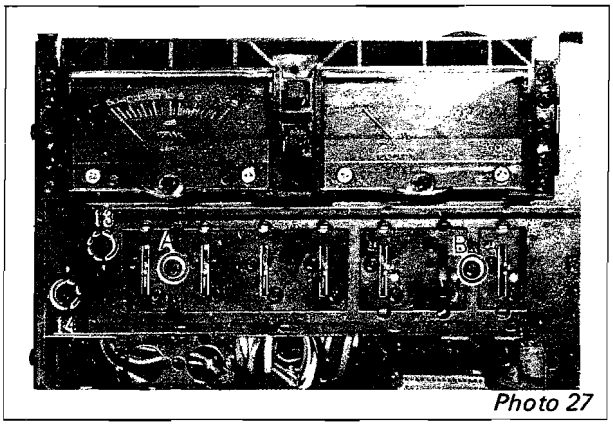


Photo 27

13. LOUDNESS CIRCUIT BOARD REMOVAL

a. Remove the impedance change SW circuit board.
b. Remove the Screws (1) and (2) shown in Photo 28, and the nut (3).

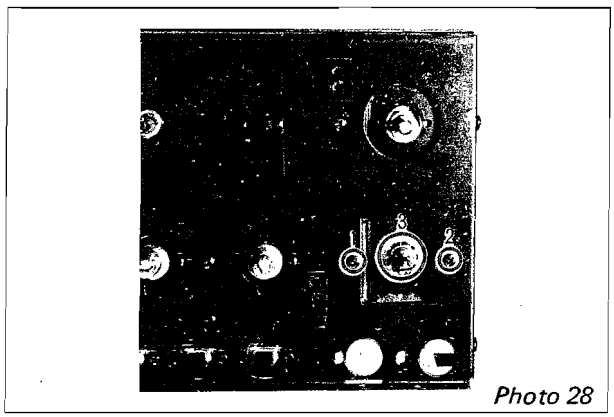


Photo 28

c. Remove connectors #49 and #57 shown in Photo 29.

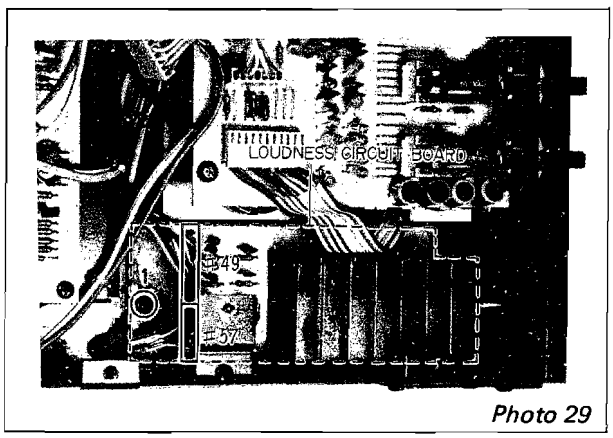


Photo 29

d. Remove the circuit board with its fixing metals from the inside of the chassis. After removing, tighten screw (1). When doing this, try to pull out the circuit board to bend to the side as shown in Photo 30 so that it does not touch other parts.

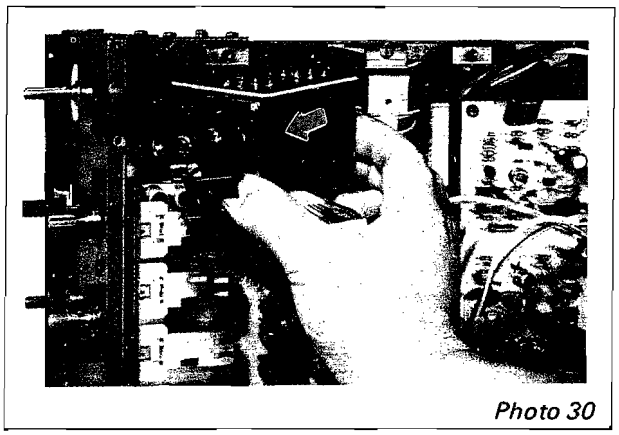


Photo 30

14. SLIDE SWITCH CIRCUIT BOARD REMOVAL

a. Remove the case as explained above.
b. Remove the inside cover.
c. Remove screws (1) to (4) from the rear panel as Photo 31.

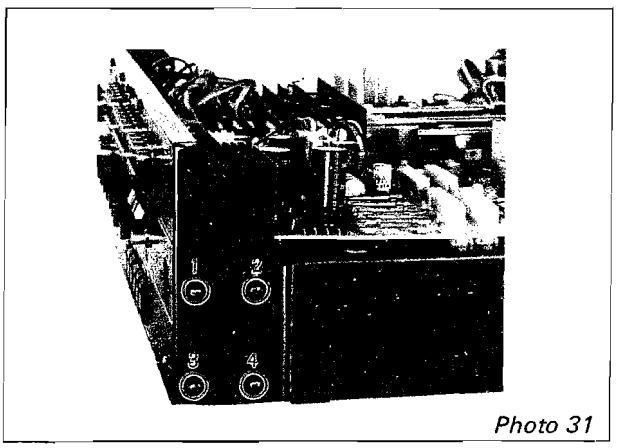


Photo 31

d. Remove plastic rivets (1) to (6) shown in Photo 32, as well as screws (A) and (B); then remove the circuit board.

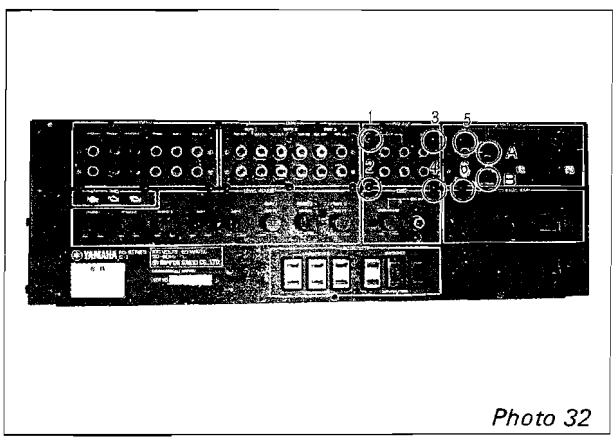


Photo 32

ADJUSTMENT

When using 2SK78, each unit must be used according to the rank below. When using a pair, select both from the same rank.

UNIT	Tr. No.	PRESSURE	RANK
EQUALIZER	Tr. 203 ~ 206	C	DK, DL, DM, DN, EK, EL, EM, EN, FK, FL, FM, FN, GK, GL, GM, GN
	Tr. 221, 222 225, 226	A	CK, CL, CM, DK, DL, DM, EK, EL, EM
TONE CONTROL	1115 ~ 1118	C	DK, DL, DM, DN, EK, EL, EM, EN, FK, FL, FM, FN, GK, GL, CM, GN
	1137, 1138 1141, 1142	A	CK, CL, CM, DK, DL, DM, EK, EL, EM
ACOUSTIC	1123, 1124	C	AK, AL, BK, BL, CK, CL
AUX TAPE BUFF	Tr. 515, 516 435, 436	C	AK, AL, BK, BL, CK, CL, DK, DL

For 2SK75, refer to the list below.

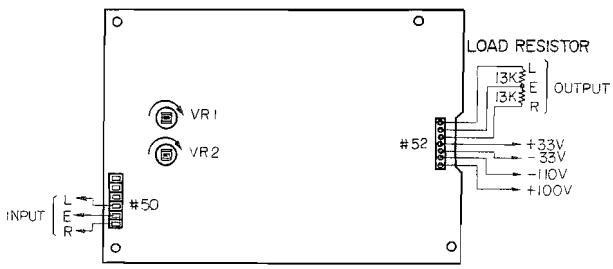
UNIT	Tr. No.	PRESSURE	RANK
OUTPUT BUFFER	Tr. 815, 816	C	AK, AL, BK, BL, CK, CL

1. CIRCUIT BOARD ADJUSTMENT

1. EQUALIZER CIRCUIT BOARD

■ CONNECTIONS

NOTES: 1) Turn VR1 and VR2 all the way to the right.
2) Adjust VR1 and VR2 during all general adjustments (or checks).

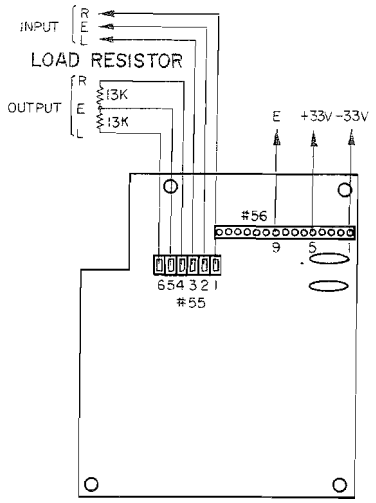


■ MEASUREMENT ITEMS

ITEM	INPUT	OUTPUT	DISTORTION	FREQUENCY
OUTPUT POWER LEVEL and MAXIMUM OUTPUT POWER	2 mV	150 mV ± 5 mV	Less than 0.02%	1 KHz
		775 mV (0 dBm)	Less than 0.02%	20/1K/20 KHz
		13V (24.5 dBm)	Less than 0.05%	20 Hz
		13V (24.5 dBm)	Less than 0.05%	1 KHz
		3V (11.75 dBm)	Less than 0.05%	20 KHz
FREQUENCY CHARACTERISTICS		5.5V ± 18 mV (16.95 dBm ± 0.2 dB)		50 Hz
		4.5V ± 18 mV (15.28 dBm ± 0.2 dB)		70 Hz
		2.0V ± 18 mV (8.22 dBm ± 0.2 dB)		200 Hz
		775 mV (0 dBm)		1 KHz
		300 mV ± 18 mV (−8.23 dBm ± 0.2 dB)		5 KHz
		107 mV ± 18 mV (−17.17 dBm ± 0.2 dB)		15 KHz

2. BUFFER AMP CIRCUIT BOARD

■ CONNECTIONS

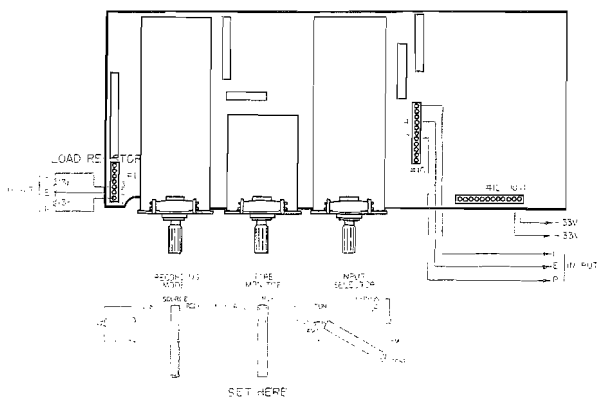


■ MEASUREMENT ITEMS

ITEM	INPUT	OUTPUT	DISTORTION	FREQUENCY
OUTPUT POWER	775 mV (0 dBm) 13V (24.5 dBm)	775 mV ± 27 mV (0 dBm ± 0.3 dB) 13V ± 27 mV (24.5 dBm ± 0.3 dB)	Less than 0.02% Less than 0.02%	20/1K/20 KHz 20/1K/20 KHz
FREQUENCY CHARACTERISTICS		775 mV ± 18 mV (0 dBm ± 0.2 dB) 775 mV (0 dBm) 775 mV ± 18 mV (0 dBm ± 0.2 dB)		20 Hz 1 KHz 20 KHz

3. FUNCTION CIRUIT BOARD

■ CONNECTIONS



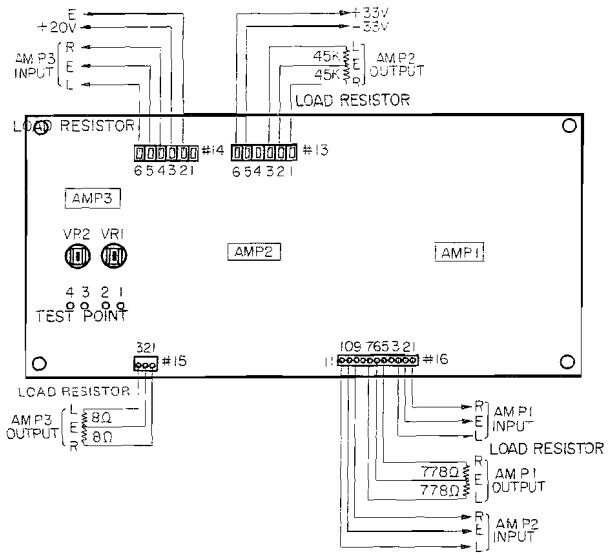
■ MEASUREMENT ITEMS

ITEM CHECKED	INPUT	OUTPUT	DISTORTION	FREQUENCY
OUTPUT	775 mV (0 dBm) 13V (24.5 dBm)	775 mV ± 27 mV (0 dBm ± 0.3 dB) 13V ± 27 mV (24.5 dBm ± 0.3 dB)	Less than 0.02%	20/1K/20 KHz
FREQUENCY CHARACTERISTICS		775 mV ± 18 mV (0 dBm ± 0.2 dB) 775 mV (0 dBm) 775 mV ± 18 mV (0 dBm ± 0.2 dB)		20 Hz 1 KHz 20 KHz

4. FLAT AMP CIRCUIT BOARD

■ CONNECTIONS

Note: ±33V: Power for Amp 1, 2
+20V: Power for Amp 3
No ground is connected in the Circuit Board for Amps 1, 2 and 3.



ADJUSTMENT

Adjust VR1 between test points 1 (+) and ~2 (–) and VR2 between test points 4 (+) and ~3 (–) for a reading of 10 mV. (Adjust at no signal).

■ MEASUREMENT ITEMS

AMP1	INPUT	OUTPUT	DISTORTION	FREQUENCY
OUTPUT LEVEL	775 mV (0 dBm) 7.75V (20 dBm)	775 mV (0 dBm ± 0.3 dB) 7.75V (20 dBm ± 0.3 dB)	Less than 0.02%	20/1K/20 KHz
FREQUENCY CHARACTERISTICS		775 mV ± 18 mV (0 dB ± 0.2 dB) 775 mV (0 dBm) 775 mV ± 18 mV (0 dBm ± 0.2 dB)		20 Hz 1 KHz 20 KHz

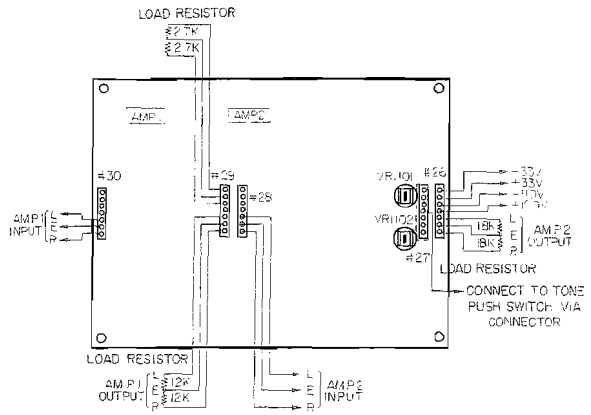
OUTPUT LEVEL	150 mV (–14.3 dBm)	775 mV ± 27 mV (0 dBm ± 0.3 dB) 15V (25.8 dBm)	Less than 0.02%	20/1K/20 KHz
FREQUENCY CHARACTERISTICS		775 mV ± 18 mV (0 dBm ± 0.2 dB) 775 mV (0 dBm) 775 mV ± 18 mV (0 dBm ± 0.2 dB)		20 Hz 1 KHz 20 KHz

FREQUENCY CHARACTERISTICS	138 mV (−15 dBm)	637 mV ± 46 mV (−1.7 dBm ± 0.5 dB)	Less than 0.05%	70/1K/20 KHz
OUTPUT LEVEL		245 mV ± 46 mV (−10 ± 0.05 dB) 245 mV (−10 dBm) 245 mV ± 46 mV (−10 ± 0.3 dB)		70 Hz 1 KHz 20 KHz

5. TONE AMP CIRCUIT BOARD

■ CONNECTIONS

Notes: 1. VR1101 and 1102 should be turned all the way to the right.
2. The above VR should be adjusted during any general adjustment.
3. The connected tone push-switch circuit board forms a unit with the tone control.



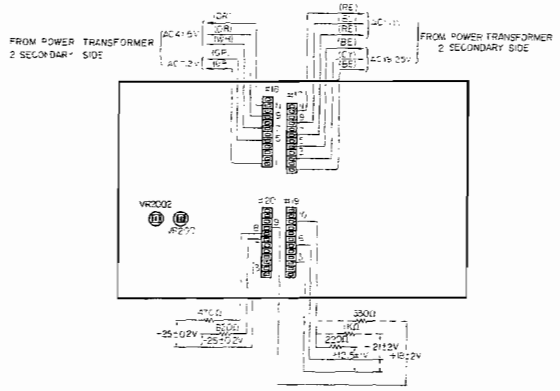
■ MEASUREMENT RATINGS

AMP1	INPUT	OUTPUT	DISTORTION	FREQUENCY
OUT LEVEL AND MAXIMUM OUTPUT	775 mV (0 dBm)	2.01V ± 46 mV (8.3 dBm ± 0.5 dB) 15V (over 25.75 dBm)	Less than 0.02% Less than 0.03%	20/1K/20 KHz 20/1K/20 KHz
FREQUENCY CHARACTERISTICS		775 mV ± 8 mV (0 dBm ± 0.2 dB) 775 mV (0 dBm) 775 mV (0 dBm ± 0.2 dB)		20 Hz 1 KHz 20 KHz

OUT LEVEL AND MAXIMUM OUTPUT	775 mV (0 dBm)	6.3V ± 46 mV (8.2 dBm ± 0.5 dB) 19.5V (over 28.0 dBm)	Less than 0.02% Less than 0.03%	20/1K/20 KHz 20/1K/20 KHz
FREQUENCY CHARACTERISTICS		775 mV ± 18 mV (0 dBm ± 0.2 dB) 775 mV (0 dBm) 775 mV ± 18 mV (0 dBm ± 0.2 dB)		20 Hz 1 KHz 20 KHz

6. POWER CIRCUIT BOARD

■ CONNECTIONS



■ ADJUSTMENT

1. Adjust VR2001 and VR2002 so during a loaded condition there is +25.0V and −25.0V at pins 3~7 and 3~8 of #20.
2. Be sure that the 21V present between #19-10~6 rises to this level within 3~5 seconds after switching on, and drops to 0V after switching off.
3. Switch of and then on again, and check that the 21V mentioned above is present.

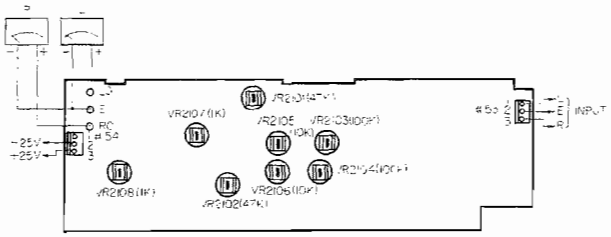
7. METER AMP CIRCUIT BOARD

■ CONNECTIONS

Input: Connect a signal generator between 1 and 2 (R. ch.) and between 3 and 2 (L. ch.) on #53.

Output: Connect LO.E, RO to left and right peak meters. E is the ground.

Power: Feed −25V to 2 of #54, +25V to 3. Connect 1 and 3.



■ ADJUSTMENT

Use the meter needle adjusting screws to set the meters at ∞.

Set each VR to its median position and feed an input signal of 1KHz.

PROCEDURE	INPUT	METER READING	ADJUSTMENT VR	
			L	R
1	245 mV (−30 dBm)	−30 dB	VR2107	2108
2	775 mV (−20 dBm)	−20 dB	VR2101	2102
3	245 mV (−10 dBm)	−10 dB	VR2103	2104
4	775 mV (0 dBm)	0 dB	VR2105	2106

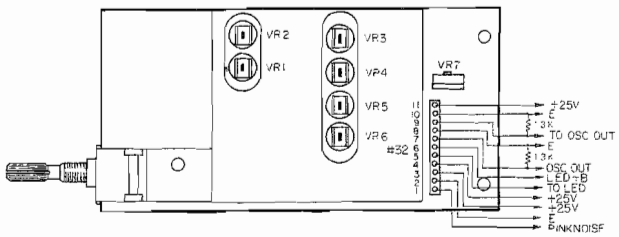
Adjust so that the needle moves over the required indication point. After adjustment check for movement from +5 to −50dB, and correct if necessary.

Adjustment tolerances are checked as follows: for 0, −10, −20 and −30 the needle must be over the white line. For −40 it must be within ±3dB, for −50 within ±5dB and for +5dB within ±0.3dB.

2. Frequency Characteristics Input 775mV (0dB)
3. When the power is switched off after a 0dB reading, the needle should drop to ∞ within 2 seconds.

8. OSC CIRCUIT BOARD

■ CONNECTIONS



Note: Adjust VR7 whenever a general adjustment is carried out.

■ ADJUSTMENT

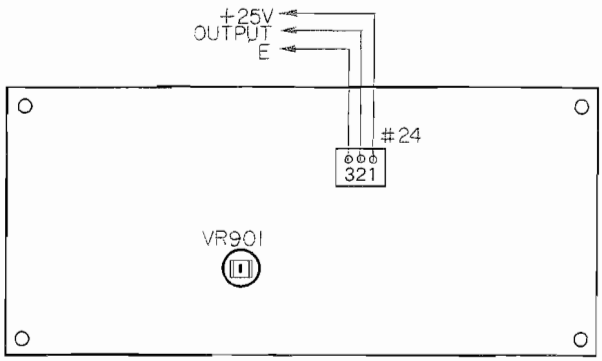
1. Set VR3 to 6 to Maximum (all the way to the right).
2. Adjust VR1 for an 0.5dB drop using an output clip (between (7) and (8)) at 70Hz.
3. Adjust VR3 to 6 for 775mV between (7) and (8) at each frequency.
4. Adjust VR2 for best possible distortion characteristics (under 0.5%) at 1KHz.

■ ADJUSTMENT

VR6	.....	70 Hz ± 10 Hz
VR5	.....	333 Hz ± 15 Hz
VR4	.....	1 KHz ± 0.1 Hz
VR3	.....	10 KHz ± 1 KHz
VR7	.....	General Adjustment

9. PINK NOISE CIRCUIT BOARD

■ CONNECTIONS



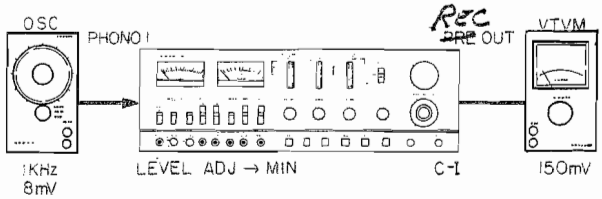
■ ADJUSTMENT

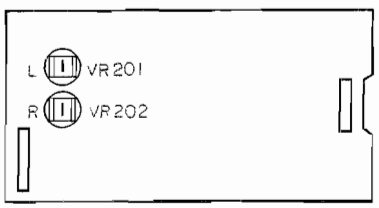
Adjust VR901 for a 300mV (–8dBm) pink noise output at the output jack.
Check that the noise waveform matches the standard configuration.

2. OVERALL ADJUSTMENT

1. EQUALIZER AMP CIRCUIT BOARD ADJUSTMENT

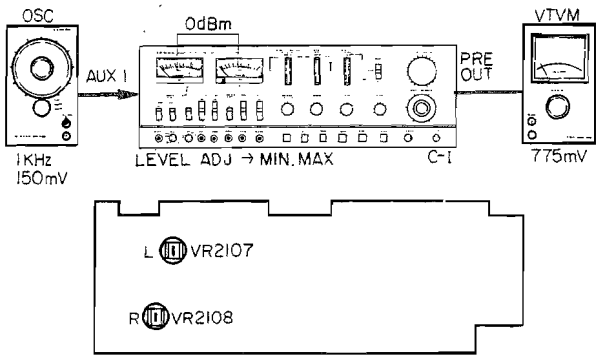
Set the Phono 1 input level control to minimum and feed a 1KHz 8mV signal in through the Phono 1 jack. Adjust VR201 and 202 on the equalizer circuit board for a 150mV output from the Rec Out jack at this time.





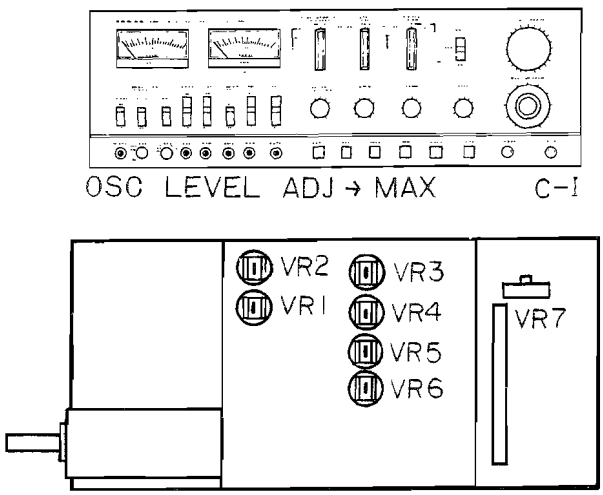
2. METER AMP CIRCUIT BOARD ADJUSTMENT

Feed a 1KHz, 150mV signal to the Aux 1 jack and check for 775mV (0dBm) when the Aux 1 level control is set to maximum. Adjust VR2107, and 2108 on the meter amp sheet for a meter reading of 0dBm at this time.



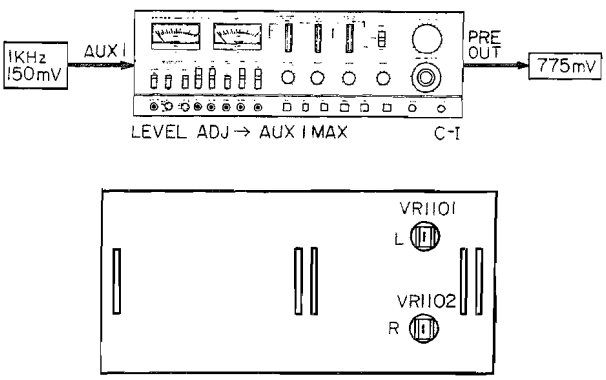
3. OSC CIRCUIT BOARD ADJUSTMENT

Adjust VR7 on the OSC circuit board so that the peak meters read 0dBm for each output: pink noise, 10KHz, 1KHz, 333Hz and 70Hz.

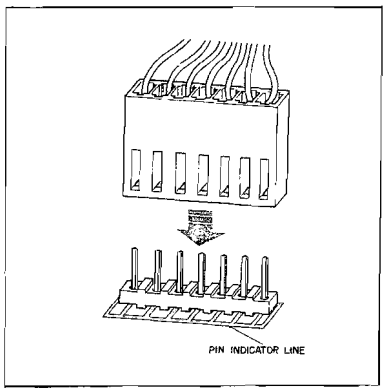


4. TONE AMP CIRCUIT BOARD ADJUSTMENT

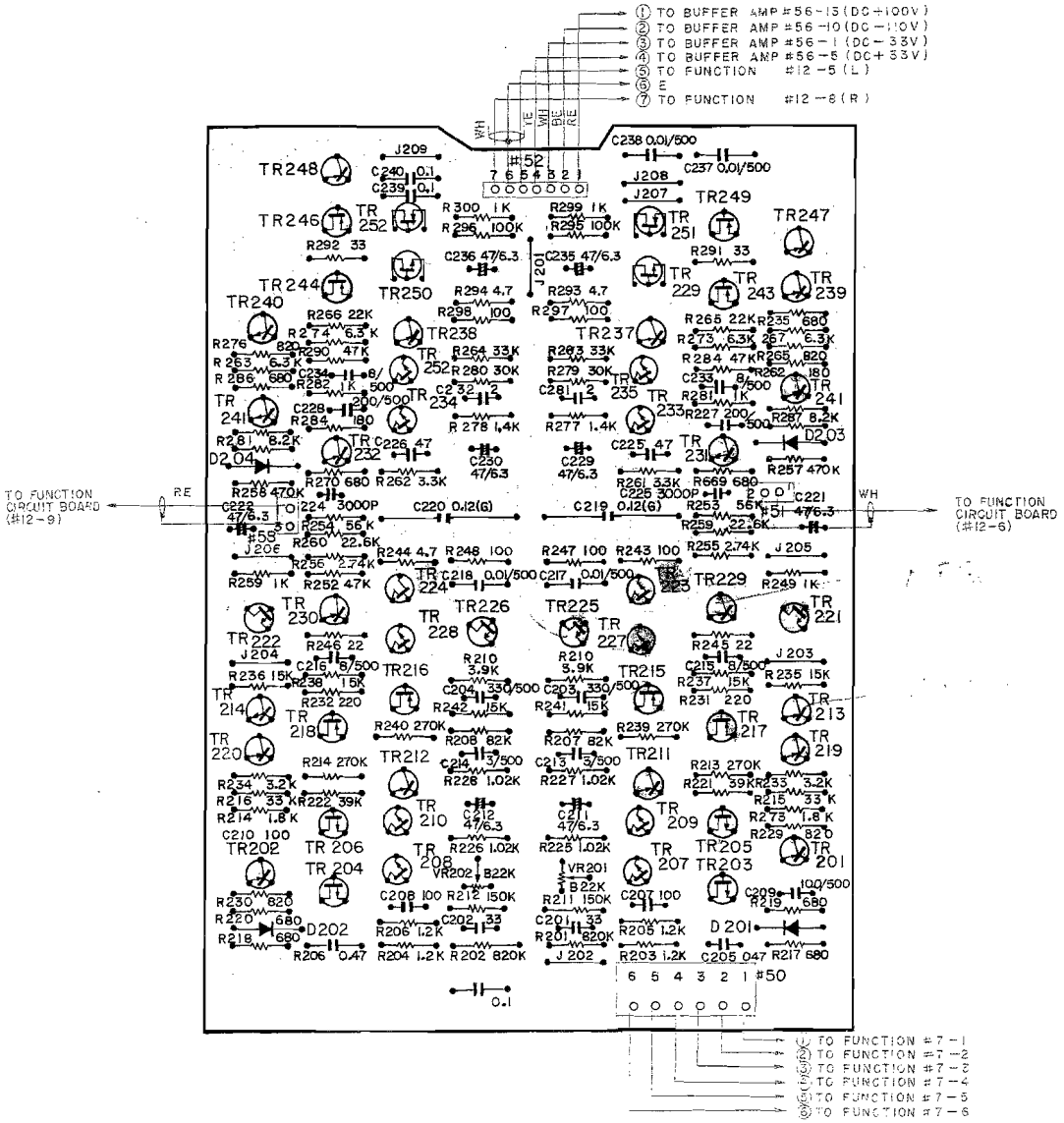
Feed a 150mV signal into the Aux 1 jack and check the output from the Pre Out jack. Adjust the tone amp VR1101 and 1102 so that there is a 0dB difference when the Tone Circuit switch is turned on and off.

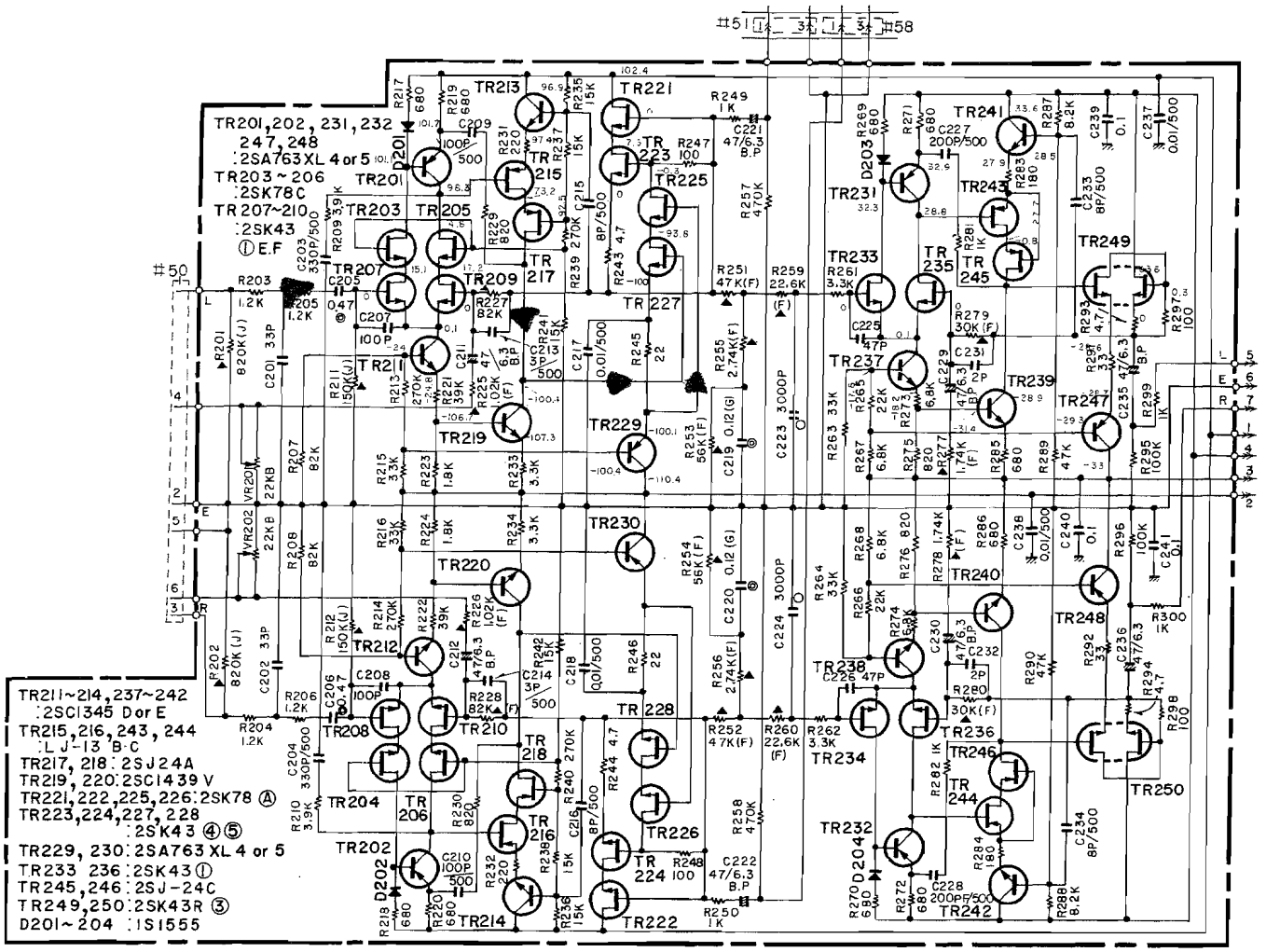


PRINTED CIRCUIT BOARD

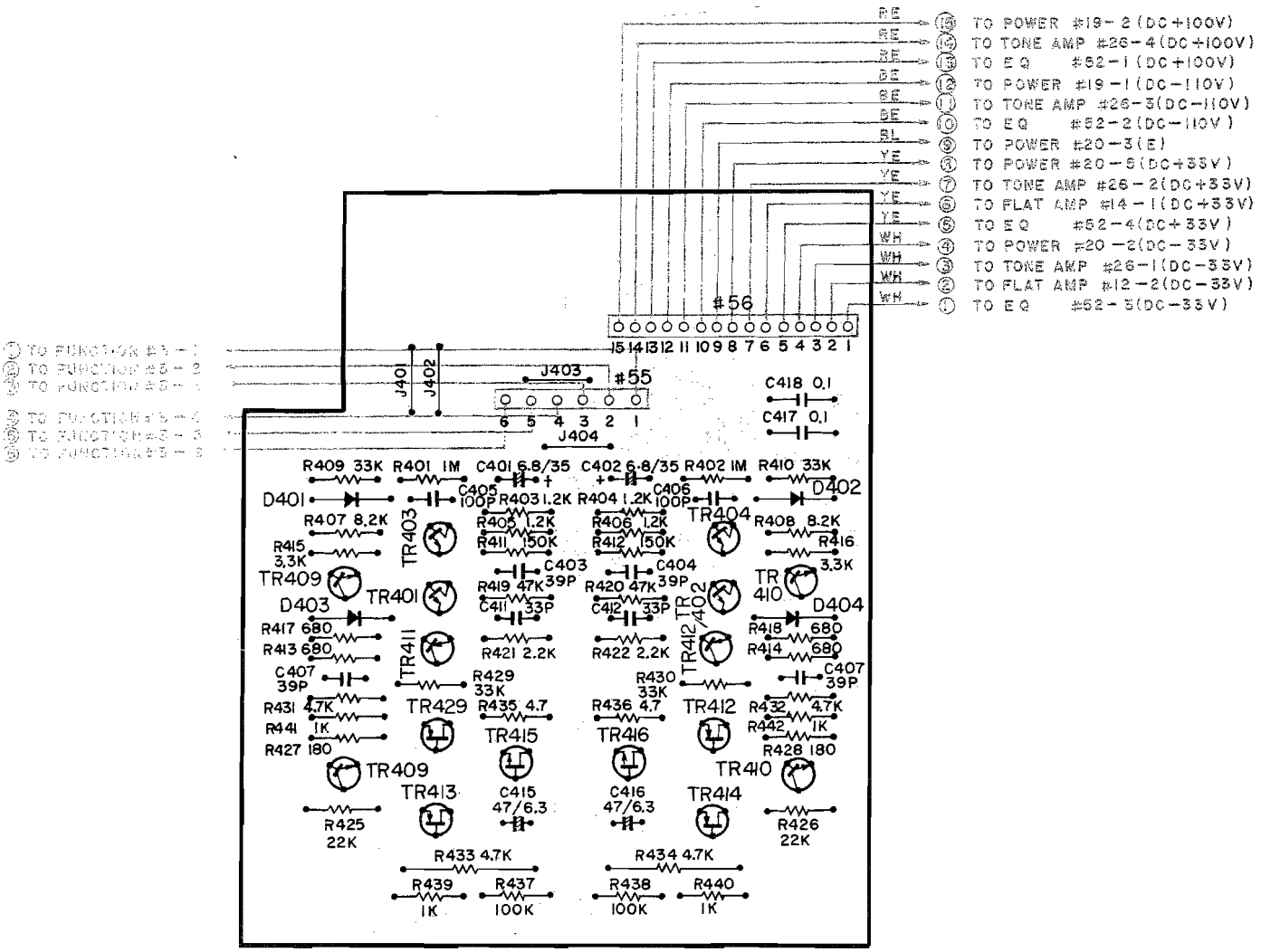


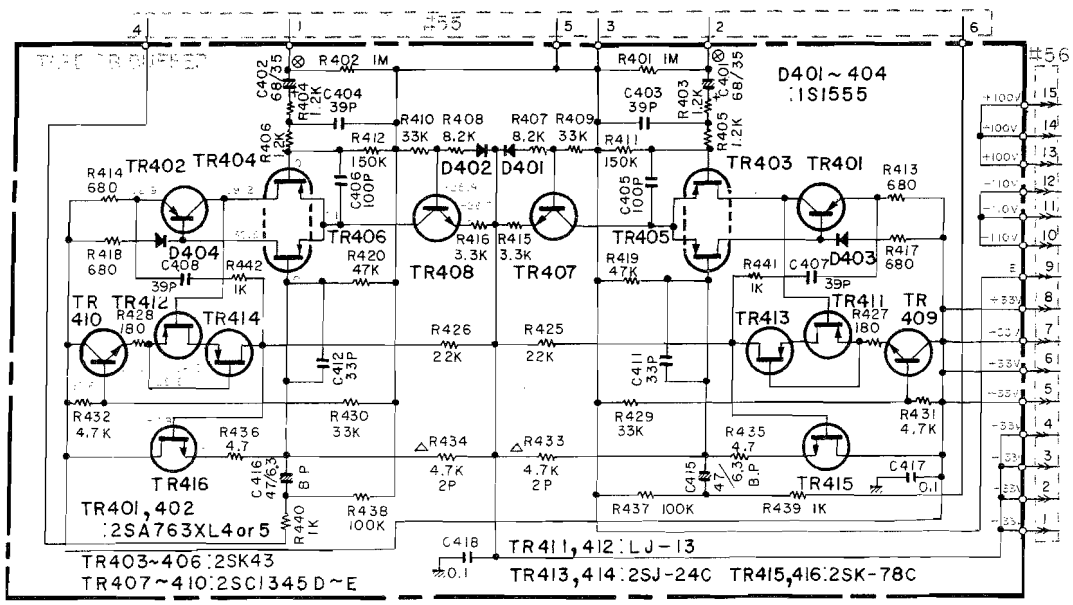
1. EQUALIZER CURCUIT BOARD NA06714



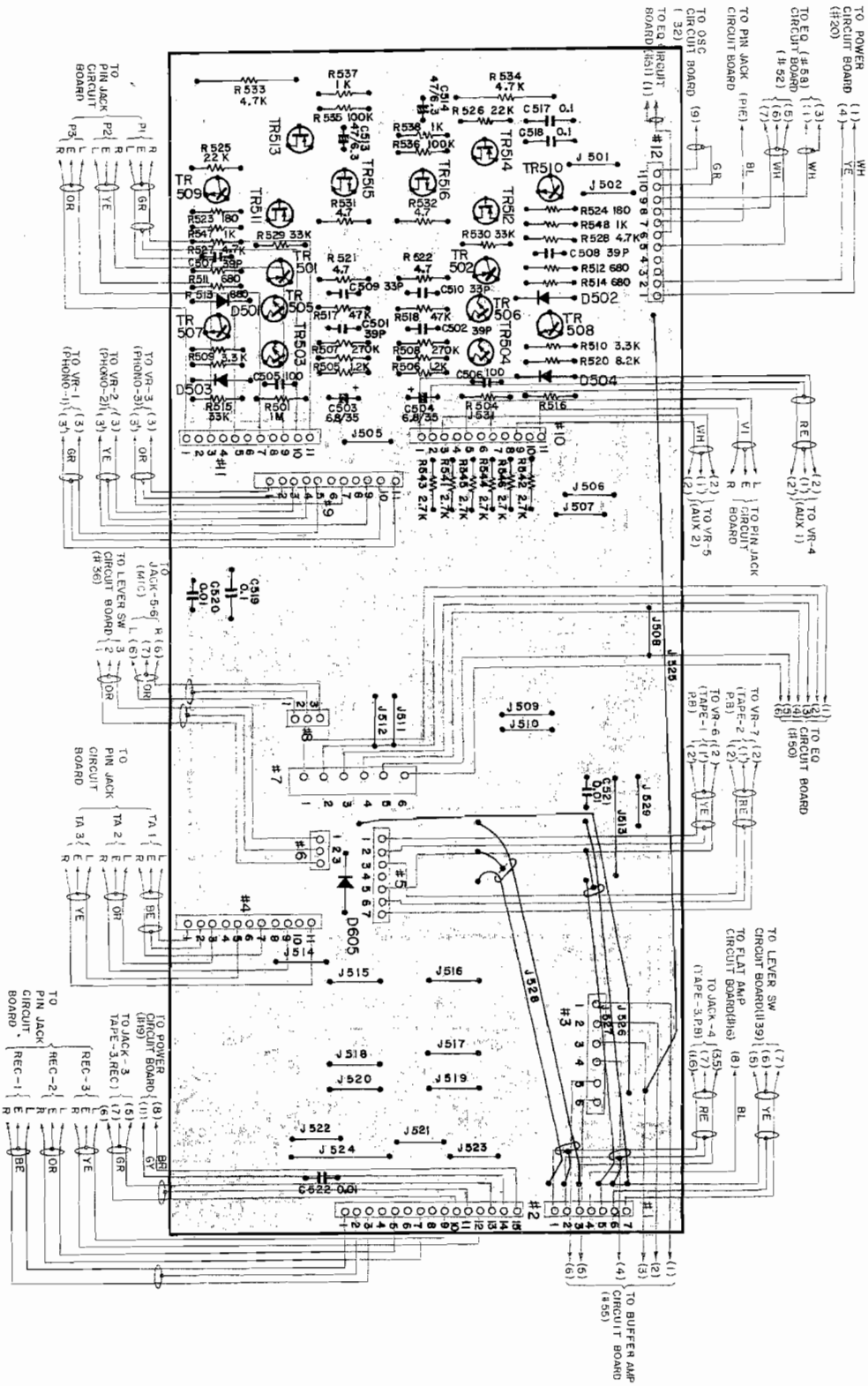

TR201,202,231,232
247,248
:2SA763XL 4 or 5
TR203~206
:2SK78C
TR207~210
:2SK43
① E.F
TR211~214,237~242
:2SC1345 D or E
TR215,216,243,244
:L J-13 B-C
TR217, 218 : 2SJ24A
TR219, 220 : 2SC1439 V
TR221,222,225,226 : 2SK78 Ⓐ
TR223,224,227,228
:2SK43 ④⑤
TR229, 230 : 2SA763 XL 4 or 5
TR233 236 : 2SK43①
TR245,246 : 2SJ-24C
TR249,250 : 2SK43R ③
D201~204 : 1S1555

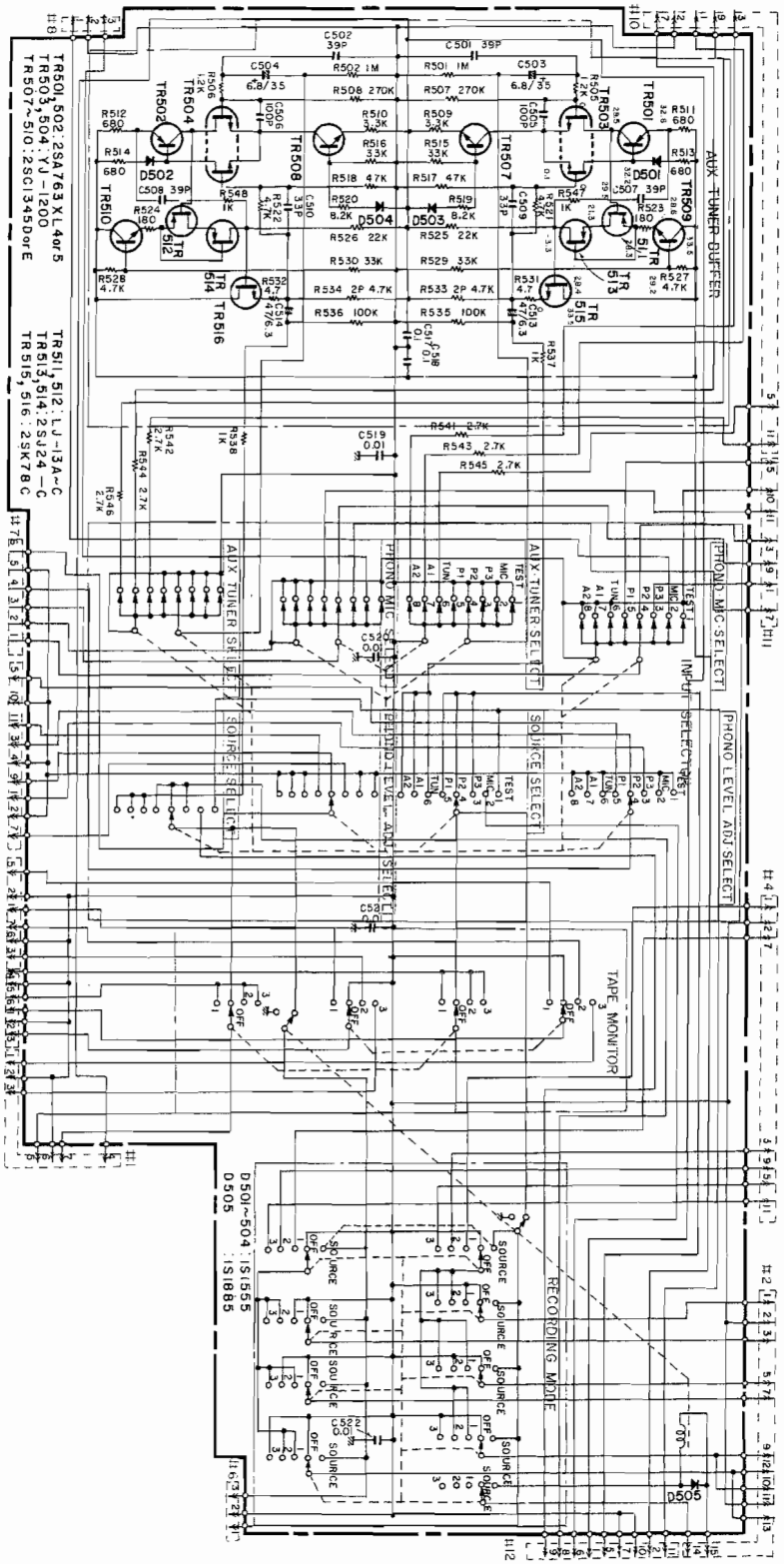
2. BUFFER AMP CIRCUIT BOARD NA06715



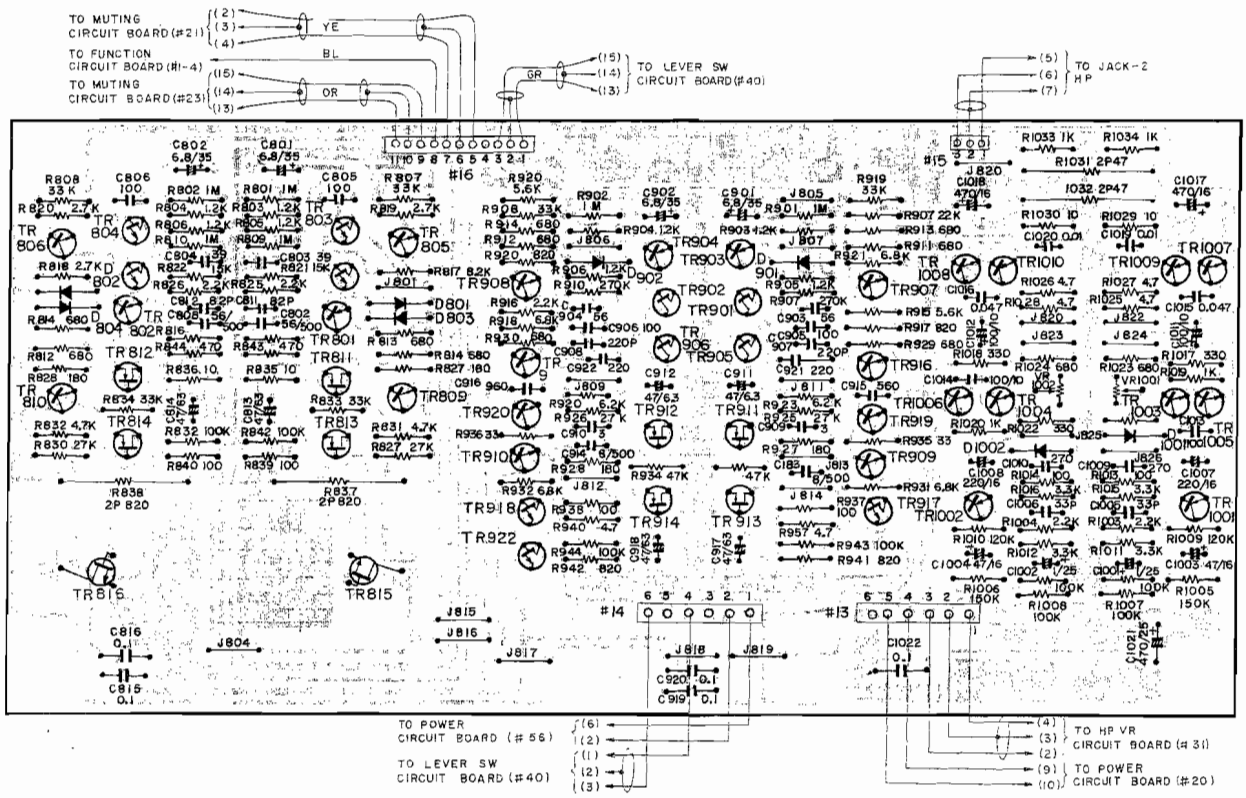


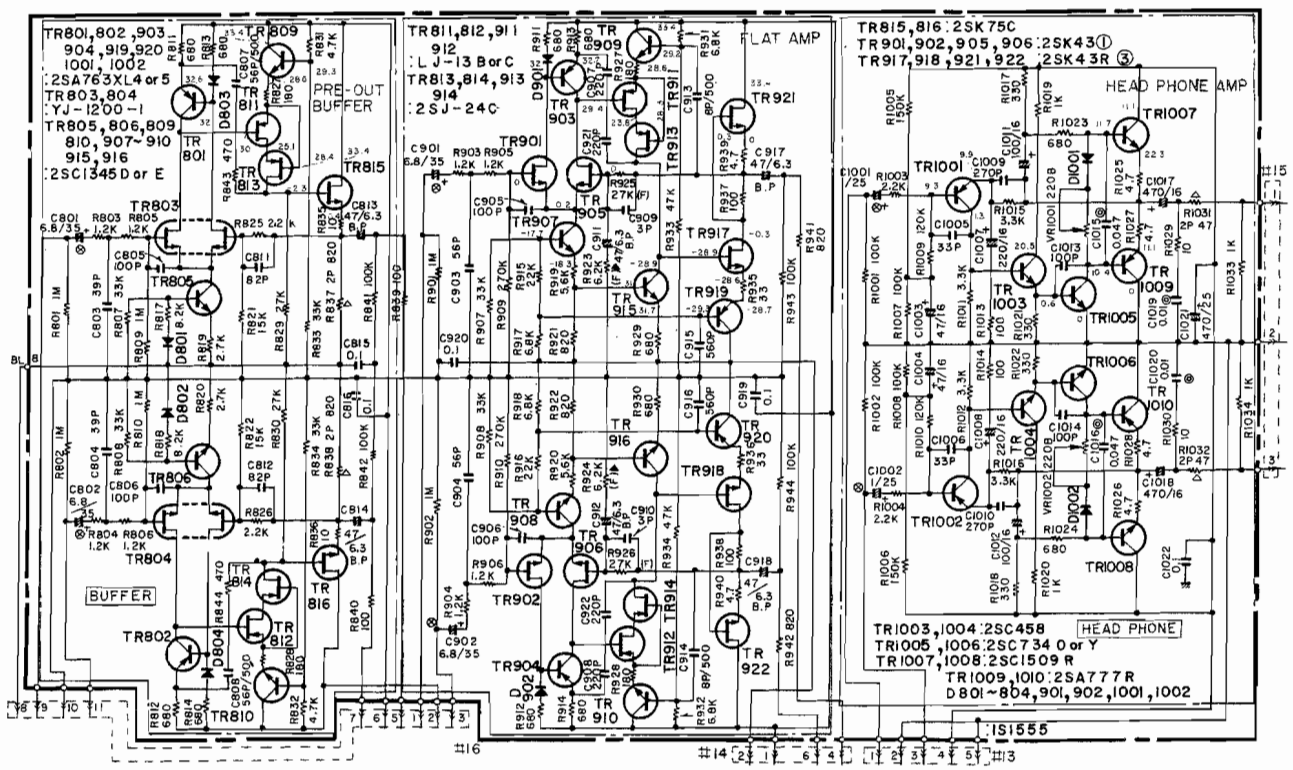
3. FUNCTION CIRCUIT BOARD NA06716



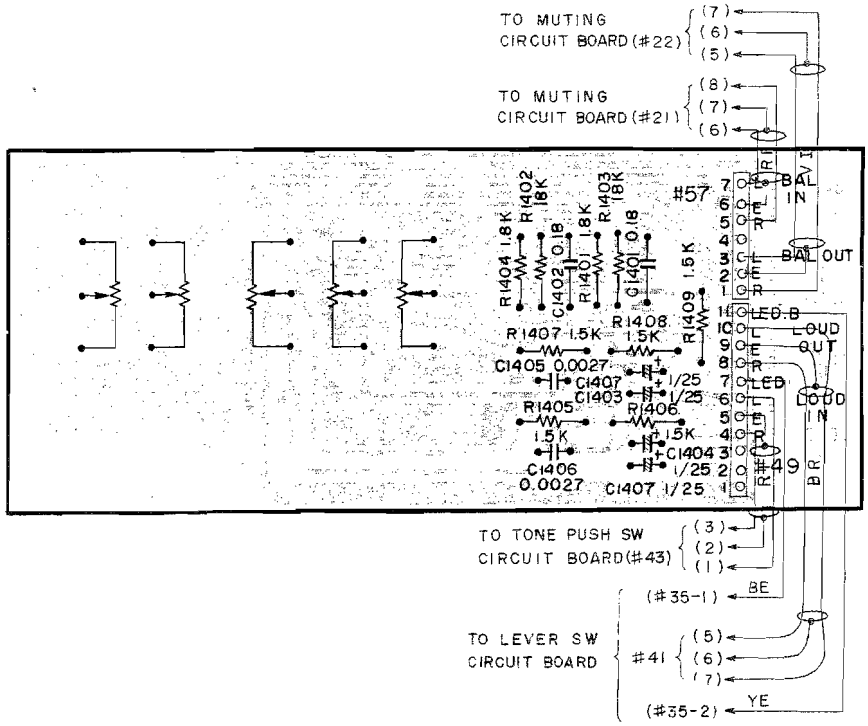

TR501,502:2SA763XL4or5
TR503,504:YJ-1200
TR507~510:2SC1345DorE
TR511,512:LJ-13A-C
TR513,514:2SJ24-C
TR515,516:2SK78C
AUX TUNER BUFFER
PHONO MIC SELECT
INPUT SELECTOR
PHONO LEVEL ADJ SELECT
AUX TUNER SELECT
SOURCE SELECT
TAPE MONITOR
RECORDING MODE
D501~504:1S1555
D505:1S1885

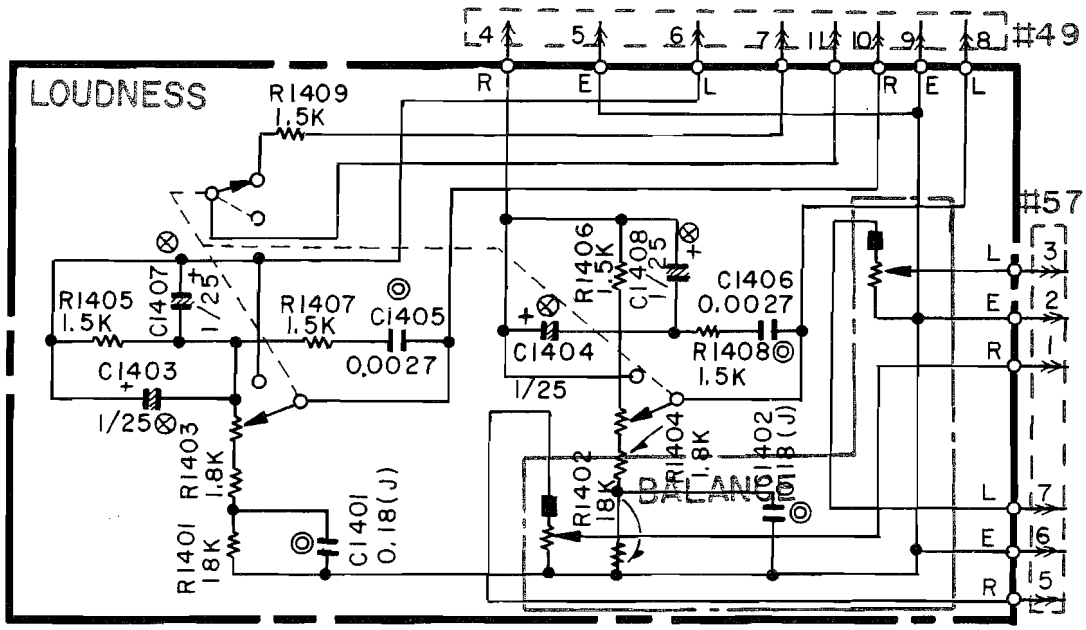
4. FLAT AMP CIRCUIT BOARD NA06717



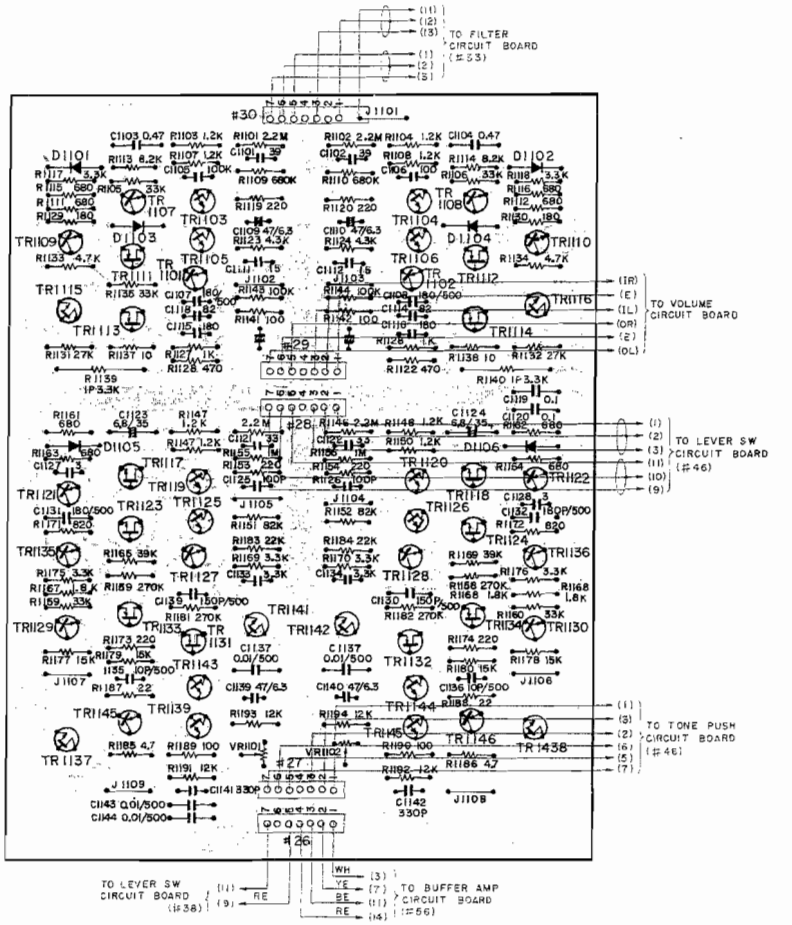


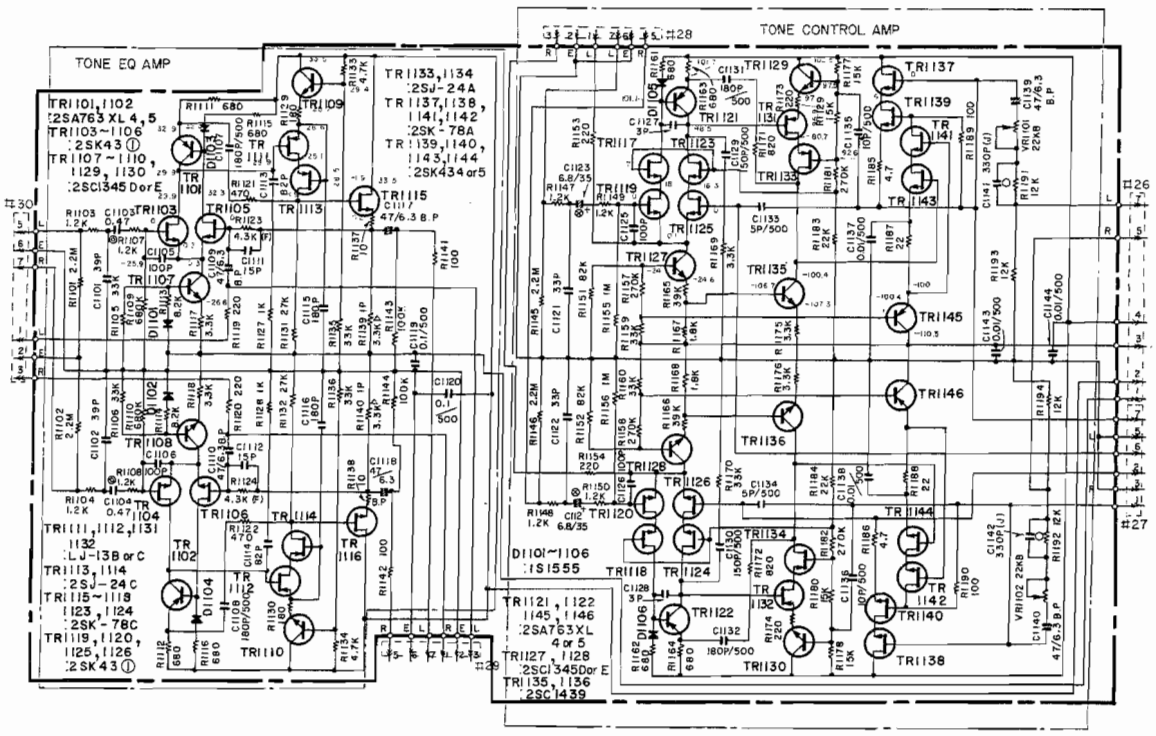
5. LOUDNESS CIRCUIT BOARD NA06718



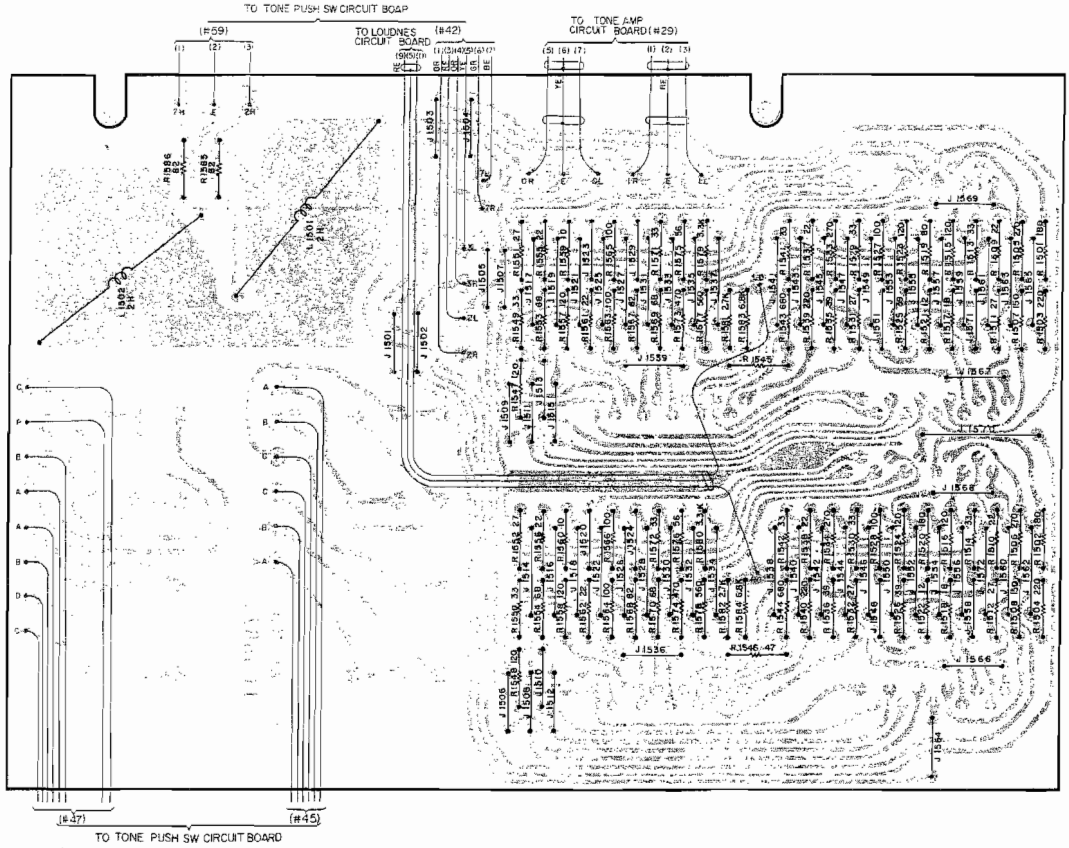


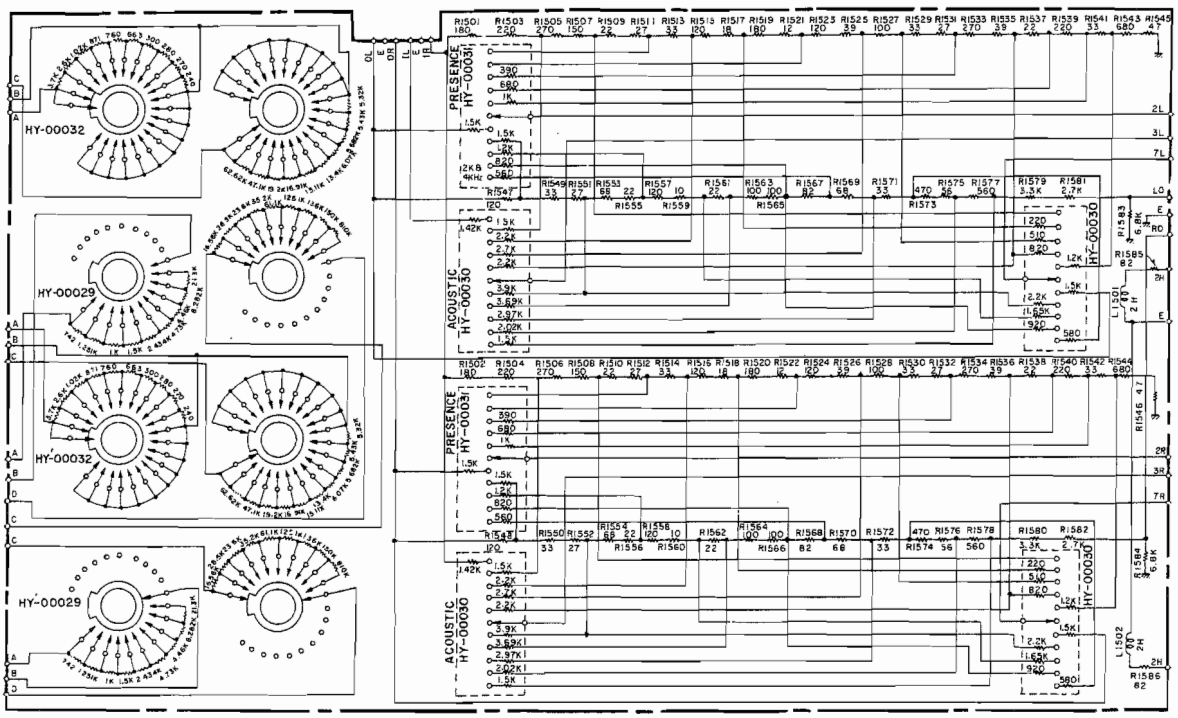
6. TONE AMP CIRCUIT BOARD NA06719



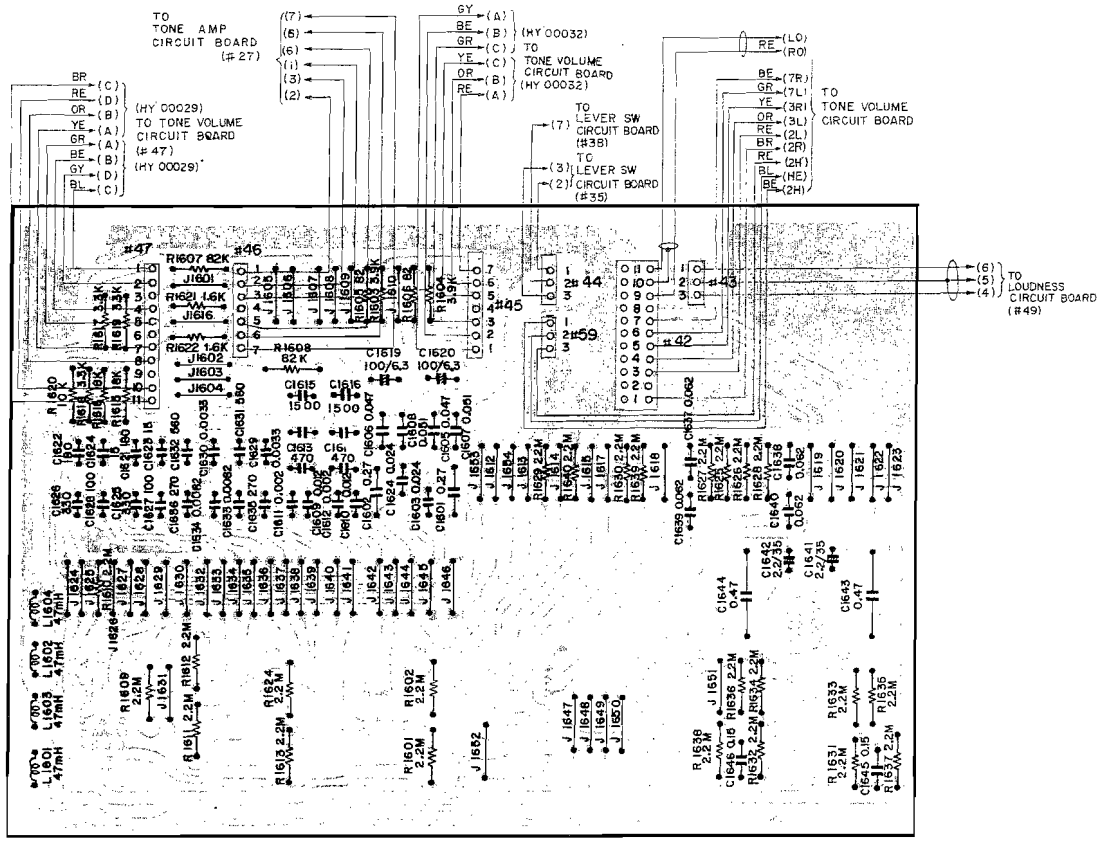


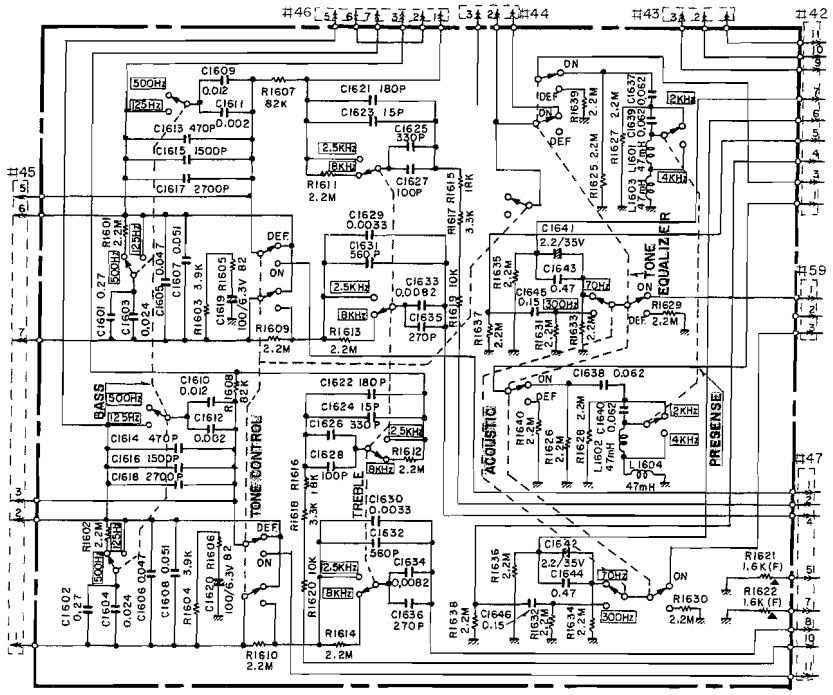
7. TONE VOLUME CIRCUIT BOARD NA06720



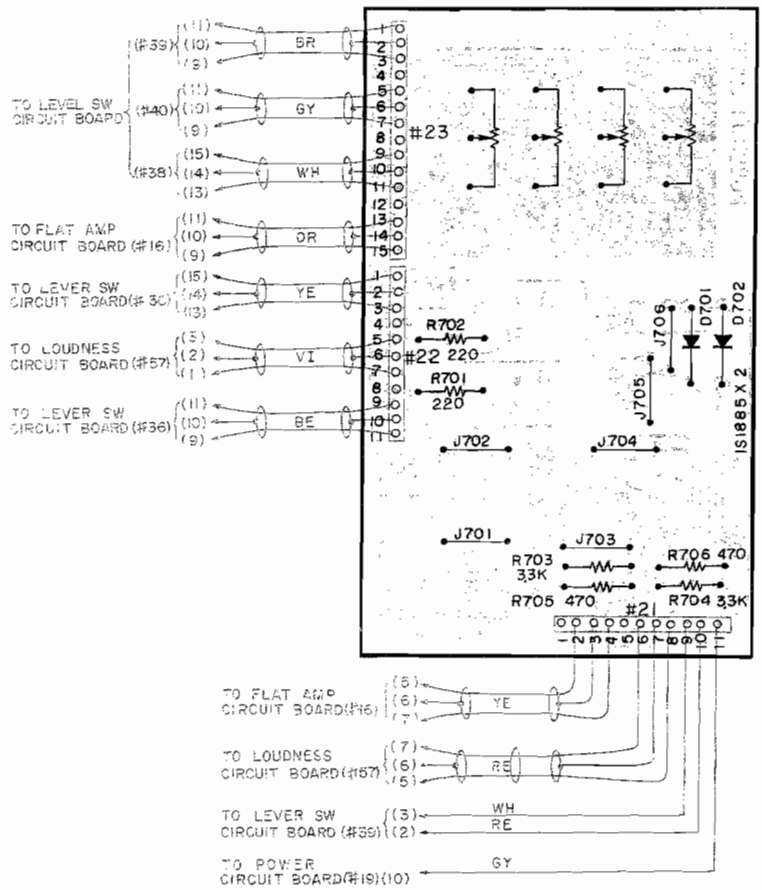


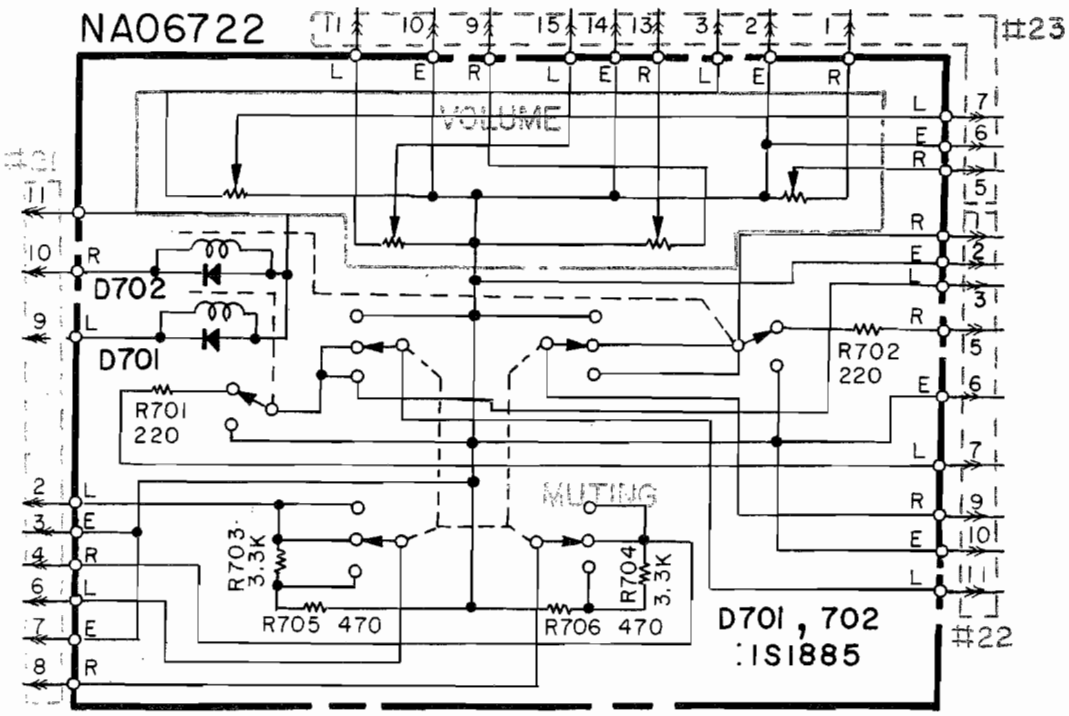
8. TONE PUSH SW CIRCUIT BOARD NA06721





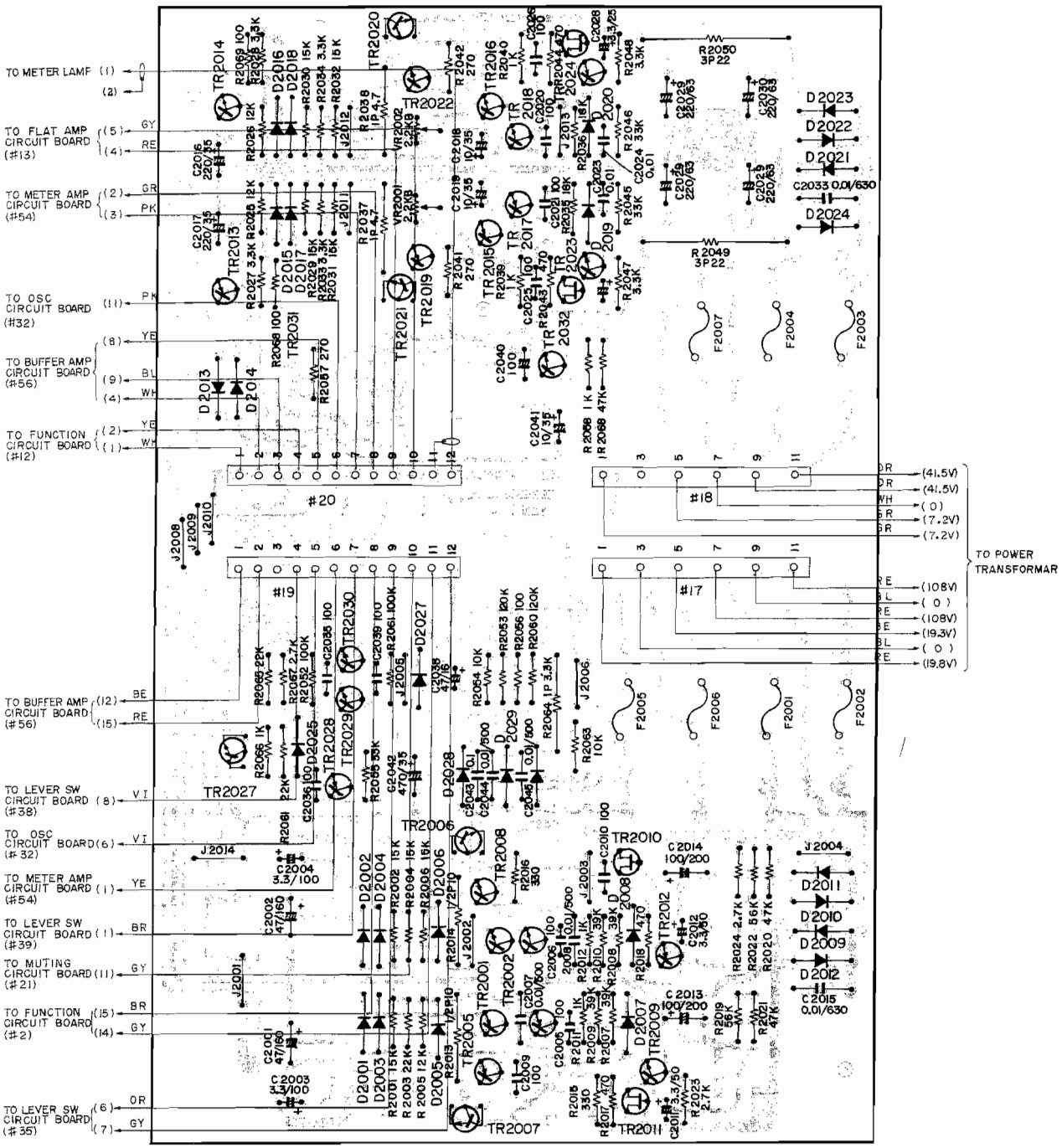
9. MOTING CIRCUIT BOARD NA06722



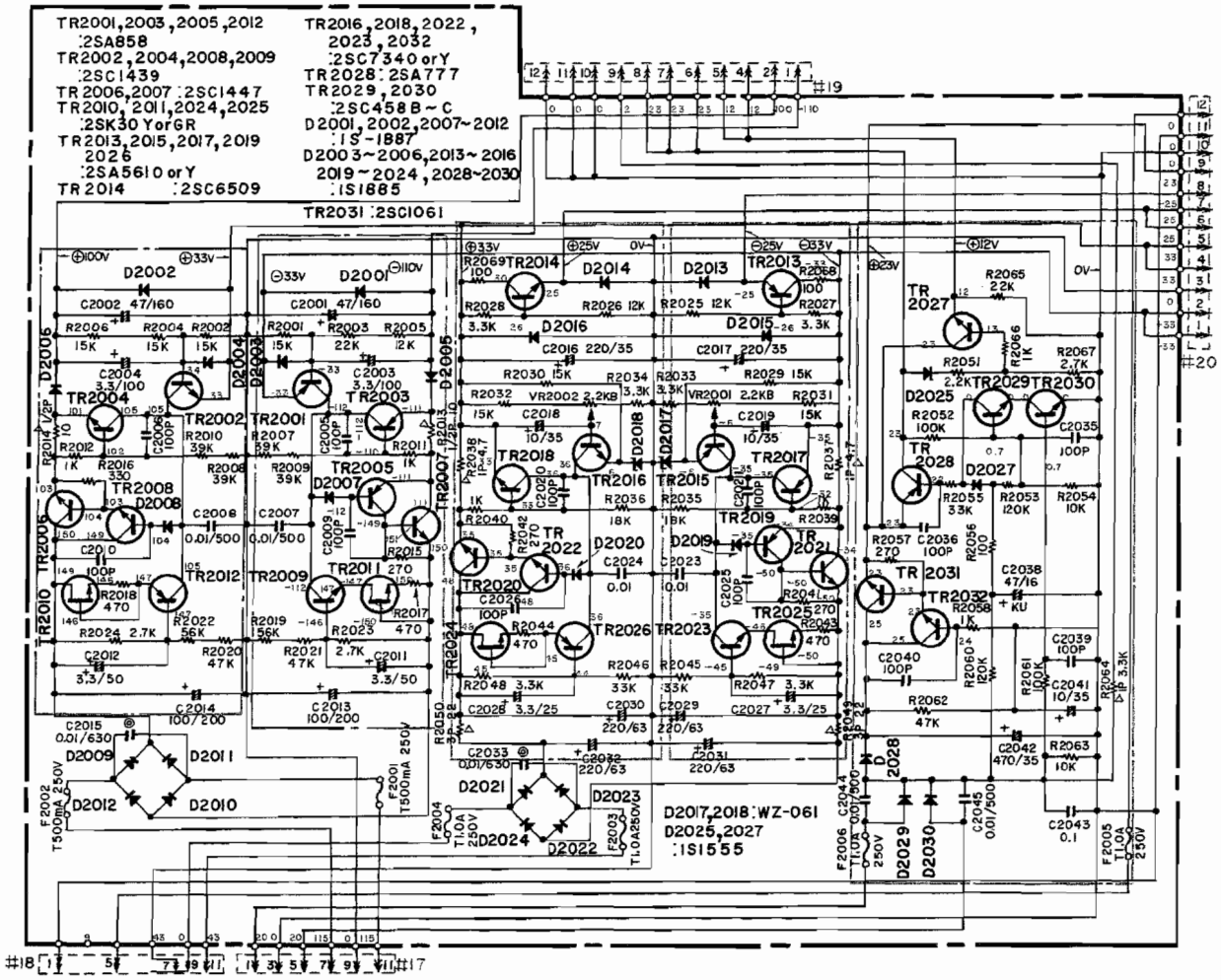


10. POWER SUPPLY CIRCUIT BOARD

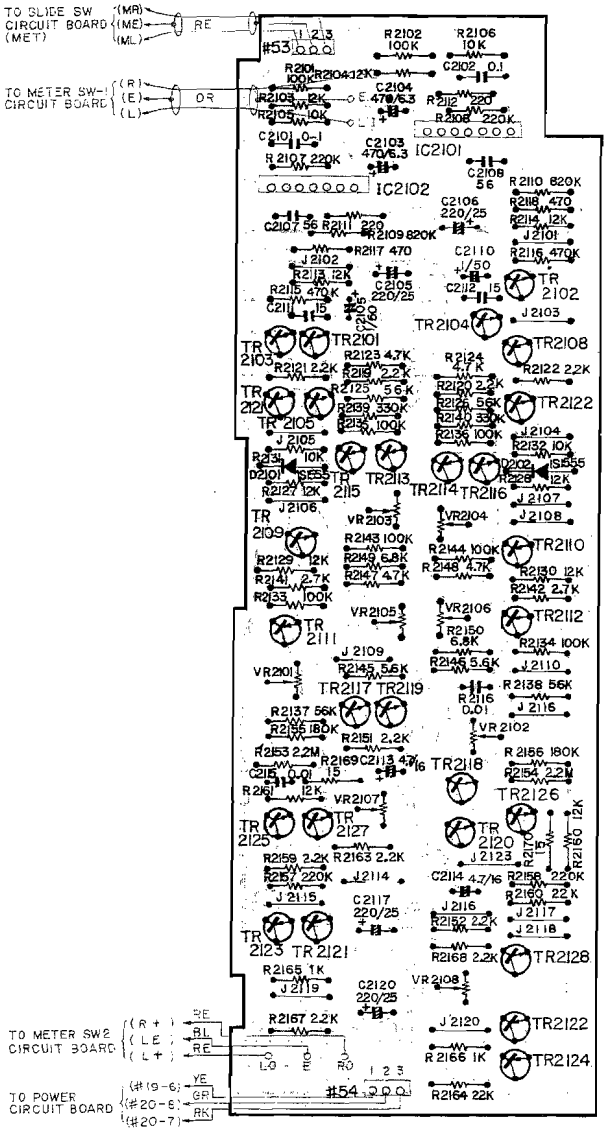
NA06745. US&CANADIAN MODELS
NA06724. EUROPIAN MODEL

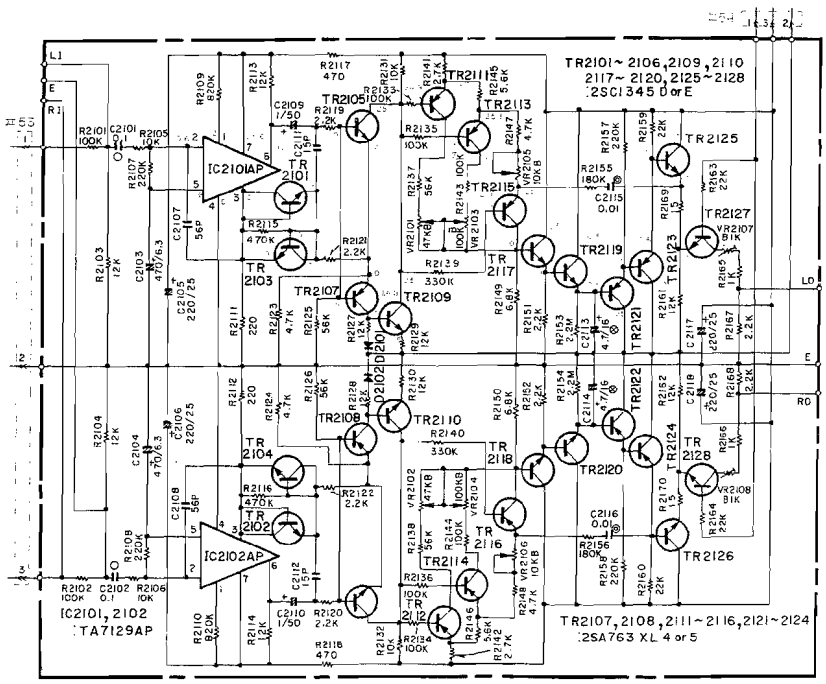


	F2001~2	F2003~7
U.S. & CANADIAN	VL TYPE 500mA 250V	UL TYPE IA 250V
EUROPIAN	TIME WGS T500mA 250V	TIME LWGS TIA 250V

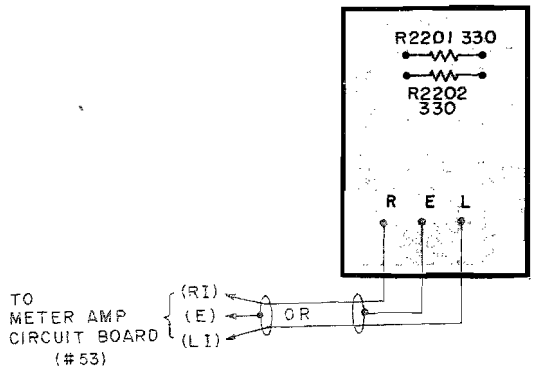

TR2001,2003,2005,2012 :2SA858
TR2002,2004,2008,2009 :2SC1439
TR2006,2007 :2SC1447
TR2010,2011,2024,2025 :2SK30 YorGR
TR2013,2015,2017,2019 2026 :2SA561O orY
TR2014 :2SC6509
TR2016,2018,2022, 2023,2032 :2SC7340 orY
TR2028 :2SA777
TR2029,2030 :2SC458B~C
D2001,2002,2007~2012 :1S-1887
D2003~2006,2013~2016 2019~2024,2028~2030 :1S1885
TR2031 :2SC1061
D2017,2018 :WZ-061
D2025,2027 :1S1555
#17
#18
#19
#20

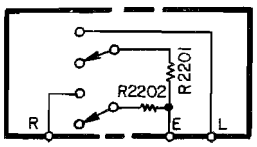
11. METER AMP CIRCUIT BOARD NA06725



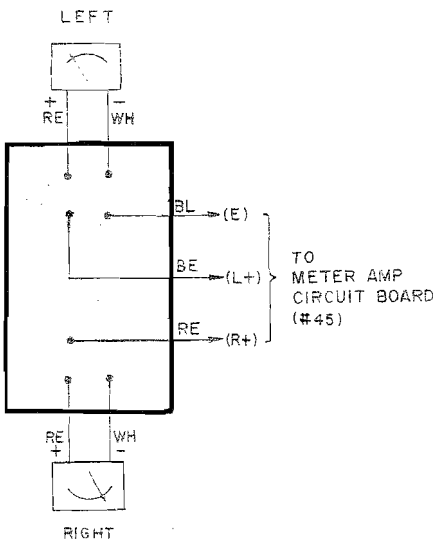


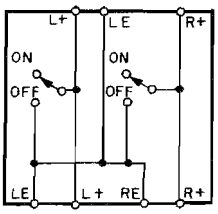
12. METER SW CIRCUIT BOARD NO1 NA06726



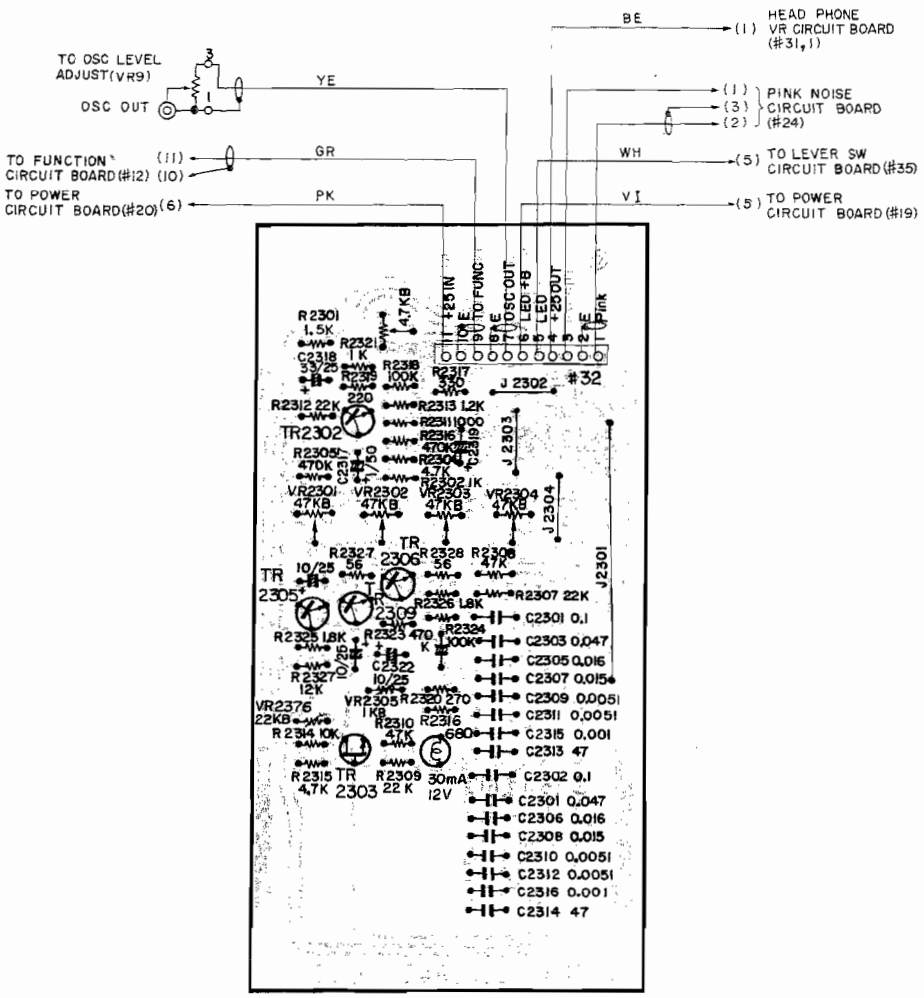


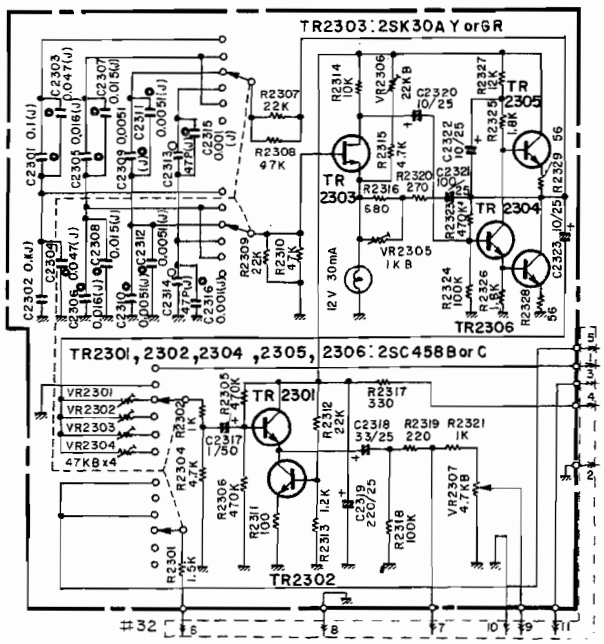
13. METER SW CIRCUIT BOARD NO2 NA06727



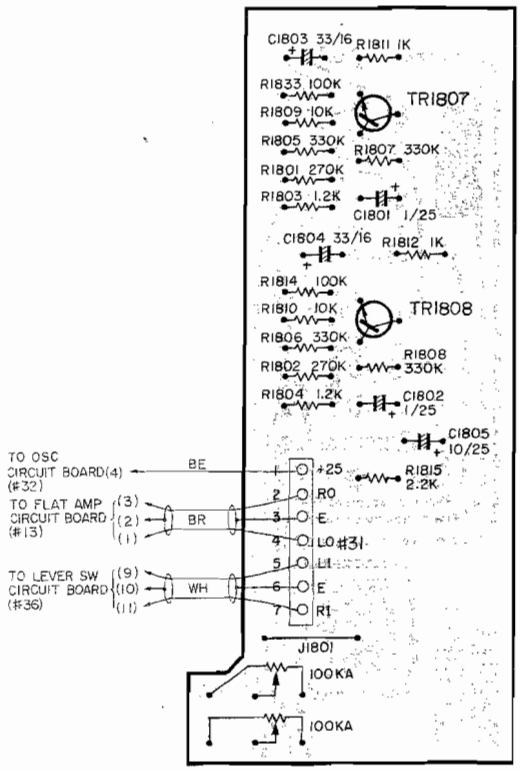


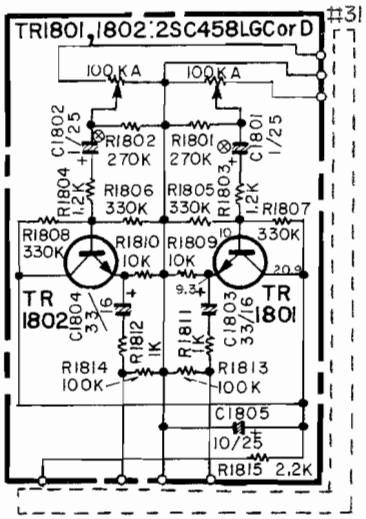
14. OSC CIRCUIT BOARD NA06728



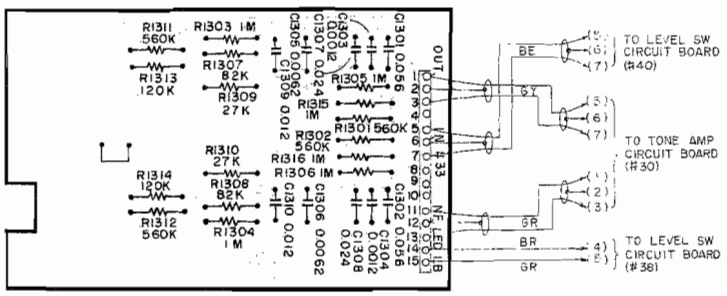


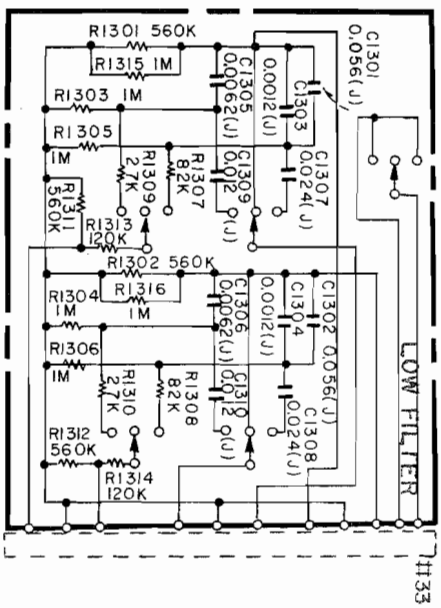
15. HEADPHONE VRCIRCUIT BOARD NA06729



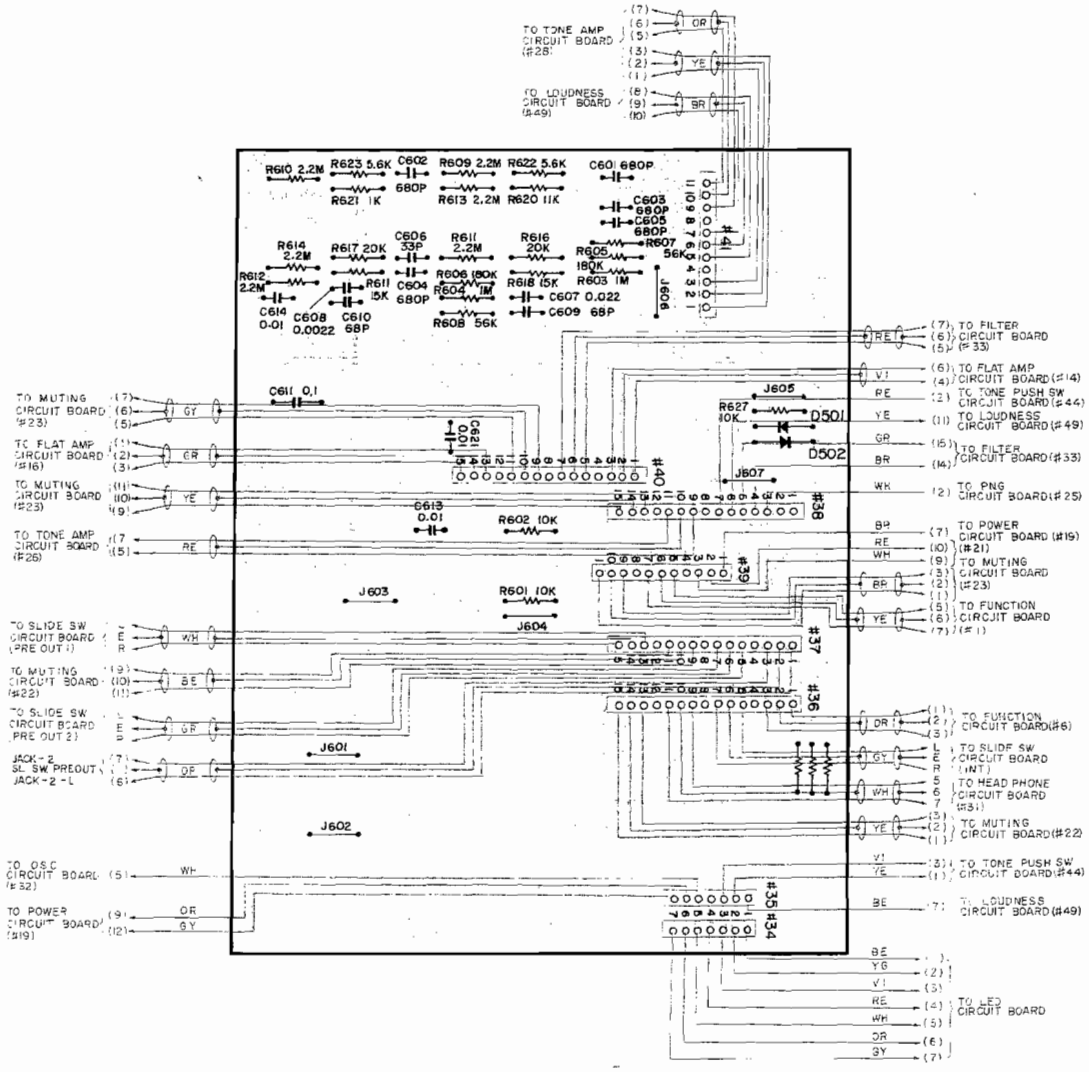


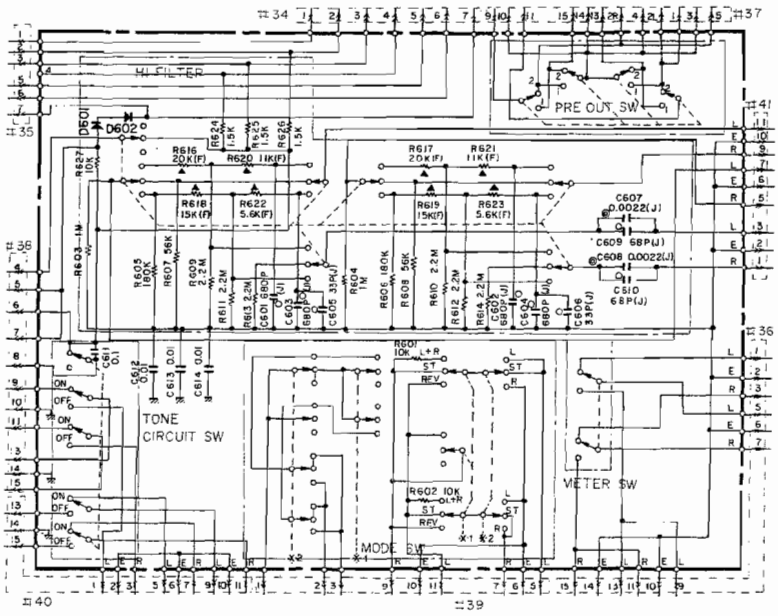
16. FILTER CIRCUIT BOARD NA06730



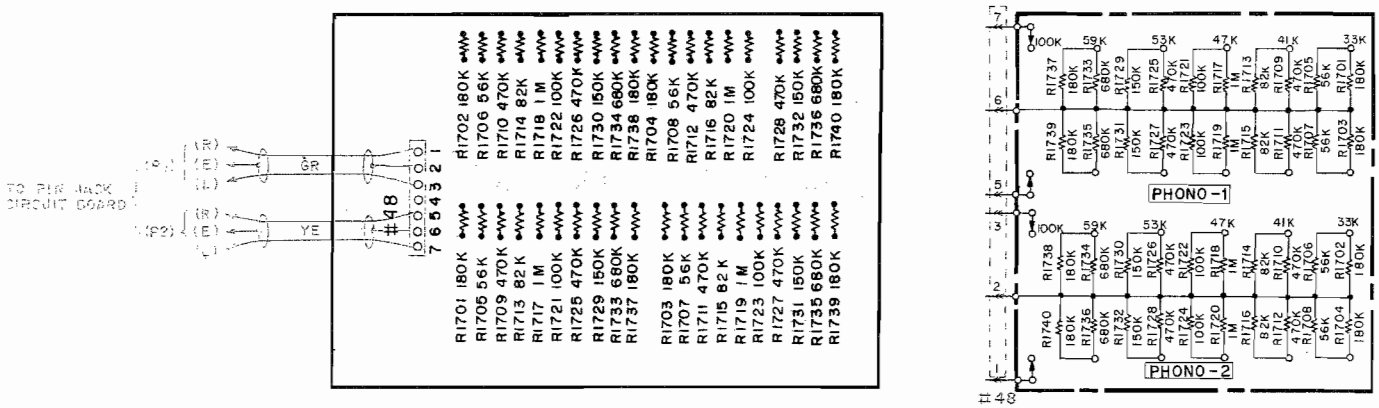


17. LEVER SW CIRCUIT BOARD NA06731

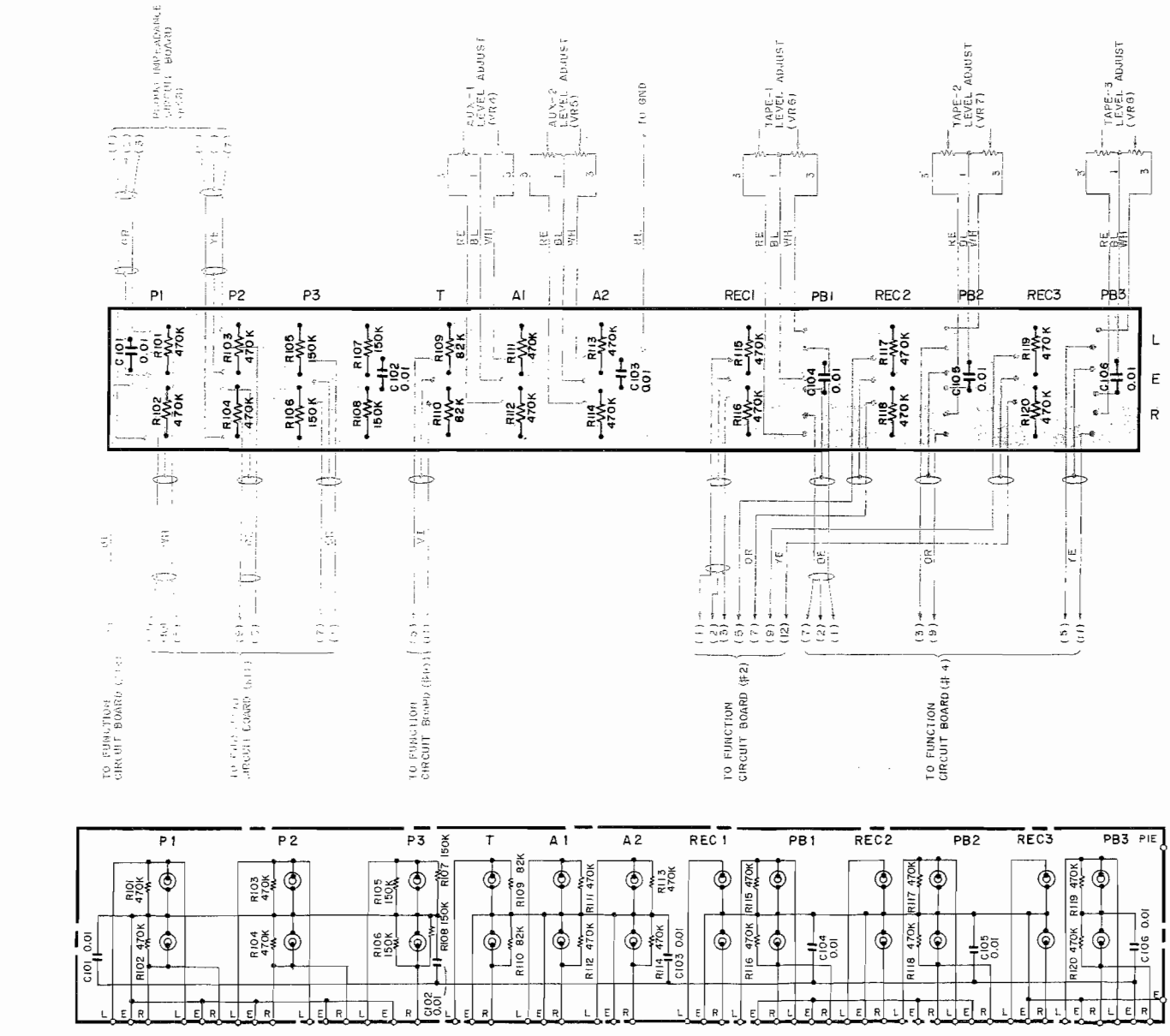




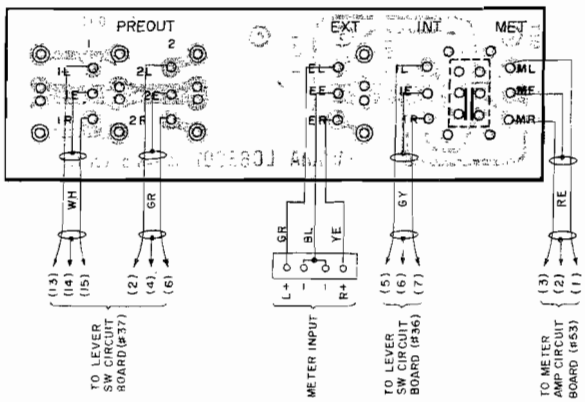
18. IMPEADANCE SELECTOR CIRCUIT BOARD NA06732

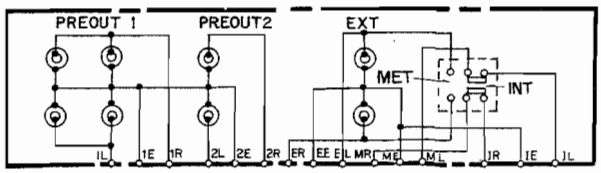


19. PIN JACK CIRCUIT BOARD NA06733

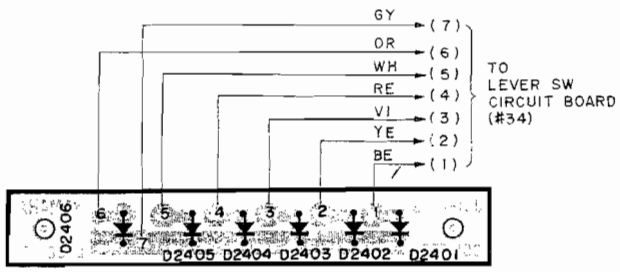


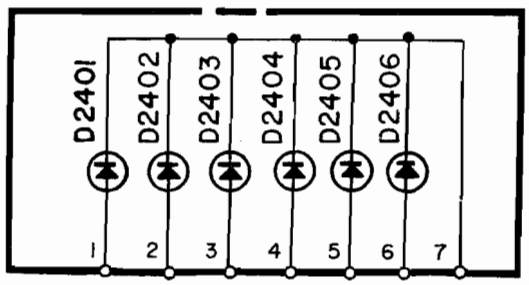
20. SLIDE SW CIRCUIT BOARD NA06734



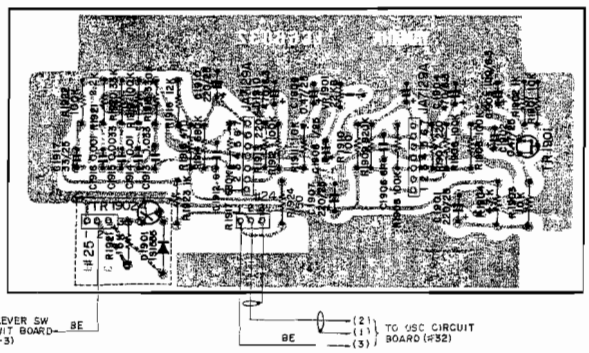


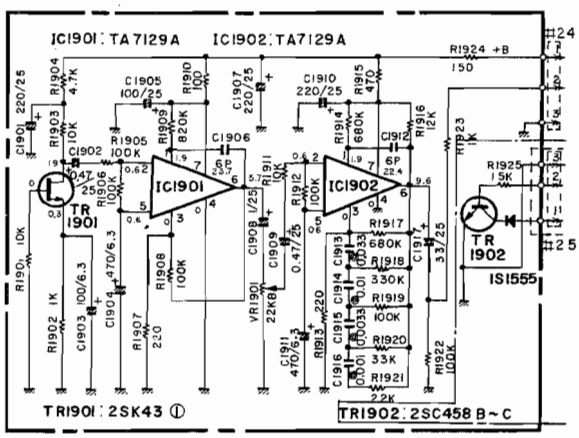
21. LED CIRCUIT BOARD NA06735



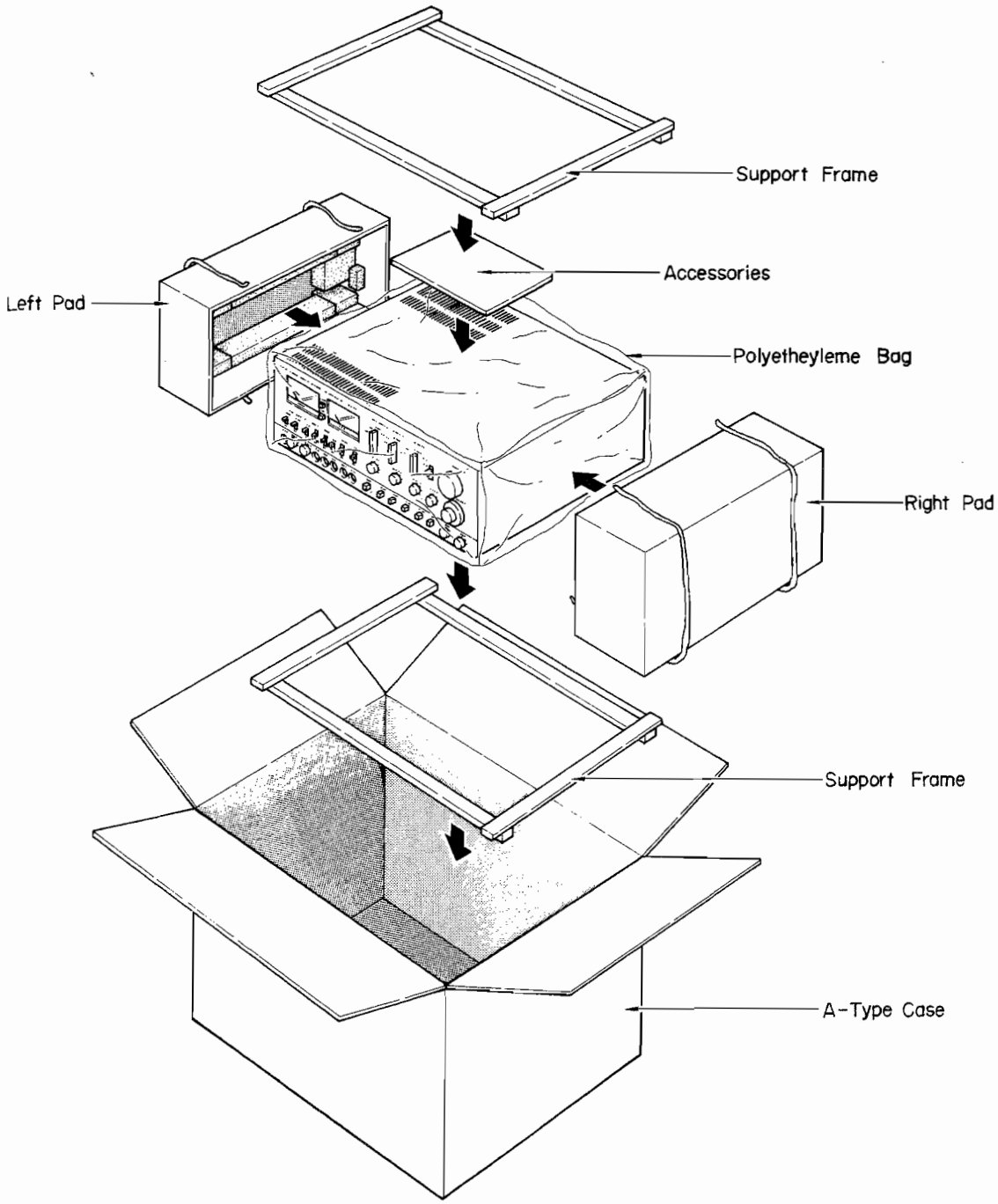


22. PINK NOISE CIRCUIT BOARD NA06739





PACKEAGE


Support Frame
Accessories
Left Pad
Polyetheyleme Bag
Right Pad
Support Frame
A-Type Case

TERMINAL CONNECTION

This is the list of sheet terminal connection
Each lead conneted to a left sheet terminal, is connetted to a right sheet terminal

Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
EQ Sheet	# 50	1	FUNCTION	7	1
(NA-06714-52)	50	2 (E)	〃	7	2 (E)
	50	3	〃	7	3
	50	4	〃	7	4
	50	5	〃	7	5
	50	6	〃	7	6
	51	1	FUNCTION	12	6
	51	3 (E)			
	52	1	BUFFER	56	13
	52	2	〃	56	10
	52	3	〃	56	1
	52	4	〃	56	5
	52	5	FUNCTION	12	5
	52	6 (E)			
	52	7	FUNCTION	12	8
	58	1	FUNCTION	12	9
	58	3 (E)			
BUFFER AMP	# 55	1	FUNCTION	3	1
(NA-06715-53)	55	2	〃	3	2
	55	3	〃	3	3
	55	4	〃	3	4
	55	5	〃	3	5
	55	6	〃	3	6
	56	1	EQ	52	3
	56	2	FLAT AMP	14	2
	56	3	TONE AMP	26	1
	56	4	POWER	20	2
	56	5	EQ	52	4
	56	6	FLAT AMP	14	1
	56	7	TONE AMP	26	2
	56	8	POWER	20	5
	56	9	〃	20	3
	56	10	EQ	52	2
	56	11	TONE AMP	26	3
	56	12	POWER	19	1
	56	13	EQ	52	1
	56	14	TONE AMP	26	4
	56	15	POWER	9	2

Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
Function	# 1	1	JACK	JACK-4 TAPE-3	1 · 6
(NA-06716-52)	1	2	〃	〃	7
	1	3	〃	〃	3 · 5
	1	4	FLAT AMP	16	8
	1	5	LEVER SW	39	5
	1	6	〃	39	6
	1	7	〃	39	7
	2	1	PIN JACK	PIN-JACK REC-1	L
	2	2 (E)	〃	〃	E
	2	3	〃	〃	R
	2	5	〃	P·J REC-2	L
	2	7	〃	〃	R
	2	9	〃	P·J REC-3	L
	2	10	JACK 3	JACK-3	6
	2	11 (E)	〃	〃	7 (E)
	2	12	PIN JACK	P·J REC-3	R
	2	13	JACK	JACK-3	5
	2	14	POWER	19	11
	2	15	〃	19	8
	3	1	BUFFER	55	1
	3	2	〃	55	2
	3	3	〃	55	3
	3	4	〃	55	4
	3	5	〃	55	5
	3	6	〃	55	6
	4	1	PIN JACK	P·J PB-1	L
	4	2 (E)	〃	〃	E
	4	3	〃	P·J PB-2	L
	4	5	〃	P·J PB-3	L
	4	7	〃	P·J PB-1	R
	4	9	〃	P·J PB-2	R
	4	11	〃	P·J PB-3	R
	5	1	TAPE 1	VR-6	2′
	5	2 (E)			
	5	3	TAPE 2	VR-7	2′
	5	5	TAPE 1	VR-6	2
	5	6 (E)			
	5	7	TAPE 2	VR-7	2
	7	1	EQ	50	1
	7	2	〃	50	2
	7	3	〃	50	3
	7	4	〃	50	4

Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
Function	# 7	5	EQ	50	5
(NA−06716−52)	7	6	〃	50	6
	8	1	JACK	JACK-6	4・6
	8	2 (E)			
	8	3	JACK	JACK-5	4・6
	9	1	PHONO 3	VR-3	3
	9	2 (E)			
	9	3	PHONO 2	VR-2	3
	9	4 (E)			
	9	5	PHONO 1	VR-1	3
	9	7	PHONO 3	VR-3	3′
	9	9	PHONO 2	VR-2	3′
	9	10(E)			
	9	11	PHONO 1	VR-1	3′
	10	1	AUX-1	VR-4	2
	10	2 (E)			
	10	3	AUX-2	VR-5	2
	10	5	PIN JACK	P・J T	L
	10	7	AUX-1	VR-4	2′
	10	9	AUX-2	VR-5	2′
	10	11	PIN JACK	P・J T	R
	6	1	LEVER SW	36	1
	6	2 (E)	〃	36	2
	6	3	〃	36	3
	11	1	PIN JACK	P・J P3	L
	11	3	〃	P・J P2	L
	11	5	〃	P・J P1	L
	11	7	〃	P・J P3	R
	11	9	〃	P・J P2	R
	11	10	〃	P・J P1	E
	11	11	〃	P・J P1	R
	12	1	POWER	20	1
	12	2	〃	20	4
	12	5	EQ	52	5
	12	6	〃	51	1
	12	7	PIN JACK	P・J P1	E
	12	8	EQ	52	7
	12	9	〃	58	1
	12	10(E)	OSC	32	10
	12	11	〃	32	9
FLAT AMP	# 13	1	H・P・VR	31	4
(NA−06717−53)	13	2 (E)	〃	31	3 (E)
	13	3	〃	31	2
	13	4	POWER	20	9

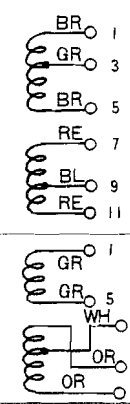
Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
FLAT AMP	# 13	5	POWER	20	10
(NA−06717−53)					
	14	1	Buffer	56	6
	14	2	〃	56	2
	14	4	LEVER SW	40	1
	14	6	〃	40	3
	15	1	PHONES	JACK-2	6
	15	2 (E)	〃	〃	7
	15	3	〃	〃	5
	16	1	LEVER SW	40	13
	16	2 (E)	〃	40	14
	16	3	〃	40	15
	16	5	MUTING	21	2
	16	6 (E)	〃	21	3
	16	7	〃	21	4
	16	8	FUNCTION	1	4
	16	9	MUTING	23	15
	16	10(E)	〃	23	14
	16	11	〃	23	13
LOUDNESS	# 49	4	TONE Push	43	3
(NA−06718−52)	49	5 (E)	〃	43	2
	49	6	〃	43	1
	49	7	LEVER SW	35	1
	49	8	〃	41	5
	49	9 (E)	〃	41	6
	49	10	〃	41	7
	49	11	〃	38	6
	57	1	MUTING	22	5
	57	2 (E)	〃	22	6
	57	3	〃	22	7
	57	5	〃	21	8
	57	6 (E)	〃	21	7
	57	7	〃	21	6
TONE AMP	# 26	1	Buffer	56	3
(NA−06719−52)	26	2	〃	56	7
	26	3	〃	56	11
	26	4	〃	56	14
	26	5	LEVER SW	38	9
	26	7	〃	38	11
	27	1	TONE PUSH	46	1
	27	2	〃	46	3
	27	3 (E)	〃	46	2 (E)
	27	5 (E)	〃	46	6 (E)

Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
TONE AMP	# 27	6	TONE PUSH	46	5
(NA—06719—52)	27	7	〃	46	7
	28	1	LEVER SW	41	3
	28	2	〃	41	2
	28	3	〃	41	1
	28	5	〃	41	11
	28	6	〃	41	10
	28	7	〃	41	9
	29	1	TONE VOLUME		1R
	29	2 (E)	〃		E
	29	3	〃		1L
	29	5	〃		0R
	29	6 (E)	〃		E
	29	7	〃		0L
	30	1	Filter	33	11
	30	2 (E)	〃	33	12(E)
	30	3	〃	33	13
	30	5	〃	33	1
	30	6 (E)	〃	33	2 (E)
	30	7	〃	33	3

Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
TONE VOLUME		0L	TONE AMP	29	7
(NA—06720—52)		0R	〃	29	5
		1L	〃	29	3
		1R	〃	29	1
		2L	TONE PUSH	42	3
		3L	〃	42	5
		7L	〃	42	7
		L0	〃	42	11
		R0	〃	42	9
		2H′	〃	59	3
		E(BL)	〃	59	2
		2R	〃	42	1
		3R	〃	42	4
		7R	〃	42	6
		2H	〃	59	1
	HY-00032 (BASS)	A	TONE PUSH	45	7
	〃	B	〃	45	6
	〃	C	〃	45	5
	HY′-00032	A	TONE PUSH	45	1
	〃	B	〃	45	2
	〃	C	〃	45	3
	HY-00029 (Treble)	A	TONE PUSH	47	5

Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
TONE VOLUME	HY-00029 (Treble)	B	TONE PUSH	47	4
(NA—06720—52)	〃	C	〃	47	1
	〃	D	〃	47	2
	HY′-00029	A	TONE PUSH	47	7
	〃	B	〃	47	8
	〃	C	〃	47	11
	〃	D	〃	47	10
				2	
TONE PUSH	# 42	1	TONE VOLUME	TONE VOLUME	2R
(NA—06721—52)	42	3	〃	〃	2L
	42	4	〃	〃	3R
	42	5	〃	〃	3L
	42	6	〃	〃	7R
	42	7	〃	〃	7L
	42	9	〃	〃	R0
	42	10(E)	〃	〃	(E)
	42	11	〃	〃	L0
	43	1	Loudness	49	6
	43	2 (E)	〃	49	5 (E)
	43	3	〃	49	4
	44	1	LEVER SW	35	2
	44	2	〃	38	7
	44	3	〃	35	3
	45	1	TONE VOLUME	TONE VOLUME	A HY-00032 BASS
	45	2	〃	〃	B 〃
	45	3	〃	〃	C 〃
	45	5	〃	〃	C HY-00032
	45	6	〃	〃	B 〃
	45	7	〃	〃	A 〃
	46	1	TONE AMP	27	1
	46	2 (E)	〃	27	3 (E)
	46	3	〃	27	2
	46	5	〃	27	6
	46	6 (E)	〃	27	5 (E)
	46	7	〃	27	7
	47	1	TONE VOLUME	TONE VOLUME	C HY-00029 TREBLE
	47	2	〃	〃	D 〃
	47	4	〃	〃	B 〃
	47	5	〃	〃	A 〃
	47	7	〃	〃	AHY′00029
	47	8	〃	〃	B 〃
	47	10	〃	〃	D 〃
	47	11	〃	〃	C 〃

Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
TONE PUSH	# 59	1	TONE VOLUME	TONE VOLUME	2H
(NA-06721-52)	59	2	〃	〃	E
	59	3	〃	〃	2H'
MUTING	# 21	2	FLAT AMP	16	5
(NA-06722-52)	21	3 (E)	〃	16	6 (E)
	21	4	〃	16	7
	21	6	LOUDNESS	57	7
	21	7 (E)	〃	57	6 (E)
	21	8	〃	57	5
	21	9	LEVER SW	39	3
	21	10	〃	39	2
	21	11	POWER	19	10
	22	1	LEVER SW	36	15
	22	2 (E)	〃	36	14 (E)
	22	3	〃	36	13
	22	5	LOUDNESS	57	1
	22	6 (E)	〃	57	2 (E)
	22	7	〃	57	3
	22	9	LEVER SW	37	11
	22	10 (E)	〃	37	10 (E)
	22	11	〃	37	9
	23	1	LEVER SW	39	11
	23	2 (E)	〃	39	10 (E)
	23	3	〃	39	9
	23	5	〃	40	11
	23	6 (E)	〃	40	10 (E)
	23	7	〃	40	9
	23	9	〃	38	15
	23	10 (E)	〃	38	14 (E)
	23	11	〃	38	13
	23	13	FLAT AMP	16	11
	23	14 (E)	〃	16	10 (E)
	23	15	〃	16	9
POWER	# 17	1			
(NA-06723-52)	17	3			
	17	5			
	17	7			
	17	9			
	17	11			
	18	1			
	18	5			
	18	7			
	18	9			
	18	11			



Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
POWER	# 19	1	BUFFER	56	12
(NA-06723-52)	19	2	〃	56	15
	19	4	LEVER SW	38	8
	19	5	OSC	32	6
	19	6	METTER	54	1
	19	7	LEVER SW	39	1
	19	8	FUNCTION	2	15
	19	9	LEVER SW	35	6
	19	10	MUTING	21	11
	19	11	FUNCTION	2	14
	19	12	LEVER SW	35	7
	20	1	FUNCTION	12	1
	20	2	Buffer	56	4
	20	3	〃	56	9
	20	4	FUNCTION	12	2
	20	5	Buffer	56	8
	20	6	OSC	32	11
	20	7	METTER	54	3
	20	8	〃	54	2
	20	9	FLAT AMP	13	4
	20	10	〃	13	5
	20	11 (E)	METER LAMP	METER LAMP R	2 (E)
	20	12	〃	〃	1
METER AMP	# 45	Lo	METER SW-2	METER SW-2	L+
(NA-06725-53)	45	E	〃	〃	LE
	45	Ro	〃	〃	R+
	53	1	SLIDE SW	SLIDE SW	ML
	53	2	〃	〃	ME
	53	3	〃	〃	MR
	53	LI	METER ATT SW-1		L
	53	E	〃		E
	53	RI	〃		R
	54	1	POWER	19	6
	54	2	〃	20	8
	54	3	〃	20	7
METER ATT SW 1		L	METER AMP	53	LI
(NA-06726-53)		E	〃	53	E
		R	〃	53	RI
METER ATT SW 2		L+	METER AMP	45	LO
(NA-06727-53)		LE	〃	45	E
		R+	〃	45	RO

Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
OSC	# 32	1	PNO	24	2
(NA-06728-53)	32	2 (E)	〃	24	3 (E)
	32	3	〃	24	1
	32	4	H·P VR	31	1
	32	5	LEVER SW	35	5
	32	6	POWER	19	5
	32	7	VR-9 (OSC. OUT)	VR-9	3
	32	8 (E)		11	1 (E)
	32	9	FUNCTION	12	11
	32	10(E)	〃	12	10(E)
	32	11	POWER	20	6
H.P VR	# 31	1	OSC	32	4
(NA-06729-52)	31	2	FLAT AMP	13	3
	31	3	〃	13	2
	31	4	〃	13	1
	31	5	LEVER SW	36	9
	31	6	〃	36	10
	31	7	〃	36	11
FILTER	# 33	1	TONE AMP	30	5
(NA-06730-52)	33	2 (E)	〃	30	6 (E)
	33	3	〃	30	7
	33	5	LEVER SW	40	5
	33	6 (E)	〃	40	6 (E)
	33	7	〃	40	7
	33	11	TONE AMP	30	1
	33	12(E)	〃	30	2 (E)
	33	13	〃	30	3
	33	14	LEVER SW	38	4
	33	15	〃	38	5
LEVER SW	# 34	1	LED	LED	1
(NA-06731-53)	34	2	〃	〃	2
	34	3	〃	〃	3
	34	4	〃	〃	4
	34	5	〃	〃	5
	34	6	〃	〃	6
	34	7	〃	〃	7
	35	1	LOUDNESS	49	7
	35	2	TONE PUSH SW	44	1
	35	3	〃	44	3
	35	5	OSC	32	5
	35	6	POWER	19	9
	35	7	〃	19	12
	36	1	FUNCTION	6	1

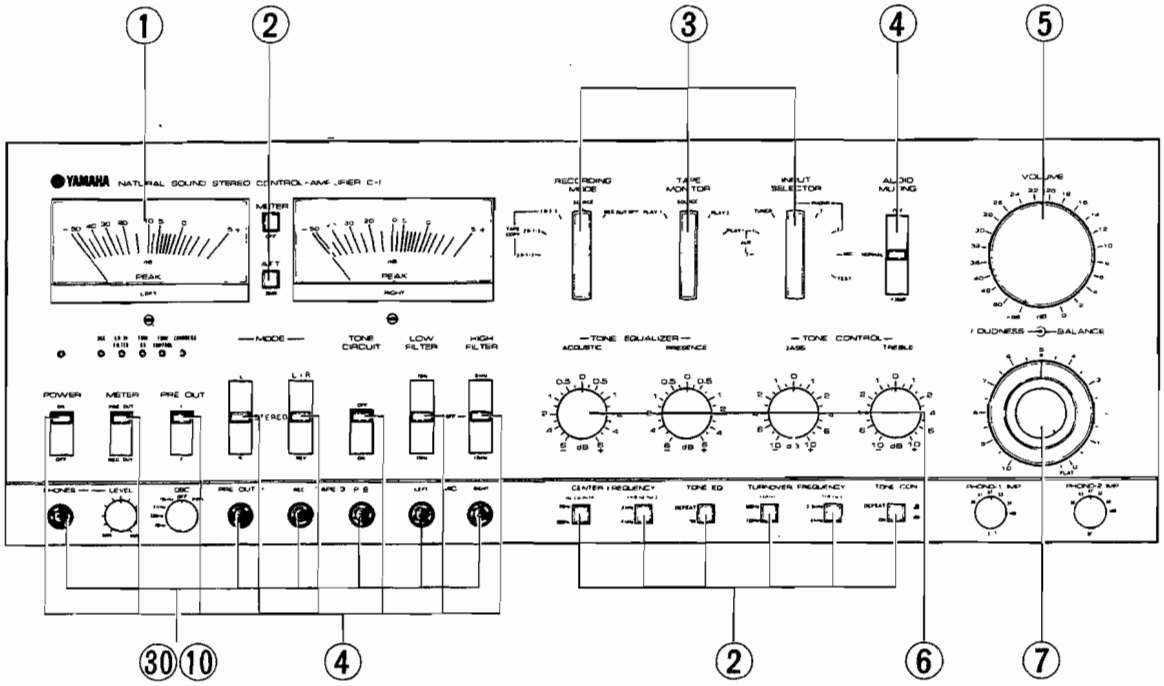
Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
LEVER SW	# 36	2 (E)	FUNCTION	6	2 (E)
(NA-06731-53)	36	3	〃	6	3
	36	5	SLIDE SW	SL SW	1 L
	36	6 (E)	〃	〃	E
	36	7	〃	〃	1 R
	36	9	H·P VR	31	5
	36	10(E)	〃	31	6 (E)
	36	11	〃	31	7
	36	13	MUTING	22	3
	36	14(E)	〃	22	2 (E)
	36	15	〃	22	1
	37	1	JACK-1	JACK-1	6
	37	2	SLIDE SW	PRE OUT-2	L
	37	3	JACK-1	JACK-1	7
	37	4	SLIDE SW	PRE OUT-2	E
	37	5	JACK-1	JACK-1	5
	37	6	SLIDE SW	PRE OUT-2	R
	37	9	MUTING	22	11
	37	10(E)	〃	22	10(E)
	37	11	〃	22	9
	37	13	SLIDE SW	PRE OUT-1	L
	37	14(E)	〃	〃	E
	37	15	〃	〃	R
	38	4	FILTER	33	14
	38	5	〃	33	15
	38	6	LOUDNESS	49	11
	38	7	TONE PUSH	44	2
	38	8	POWER	19	4
	38	9	〃	26	5
	38	10(E)			
	38	11	TONE AMP	26	7
	38	13	MUTING	23	11
	38	14(E)	〃	23	10(E)
	38	15	〃	23	9
	39	1	POWER	19	7
	39	2	MUTING	21	10
	39	3	〃	21	9
	39	5	FUNCTION	1	5
	39	6 (E)	〃	1	6 (E)
	39	7	〃	1	7
	39	9	MUTING	23	3
	39	10	〃	23	2
	39	11	〃	23	1
	40	1	FLAT AMP	14	4
	40	2			
	40	3	FLAT AMP	14	6
	40	5	FILTER	33	5

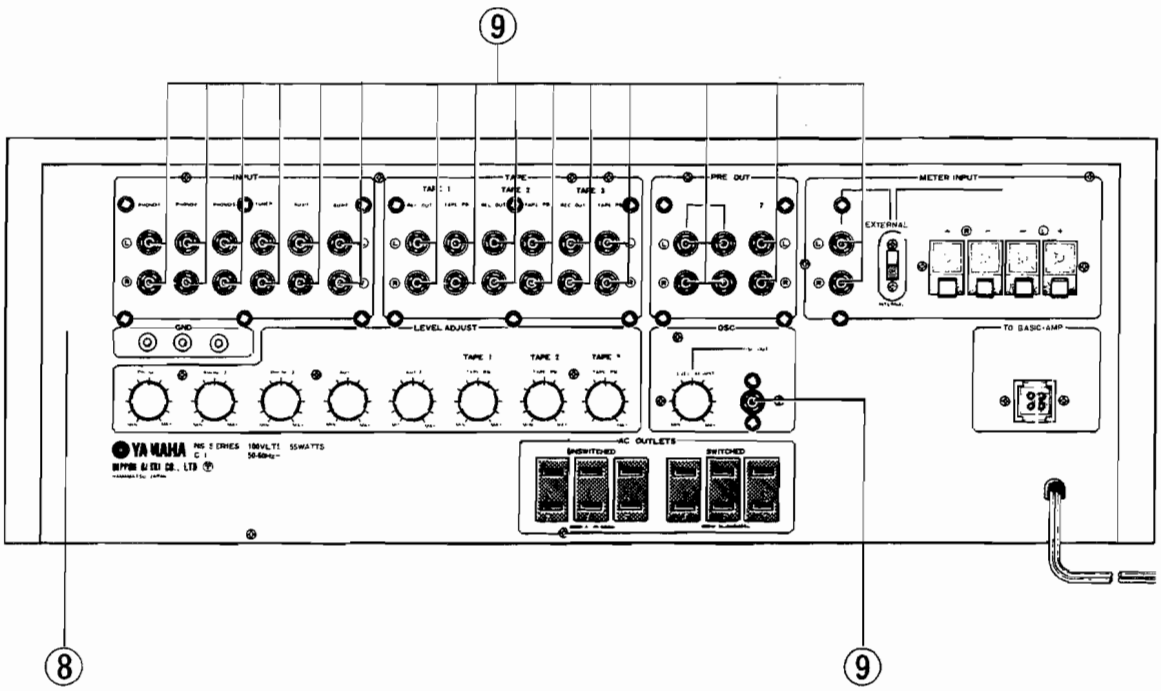
Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
LEVER SW	# 40	6 (E)	FILTER	33	6 (E)
(N A – 06731 – 53)	40	7	〃	33	7
	40	9	MUTING	23	7
	40	10(E)	〃	23	6 (E)
	40	11	〃	23	5
	40	13	FLAT AMP	16	1
	40	14(E)	〃	16	2 (E)
	40	15	〃	16	3
	41	1	TONE AMP	28	3
	41	2 (E)	〃	28	2 (E)
	41	3	〃	28	1
	41	5	LOUDNESS	49	8
	41	6 (E)	〃	49	9 (E)
	41	7	〃	49	10
	41	9	TONE AMP	28	7
	41	10(E)	〃	28	6 (E)
	41	11	〃	28	5
PHONO IMP	# 48	1	PIN JACK	P 1	R
(N A – 06732 – 52)	48	2 (E)	〃	〃	E
	48	3	〃	〃	L
	48	5	〃	P 2	R
	48	6 (E)	〃	〃	E
	48	7	〃	〃	L
PIN JACK	P1	L / E / R WH	FUNCTION	11	5
(N A – 06733 – 52)	P1		〃	11	10(E)
	P1		〃	11	11
	P1	L / E / R GR	PHONO IMP	48	3
	P1		〃	48	2
	P1		〃	48	1
	P2	L / E / R RE	FUNCTION	11	3
	P2				
	P2		FUNCTION	11	9
	P2	L / E / R YE	PHONO IMP	48	7
	P2		〃	48	6
	P2		〃	48	5
	P3	L / E / R GR	FUNCTION	11	1
	P3				
	P3		FUNCTION	11	7
	T	L / E / R VI	FUNCTION	10	5
	T				
	T		FUNCTION	10	11
	A1		AUX 1	VR4	3

Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
PIN JACK	A 1	E (BL)	AUX 1	VR-4	1
(N A – 06733 – 52)	A 1	R (RE)	〃	〃	3′
	A 2	L (WH)	AUX 2	VR-5	3
	A 2	E (BL)	〃	〃	1 (E)
	A 2	R (RE)	〃	〃	3′
	REC 1	L (WH)	FUNCTION	2	1
	REC 1	E (BL)	〃	2	2 (E)
	REC 1	R (RE)	〃	2	3
	PB-1	L (WH)	TAPE 1	TAPE-1 (VR-6)	3
	PB-1	E (BL)	〃	〃	1
	PB-1	R (RE)	〃	〃	3′
	PB-1	L / E / R BE	FUNCTION	4	1
	PB-		〃	4	2 (E)
	PB-1		〃	4	7
	REC 2	L / E / R OR	FUNCTION	2	5
	REC 2				
	REC 2		FUNCTION	2	7
	PB-2	L (WH)	TAPE 2	VR-7	3
	PB-2	E (BL)	〃	〃	1
	PB-2	R (RE)	〃	〃	3′
	PB-2	L / E / R OR	FUNCTION	4	3
	PB-2				
	PB-2		FUNCTION	4	9
	REC 3	L / E / R YE	FUNCTION	2	9
	REC 3				
	REC 3		FUNCTION	2	12
	PB-3	L (WH)	TAPE 3	VR-8	3
	PB-3	E (BL)	〃	〃	1 (E)
	PB-3	R (RE)	〃	〃	3′
	PB-3	L / E / R YE	FUNCTION	4	5
	PB-3				
	PB-3		FUNCTION	4	11
SLIDE SW		1L	LEVER SW	37	13
(N A – 06734 – 4z)		1E	〃	37	14(E)
		1R	〃	37	15
		2R	LEVER SW	37	6
		2E	〃	37	4 (E)
		2L	〃	37	2
		ER	METER INPUT	METER INPUT	R+
		EE	〃	〃	R–

Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.	Sheet Name	Connecter No.	Terminal No.
SLIDE SW		EL	METER INPUT	METER INPUT	L+						
(NA-06734-4z)											
		MR	METER	53	3						
		ME	〃	53	2						
		ML	〃	53	1						
		IR	LEVER SW	36	7						
		IE	〃	36	6 (E)						
		IL	〃	36	5						
LED		1	LEVER SW	34	1						
(NA-06735-4z)		2	〃	34	2						
		3	〃	34	3						
		4	〃	34	4						
		5	〃	34	5						
		6	〃	34	6						
		7	〃	34	7						
PNG	24	1	OSC	32	3						
(NA-06737-52)	24	2	〃	32	1						
	24	3 (E)	〃	32	2 (E)						

PARTS LIST





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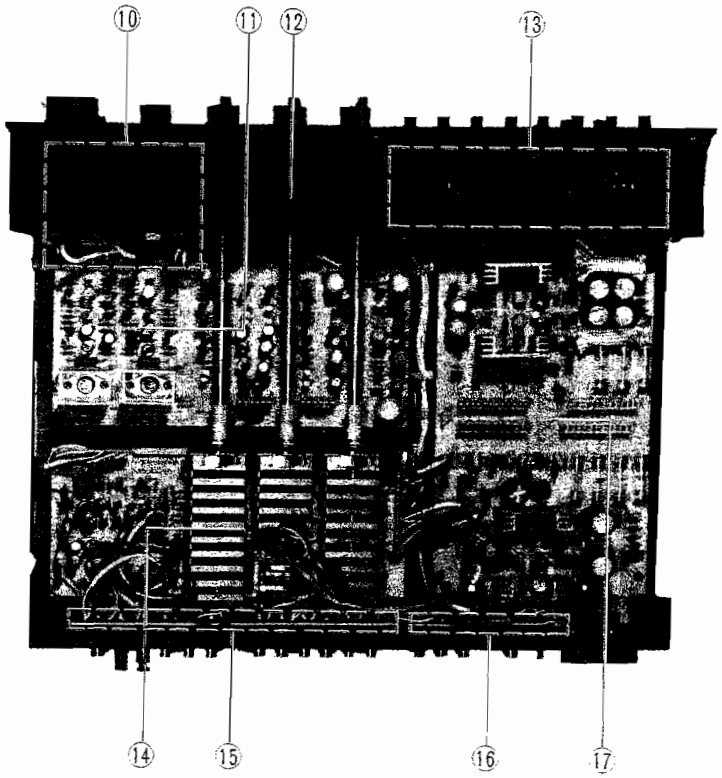
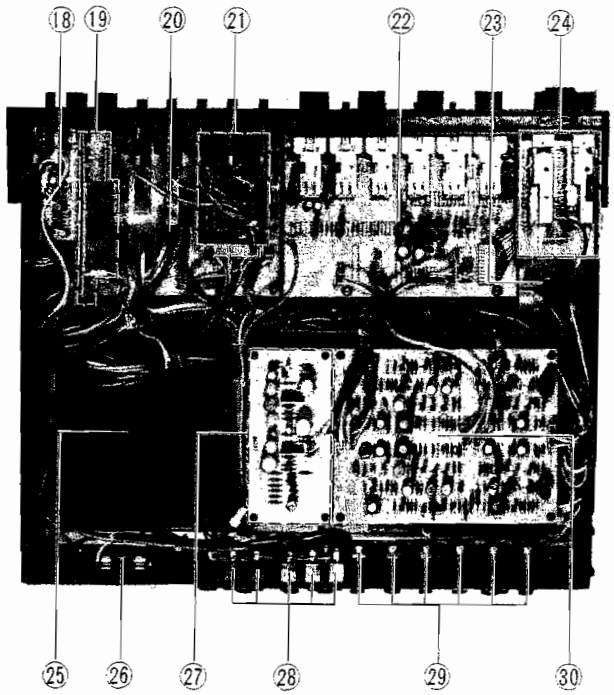
No. 1201 ~





Ref. No.	Part No.	Description			Remarks	Common Models	
	32 00 00 NA 06 71 40	Equalizer Circuit Board #65813		イコライザーシート			
	42 00 00 FZ 00 02 80	Film Capacitor	0.12μF ±2%	フィルムコン			
	42 00 00 HZ 00 07 60	Metal Film Resistor	1.02KΩ± 1% (F type)	金属被膜抵抗			
	42 00 00 HZ 00 07 70	—do.—	1.74KΩ —do.—	〃			
	42 00 00 HZ 00 07 80	—do.—	2.74KΩ —do.—	〃			
	42 00 00 HZ 00 07 90	—do.—	22.6KΩ —do.—	〃			
	42 00 00 HU 87 73 00	—do.—	30KΩ —do.—	〃			
	42 00 00 Hu 87 74 70	—do.—	47KΩ —do.—	〃			
	42 00 00 Hu 87 75 60	—do.—	56KΩ —do.—	〃			
	42 00 00 Hu 87 78 20	—do.—	82KΩ —do.—	〃			
	42 00 00 HZ 00 08 00	—do.—	820KΩ ±5% (J type)	〃			
	42 00 00 HV 87 81 50	—do.—	RP42A 150KΩ± 1%	〃			
	42 00 00 HY 00 01 60	Variable Resistor	CR-31R B-22KΩ	メタルグレースVR			
	42 00 00 iA 07 63 90	Transistor	2SA763	トランジスター			
	42 00 00 iC 13 45 40	—do.—	2SC1345	〃			
	42 00 00 iC 14 39 00	—do.—	2SC1439	〃	Made by Sony		
	42 00 00 iE 10 03 30	FET	2SK43①	FET	—do.—		
	42 00 00 iE 10 03 40	—do.—	2SK43R③	〃	—do.—		
	42 00 00 iE 10 03 20	—do.—	2SK43④or⑤	〃			
	32 00 00 iE 20 01 00	—do.—	LJ13	〃	Made by Yamaha		
	32 00 00 iE 40 01 00	—do.—	2SJ24A	〃	—do.—		
	32 00 00 iE 40 01 20	—do.—	2SJ24C	〃	—do.—		
	32 00 00 iE 30 03 20	—do.—	2SK78C	〃	—do.—		
	32 00 00 iE 30 03 00	—do.—	2SK78A	〃	—do.—		
	42 00 00 iF 00 00 40	Diode	IS1555	ダイオード			
	42 00 00 LB 60 05 20	Connector	2145-6B	コネクトコン			
	42 00 00 LB 60 10 00	Miniature Connector	3022-7A	ミニュアチュアコネクトコン			
	42 00 00 LB 30 03 20	Miniature Connector Pin	5045-3A	〃			
	32 00 00 NA 06 71 50	Buffer Amp Circuit Board #65821		バッファアンプシート			
	42 00 00 iF 00 00 40	Diode	IS1555	ダイオード			
	42 00 00 HL 42 64 70	Metal Oxide Resistor	4.7KΩ 2W	酸金抵抗			
	42 00 00 FM 10 74 70	Bi-polar Capacitor	4.7μF/6.3V	ハイポーラコン・タテ			
	42 00 00 FP 15 66 80	Tantalum Capacitor	6.8 μF/35V	タンタルコン			
	42 00 00 iA 07 63 90	Transistor	2SA763	トランジスター			
	42 00 00 iC 13 45 40	—do.—	2SC1345	〃			
	42 00 00 iE 10 03 00	FET	2SK43①	FET			

Ref. No.	Part No.	Description			Remarks	Common Models	
	32 00 00 iE 20 01 30	FET	LJ-13A	F E T			
	32 00 00 iE 30 03 20	–do.–	2SK78C	〃			
	32 00 00 iE 40 01 20	–do.–	2SJ24C	〃			
	42 00 00 LB 60 10 20	Miniature Connector	3022-15A	ミニュアチュア コネクトコン			
	42 00 00 LB 60 05 20	Connector	2145-6B	コネクトコン			
⑭	32 00 00 NA 06 71 60	Function Circuit Board	#65831	ファンクションシート			
	42 00 00 FM 10 74 70	Bi-Polar Capacitor	47μF/6.3V	バイポーラコン・タテ			
	42 00 00 FP 15 66 80	Tantalum Capacitor	6.8μF/35V	タンタルコン			
	42 00 00 HL 42 64 70	Metal Oxide Resistor	4.7KΩ 2W	酸金抵抗			
	42 00 00 iA 07 63 90	Transistor	2SA763	トランジスター			
	42 00 00 iC 13 45 40	–do.–	2SC1345	〃			
	42 00 00 iE 10 03 00	FET	2SK43①	F E T			
	32 00 00 iE 20 01 30	–do.–	LJ-13A	〃			
	32 00 00 iE 40 01 20	–do.–	2SJ24C	〃			
	32 00 00 iE 30 03 20	–do.–	2SK78C	〃			
	42 00 00 iH 00 02 40	Diode	IS1885	ダイオード			
	42 00 00 iF 00 00 40	–do.–	IS1555	〃			
	42 00 00 KA 50 05 90	Rotary Switch	2-4-4	ロータリースイッチ			
	42 00 00 KA 50 06 00	–do.–	5-10-5	〃			
	42 00 00 KA 50 06 10	–do.–	8-8-8	〃			
	42 00 00 KC 00 02 00	Relay	24V AE-1324-44	リレー			
	42 00 00 LB 30 03 20	Miniature Connector	5045-3A	ミニュアチュア コネクトコン			
	42 00 00 LB 60 10 00	–do.–	3022-7A	〃			
	42 00 00 LB 60 10 10	–do.–	3022-11A	〃			
	42 00 00 LB 60 10 20	–do.–	3022-15A	〃			
	42 00 00 LB 60 05 20	Connector	2145-6B	コネクトコン			
	32 00 00 AA 08 01 50	Function Switch Stay		F SW ステー			
⑪	32 00 00 NA 06 71 70	Flat Amp Circuit Board	#65842	フラットアンプシート			
	42 00 00 FH 61 08 00	Ceramic Capacitor	8pF 500V	セラミックコン			
	42 00 00 FH 61 21 80	–do.–	180PF 500V	〃			
	42 00 00 FM 10 74 70	Bi-Polar Capacitor	6.3V 47μF	バイポーラコン・タテ			
	42 00 00 FP 15 61 00	Tantalum Capacitor	1μF/25V	タンタルコン	Substitution part	1μF/35V	
	42 00 00 FP 15 66 80	–do.–	6.8μF/35V	〃			
	42 00 00 HL 42 44 70	Metal Oxide Resistor	47Ω 2W	酸金抵抗			
	42 00 00 HL 42 58 20	–do.–	820Ω 2W	〃			
	42 00 00 HU 87 66 20	Metal Film Resistor	6.2KΩ ± 1%	金属被膜抵抗F型			

Ref. No.	Part No.	Description			Remarks	Common Models	
	42 00 00 HT 41 00 10	Variable Resistor	B-220Ω SR19R	ソリッドVR			
	42 00 00 iA 07 63 09	Transistor	2SA763WL	トランジスター			
	42 00 00 iA 07 77 30	—do.—	2SA777	〃			
	42 00 00 iC 07 34 20	—do.—	2SC734	〃			
	42 00 00 iC 13 45 40	—do.—	2SC1345	〃			
	42 00 00 iC 15 09 30	—do.—	2SC1509	〃			
	42 00 00 iC 04 58 90	—do.—	2SC458	〃			
	42 00 00 iE 10 03 00	FET	2SK43Ⓘ	FET			
	42 00 00 iE 10 03 40	—do.—	2SK43R ③	〃			
	32 00 00 iE 20 01 00	—do.—	LJ-13	〃			
	32 00 00 iE 40 01 20	—do.—	2SJ 24C	〃			
	32 00 00 iE 30 02 10	—do.—	2SK75C	〃			
	42 00 00 iF 00 00 40	Diode	IS1555	ダイオード			
	42 00 00 LB 30 03 20	Miniature Connector	5045-3A	ミニュアチュアコネクトコン			
	42 00 00 LB 60 10 10	—do.—	3022-11A	〃			
	42 00 00 LB 60 05 20	Connector	2145-6B	コネクトコン			
㉓	32 00 00 NA 06 71 80	Loudness Circuit Board	#65852	ラウドネスシート			
	32 00 00 FP 15 61 00	Tantalum Capacitor	1μF/25V	タンタルコン	Substitution part	1μF/35V	
	42 00 00 HY 00 02 80	Variable Resistor		VR			
	32 00 00 AA 08 03 70	Loudness V.R. Stay		ラウドネスVRステー			
	42 00 00 LB 60 10 00	Miniature Connector	3022-7A	ミニュアチュアコネクトコン			
	42 00 00 LB 60 10 10	—do.—	3022-11A	〃			
㉚	32 00 00 NA 06 71 90	Tone Control Amp. Circuit Board	#65861	トーンアンプシート			
	42 00 00 FH 61 05 00	Ceramic Capacitor	15pF 500V CH	セラコン			
	42 00 00 FH 61 11 00	—do.—	10pF —do.—	〃			
	42 00 00 FH 61 21 50	—do.—	150pF —do.—	〃			
	42 00 00 FH 61 21 80	—do.—	180pF —do.—	〃			
	42 00 00 FH 23 41 00	—do.—	0.01μF 500V YZP	〃			
	42 00 00 FM 10 74 70	Bi-Polar Capacitor	4.7μF/6.3V	バイポーラコン・タテ			
	42 00 00 FP 15 66 80	Tantalum Capacitor	6.3μF/35V	タンタルコン			
	42 00 00 HL 41 63 30	Metal Oxide Resistor	3.3KΩ 1W	酸金抵抗			
	42 00 00 Hu 87 64 30	Metal Film Resistor	4.3KΩ±1%	金属被膜抵抗F型			
	42 00 00 HY 00 01 60	Variable Resistor	B-22KΩ CR-31R	メタルグレーズVR			
	42 00 00 iA 07 63 90	Transistor	2SA763	トランジスター			
	42 00 00 iC 13 45 40	—do.—	2SC1345	〃			

Ref. No.	Part No.	Description		Remarks	Common Models
	42 00 00 iC 14 39 00	Transistor	2SC1439		
	42 00 00 iE 10 03 00	FET	2SK43①	F E T	
	42 00 00 iE 10 03 20	—do.—	2SK43④or⑤	〃	
	32 00 00 iE 20 01 00	—do.—	LJ13	〃	
	32 00 00 iE 40 01 20	—do.—	2SJ24C	〃	
	32 00 00 iE 40 01 00	—do.—	2SJ24A	〃	
	32 00 00 iE 30 03 20	—do.—	2SK78C	〃	
	32 00 00 iE 30 03 00	—do.—	2SK78A	〃	
	42 00 30 iF 00 00 40	Diode	IS1555	ダイオード	
	42 00 00 LB 60 10 00	Miniature Connector	3022-7A	ミニュアチュアコネクトコン	
	42 00 00 BA 00 68 60	Heat Sink		放熱器	
	32 00 00 NA 06 72 00	Tone Volume Circuit Board	LC65872	トーンボリュームシート	
	42 00 00 GD 90 01 40	Coil	47 mH	コイル	
	42 00 00 HY 00 03 20	Variable Resistor	(Detent type), Bass	SRAディテントVR	
	42 00 00 HY 00 02 90	—do.—	, Treble	〃	
	42 00 00 HY 00 03 00	—do.—	, Acoustic	〃	
	42 00 00 HY 00 03 10	—do.—	, Presence	〃	
(22)	32 00 00 NA 06 72 10	Tone Push Switch Circuit Board	#65882	トーンプッシュスイッチシート	
	42 00 00 HU 87 61 60	Metal Film Resistor	1.6KΩ ± 1%	金属被膜抵抗	
	42 00 00 FA 15 45 10	Mylar Capacitor	0.051 μF 50V MS	マイラーコン	
	42 00 00 FA 15 54 70	—do.—	0.47 μF 〃	〃	
	42 00 00 FA 15 52 70	—do.—	0.27 μF 〃	〃	
	42 00 00 FD 15 31 50	Polystyrene Capacitor	1500pF 50V	スチロールコン	
	42 00 00 FD 15 24 70	—do.—	470pF 50V	〃	
	42 00 00 FE 15 11 50	—do.—	15pF 50V	〃	
	42 00 00 FM 23 62 20	Bi-Polar Electrolytic Capacitor	2.2 μF/35V	バイポーラケミコン	
	42 00 00 FM 10 81 00	—do.—	100 μF/6.3V	〃	
	42 00 00 GE 20 01 10	MPX. Coil	GE6062 47mH	MPX固定コイル	
	42 00 00 LB 30 03 20	Miniature Connector	5045-3A	ミニュアチュアコネクトコン	
	42 00 00 LB 60 10 00	—do.—	3022-7A	〃	
	42 00 00 LB 60 11 50	—do.—	3094-11A	〃	
	42 00 00 LB 60 11 60	—do.—	5110-7A	〃	
	42 00 00 LB 60 11 70	—do.—	5110-11A	〃	
	42 00 00 KA 70 06 20	Push Switch Non Shorting Type	SPU-019A12	プッシュSW	
	42 00 00 KA 70 06 10	—do.— Shorting Type	SPU-019A11	〃	

Ref. No.	Part No.	Description			Remarks	Common Models	
⑩	32 00 00 NA 06 72 20	Muting Circuit Board	#65894	ミューティングシート			
	42 00 00 HY 00 02 70	Variable Resistor	20KΩ x 2 + 50KΩ x 2	VR			
	42 00 00 KC 00 02 40	Relay	AG1014 DL-1a-24V	リ レ ー			
	42 00 00 IH 00 02 40	Diode	IS1885	ダ イ オ ー ド			
	42 00 00 KA 20 02 30	Lever Switch	SLA-34351 Non Shorting Type	レバースイッチ			
	42 00 00 LB 60 10 10	Miniature Connector	3022-11A	ミニュアチュア コネクトコン			
	42 00 00 LB 60 10 20	–do.–	3022-15A	〃			
⑰	32 00 00 NA 06 72 30	Power Supply Circuit Board	#65901	電 源 シ ー ト			
	42 00 00 FZ 00 06 50	Metal Film Capacitor	0.01μF/630V	メタライズド フィルムコン			
	42 00 00 FJ 15 84 70	Electrolytic Capacitor	470 μF/35V	ケ ミ コ ン	Substitution part		
	42 00 00 FJ 26 63 30	–do.–	3.3μF/50V	〃	–do.–		
	42 00 00 FJ 27 82 20	–do.–	220μF/63V	〃			
	42 00 00 FJ 29 63 30	–do.–	3.3 μF/100V	〃			
	42 00 00 FJ 20 74 70	–do.–	47 μF/160V	〃			
	42 00 00 FZ 00 06 40	–do.–	100 μF/200V	〃			
	42 00 00 FJ 53 74 70	–do.–	KU Type 47μ F/16V	ケミコン KU型			
	42 00 00 HL 40 41 00	Metal Oxide Resistor	10Ω ½W	酸 金 抵 抗			
	42 00 00 HL 41 34 70	–do.–	4.7Ω 1W	〃			
	42 00 00 HL 41 63 30	–do.–	3.3KΩ 1W	〃			
	42 00 00 HL 63 42 20	–do.–	22Ω 3W	〃			
	42 00 00 HT 41 00 30	Variable Resistor	B-2.2K Ω	ソ リ ッ ド V R			
	42 00 00 IA 08 58 00	Transistor	2SA858	トランジスター			
	42 00 00 IC 14 39 00	–do.–	2SC1439	〃			
	42 00 00 IA 05 61 22	–do.–	2SA561	〃			
	42 00 00 IA 07 77 30	–do.–	2SA777	〃			
	42 00 00 IC 07 34 22	–do.–	2SC734	〃			
	42 00 00 IC 07 93 20	–do.–	2SC1061	〃	Substitution part	2SC793	
	42 00 00 IC 04 58 90	–do.–	2SC458	〃			
	42 00 00 IC 14 47 00	–do.–	2SC1447	〃			
	42 00 00 IE 00 00 10	FET	2SK30A	F E T			
	42 00 00 IF 00 03 20	Zener Diode	WZ-061	ツェナーダイオード			
	42 00 00 IF 00 03 50	–do.–	WZ-130	〃			
	42 00 00 IH 00 03 30	Diode	IS1887	ダ イ オ ー ド			
	42 00 00 IF 00 00 40	–do.–	IS1555	〃			
	42 00 00 IH 00 02 40	–do.–	IS1885	〃			

Ref. No.	Part No.	Description			Remarks	Common Models	
	42 00 00 KB 00 03 10	Fuse T	500mA 250V	耐ラッシュヒューズ	Except European model		
	42 00 00 KB 00 07 10	Miniature Fuse	500mA 250V	タイムラグⓈヒューズ	European model		
	42 00 00 KB 00 03 30	Fuse T	1.0A 250V	耐ラッシュヒューズ	Except European model		
	42 00 00 KB 00 07 30	Miniature Fuse	1.0A 250V	タイムラグⓈヒューズ	European model		
	42 00 00 BA 06 69 40	Heat Sink		放熱板			
	42 00 00 LB 60 10 80	Connector	2145-12B	コネクトコン			
	42 00 00 LB 60 12 50	—do.—	5145-6E	〃			
⑬	32 00 00 NA 06 72 50	Meter Circuit Board	#65911	メーターシート			
	32 00 00 FP 15 64 70	Tantalum Capacitor	4.7μF/16V	タンタルコン	Substitution part		
	42 00 00 HT 41 00 20	Variable Resistor	B-1KΩ	ソリッドVR			
	42 00 00 HT 41 00 70	—do.—	B-10KΩ	〃			
	42 00 00 HT 41 01 40	Variable Resistor	B47KΩ	〃			
	42 00 00 HT 41 00 90	—do.—	B100KΩ	〃			
	42 00 00 iA 07 63 00	Transistor	2SA763L	トランジスター			
	42 00 00 iC 13 45 40	—do.—	2SC1345	〃			
	42 00 00 iG 00 09 70	IC	TA7129AP	IC			
	42 00 00 iF 00 00 40	Diode	IS1555	ダイオード			
	42 00 00 LB 30 03 20	Miniature Connector	5045-3A	ミニュアチュアコネクトコン			
	32 00 00 NA 06 72 60	No.1 Meter Switch Circuit Board	#65931	メーターSWシート No. 1			
	42 00 00 KA 70 06 30	Push Switch	SPZ 4-2	プッシュスイッチ			
	32 00 00 NA 06 72 70	No.2 Meter Switch Circuit Board	#65920	メーターSWシート No. 2			
	42 00 00 KA 70 06 30	Push Switch	SPZ 4-2	プッシュスイッチ			
⑲	32 00 00 NA 06 72 80	Oscillator Circuit Board	#65942	OSCシート			
	42 00 00 FA 15 31 00	Mylar Capacitor	0.001μF 50V MS	マイラーコン			
	42 00 00 FA 15 35 10	—do.—	0.0051μF	〃			
	42 00 00 FA 15 41 50	—do.—	0.015μF	〃			
	42 00 00 HT 41 00 20	Variable Resistor	B1KΩ	ソリッドVR			
	42 00 00 HT 41 00 80	—do.—	B22KΩ	〃			
	42 00 00 HT 41 01 40	—do.—	B47KΩ	〃			
	41 00 00 HT 41 01 50	—do.—	B4.7KΩ	〃			

Ref. No.	Part No.	Description		Remarks	Common Models
	42 00 00 ıC 04 58 90	Transistor 2SC458	トランジスター		
	42 00 00 ıE 00 00 10	FET 2SK30A	F E T		
	42 00 00 KA 50 06 20	Rotary Switch SRZ-064	ロータリーSW		
	42 00 00 JB 00 00 70	Lamp Lead Type 12V 30mA	パイロットランプ		
	42 00 00 LB 60 10 00	Miniature Connector 3022-11A	ミニュアチュアコネクトコン		
⑱	32 00 00 NA 06 72 90	Headphone VR Circuit Board #65953	ヘッドホーンVRシート		
	32 00 00 FP 15 61 00	Tantalum Capacitor 1μF/25V	タンタルコン	Substitution part	1μF/35V
	42 00 00 ıC 04 58 90	Transistor 2SC458LG	トランジスター		
	42 00 00 HS 11 01 30	Variable Resistor A100KΩ x 2 16 φ	ボリューム		
	42 00 00 LB 60 11 50	Miniature Connector 3094-7A	ミニュアチュアコネクトコン		
㉑	32 00 00 NA 06 73 00	Filter Circuit Board #65961	フィルターシート		
	42 00 00 LB 60 10 30	Miniature Connector 3094-15A	ミニュアチュアコネクトコン		
	42 00 00 KA 20 02 40	Lever Switch SLA36304 Shorting 6-3	レバースイッチ		
⑳	32 00 00 NA 06 73 10	Lever Switch Circuit Board #65974	レバースイッチシート		
	42 00 00 FD 15 13 30	Polystyrene Capacitor 33pF	スチロールコン		
	42 00 00 FD 15 16 80	–do.– 68pF	〃		
	42 00 00 FD 15 26 80	–do.– 680pF	〃		
	42 00 00 Hu 87 65 60	Metal Film Resistor 5.6KΩ ± 1%	金属被膜抵抗F型		
	42 00 00 Hu 87 71 10	–do.– 11KΩ ±1%	〃		
	42 00 00 Hu 87 71 50	–do.– 15KΩ ±1%	〃		
	42 00 00 Hu 87 72 00	–do.– 20KΩ ±1%	〃		
	42 00 00 ıF 00 00 40	Diode IS1555	ダイオード		
	42 00 00 LB 60 10 00	Miniature Connector 3022-7A	ミニュアチュアコネクトコン		
	42 00 00 LB 60 10 10	–do.– 3022-11A	ミニュアチュアコネクトコン		
	42 00 00 LB 60 10 20	–do.– 3022-15A	〃		
	42 00 00 KA 20 01 40	Lever Switch SLA34301 Shorting type 4-3	レバースイッチ		
	42 00 00 KA 20 02 50	–do.– SLA38301 Shorting type 8-3	〃		
	42 00 00 KA 20 02 60	–do.– SLA36203	〃		
	42 00 00 KA 20 01 50	–do.–	〃		
㉔	32 00 00 NA 06 73 20	Impedance Selector Circuit Board #65980	インピーダンス切換シート		
	42 00 00 KA 50 06 20	Rotary Switch SRZ-064	ロータリースイッチ		
	42 00 00 AA 08 02 80	Phone Switch Stay	フォノSWステー		
	42 00 00 LB 60 10 00	Miniature Connector 3022-7A	ミニュアチュアコネクトコン		

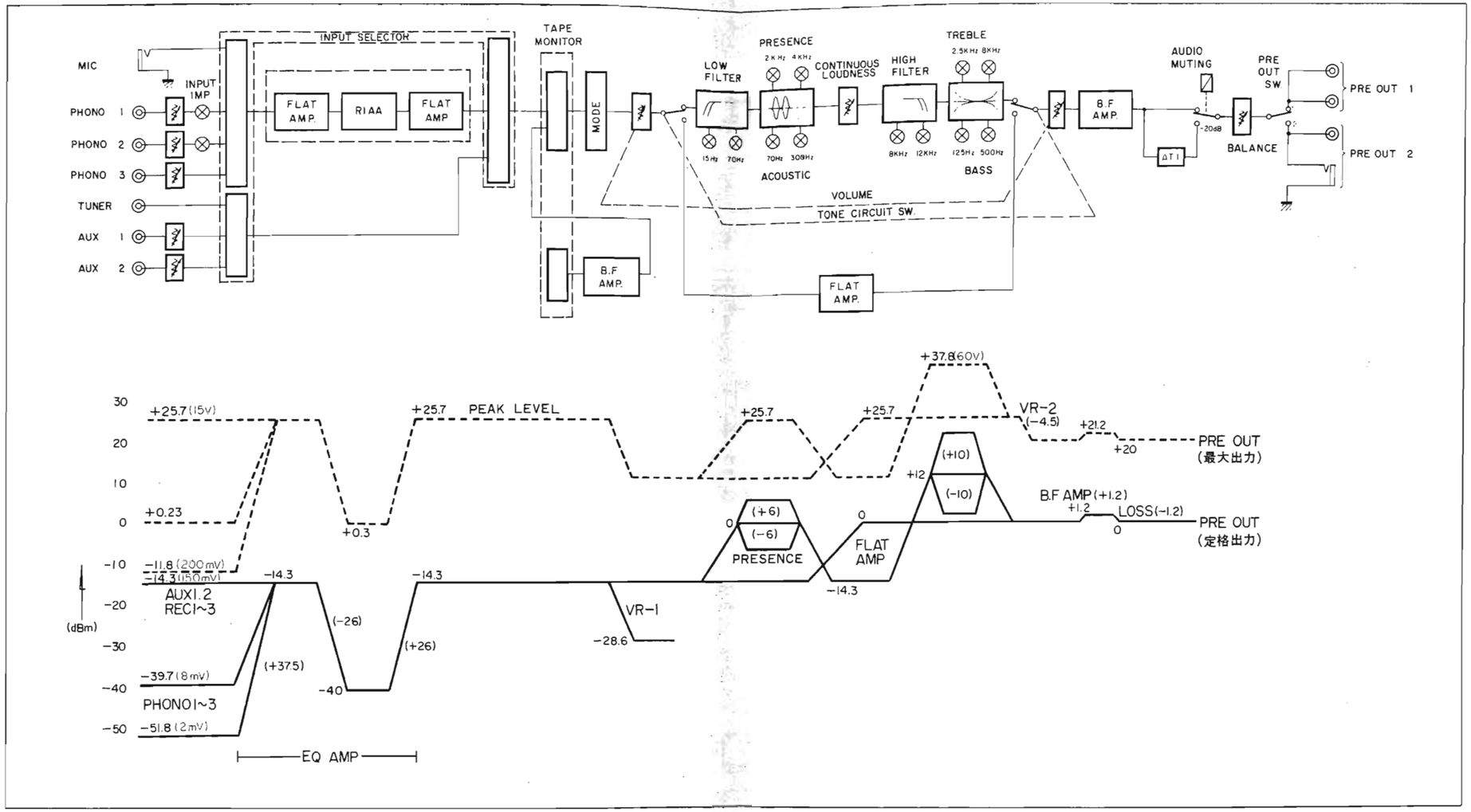
Ref. No.	Part No.	Description		Remarks	Common Models	
⑮	32 00 00 NA 06 73 30	Pin Jack Circuit Board #65992	ピンジャックシート			
	42 00 00 LB 60 09 90	12P Pin Jack	12Pピンジャック			
⑯	32 00 00 NA 06 73 40	Slide Switch Circuit Board #66001	スライドスイッチシート			
	42 00 00 LB 20 08 30	2P Pin Jack	2Pピンジャック			
	42 00 00 LB 60 12 40	6P –do.–	6P 〃			
	42 00 00 KA 40 02 10	Slide Switch	スライドスイッチ			
	32 00 00 NA 06 73 50	LED Circuit Board #66011	LEDシート			
	42 00 00 iF 00 04 90	Light Emitting Diode SLP-119B	発光ダイオード			
㉗	32 00 00 NA 06 73 70	Pink Noise Circuit Board #66032	ピンクノイズシート			
	42 00 00 FA 15 31 00	Mylar Capacitor 0.001μF 50V	マイラーコン			
	42 00 00 iG 00 09 70	IC TA7129A	IC			
	42 00 00 iC 04 58 90	Transistor 2SC458	トランジスター			
	42 00 00 iE 10 03 00	FET 2SK43①	FET			
	42 00 00 HT 41 00 80	Variable Resistor B-22KΩ	ソリッドVR			
	42 00 00 LB 30 03 20	Miniature Connector 5045-3A	ミニコネクター			
⑧	32 00 00 AA 08 00 50	Top Cover	ケース			
	32 00 00 AA 08 00 70	Bottom Cover	底板			
③	32 00 00 BA 06 69 90	Switch Knob	SWツマミ			
⑤	32 00 00 BA 06 70 00	Volume Knob	VRツマミ			
⑦	32 00 00 BA 06 69 70	Loudness Knob	ラウドネスツマミ			
⑥	32 00 00 BA 06 69 80	Tone Control Knob	トーンコンツマミ			
	32 00 00 BA 06 71 10	Control Knob	コントロールノブ			
②	32 00 00 BA 06 67 80	Push Button	プッシュボタン			
④	32 00 00 CB 07 38 40	Lever Knob	レバーツマミ			
	32 00 00 CB 06 85 80	Bushing for Switch	スイッチ用ブッシュ			
	42 00 00 CB 07 35 70	Apron for Switch	スイッチエプロン			
	42 00 00 CB 07 41 00	–do.–	〃			
	32 00 00 CB 06 86 60	Serrated Bushing	セレーションブッシュ			
	42 00 00 CB 07 44 50	Leg	脚(トランレッグG)			

Ref. No.	Part No.	Description			Remarks	Common Models	
①	42 00 00 Ji 00 03 10	Level Meter	Left	レベルメーターL			
①	42 00 00 Ji 00 03 30	–do.–	Right	〃 R			
	42 00 00 LB 20 05 40	Fuse Holder	TN-0125	ヒューズホルダーウェハー型			
	42 00 00 JB 00 00 40	Cartridge Type Lamp	8V 0.3A	パイロットランプ筒型			
	32 00 00 AA 08 02 00	Meter Stay		メーターステー			
	32 00 00 AA 08 02 70	Lamp Stay		ランプステー			
	32 00 00 CB 07 40 00	Meter Sash		メーター枠			
	32 00 00 AA 08 01 20	Lever Switch Stay		レバースイッチステー			
	32 00 00 AA 08 01 90	Extension Shaft Holder		延長シャフトホルダー			
	32 00 00 AA 08 02 90	Shaft Holder		シャフトホルダー			
	32 00 00 BA 06 70 90	Extension Shaft		延長シャフト			
	32 00 00 AA 08 01 70	Holder for Tone Control Circuit Board		TCシートホルダー			
	32 00 00 MZ 06 65 10	Tone Control Connector Assembly		TCコネクターAssy			
	42 00 00 LB 60 10 40	7P Housing	3021-7	7Pハウジング			
	42 00 00 LB 60 10 50	11P Housing	3021-11	11Pハウジング			
	42 00 00 LB 10 03 40	Connector Terminal	2759-T	コネクトコンターミナル連鎖状			
	42 00 00 LB 30 03 30	3P Miniature Connector Housing	5051-3				
⑩	42 00 00 LB 30 03 80	Phone Jack	JH-5020K	ホーンジャック			
	32 00 00 AA 08 01 10	Phone Jack Stay		ホーンジャックステー			
	32 00 00 CB 07 39 70	Phone Nut		ホーンナット			
	32 00 00 MZ 06 65 20	Jack Connector Assembly		ジャックコネクターAss'y			
	42 00 00 LB 30 03 30	3P Housing	5051-3	3Pハウジング			
	42 00 00 LB 10 03 40	Connector Terminal	2759-T	コネクトコンターミナル連鎖状			
	42 00 00 KA 20 01 00	Power Switch	JL-04 TV-3	レバーSW	U.S. and Canadian models		
	42 00 00 KA 20 02 10	–do.–	PETRICK 285/5	〃	European model	CR-600	
	42 00 00 FZ 00 01 10	Spark Killer	0.033μF + 120Ω/500V	スパークキラーコン	U.S. and Canadian models		
	32 00 00 NB 07 37 90	Front Panel Unit		フロントパネルユニット			
	32 00 00 MZ 06 65 70	LED Connector Assembly		LEDコネクターAss'y			

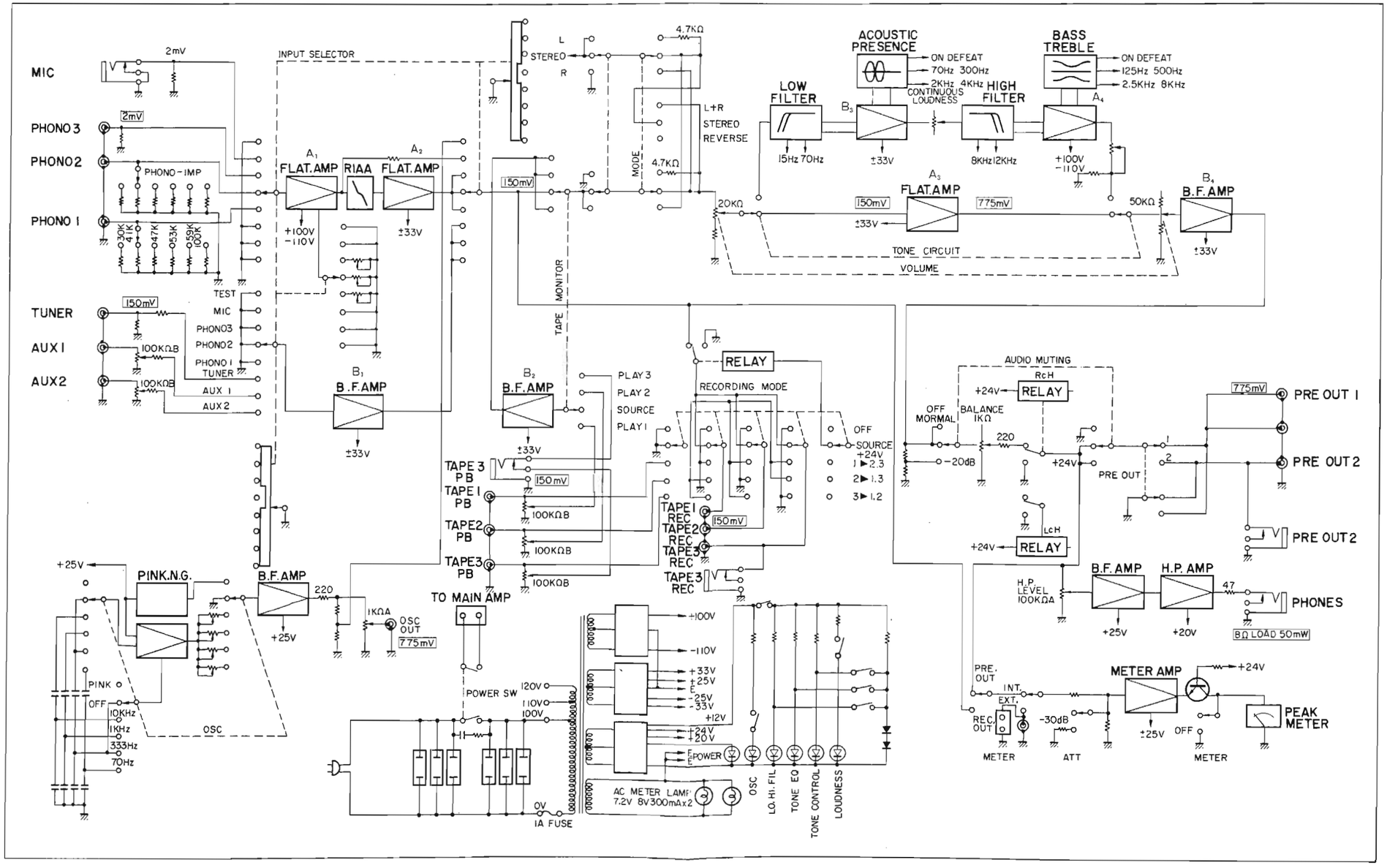
Ref. No.	Part No.	Description		Remarks	Common Models	
	42 00 00 LB 60 10 40	7P Housing 3021-7	7Pハウジング			
	42 00 00 LB 10 03 40	Connector Terminal 2759-1	コネクトコンターミナル連鎖状			
㉕	42 00 00 GA 60 81 10	Power Transformer	電源トランス	U.S. and Canadian models		
㉕	42 00 00 GA 60 81 20	—do.—	〃	European model		
	42 00 00 LB 60 11 20	Connector Housing 2139-12	コネクトコン配線用ハウジング			
	42 00 00 LB 10 02 70	Connector Terminal 2478-T	コネクトコンターミナル連鎖状		CT-7000	
	42 00 00 LA 00 13 20	4PE Push Terminal SQ-2161	4PE型プッシュターミナル			
	42 00 00 LB 40 02 20	4P Connector Plug P-1304-DB-01	4Pコネクタープラグ	U.S. and Canadian models		
	42 00 00 LB 20 07 10	AC Socket Spring Type SI-6432	ACソケットバネ式	—do.—		
	42 00 00 LB 20 08 40	Fuse Holder	ヒューズホルダー	—do.—		
	42 00 00 LB 20 05 90	—do.— Screw Type FEB031-1401	〃 ネジ式	European model		
	42 00 00 KB 00 10 60	UL Listed Fuse 1AT 250V	ULヒューズ	U.S. and Canadian models		
	42 00 00 KB 00 07 10	Miniature Fuse 0.5A 250V	Ⓢヒューズタイムラグ	European model		
	32 00 00 AA 08 00 90	Rear Panel	リアーパネル	U.S. and Canadian models		
	32 00 00 AA 08 01 00	—do.—	〃	European model		
	42 00 00 CB 06 86 30	Cord Stopper HEYCO SR-3P-4	コードストッパー	U.S. and Canadian models		
	42 00 00 CB 07 06 90	—do.— EA-5	〃	European model		
⑨	42 00 00 LB 10 03 30	1P Pin Jack	1Pピンジャック			
	42 00 00 HS 11 01 00	16φ Variable Resistor A-1KΩ	VR			
	42 00 00 HS 11 01 10	—do.— B-5KΩ x 2	〃			
	42 00 00 HS 11 01 20	—do.— B-100KΩ x 2	〃			
	42 00 00 LA 00 10 40	Connection Terminal	中継端子台	European model		
	42 00 00 LA 00 10 70	Ground Terminal Knob Type			CA-1000	
	42 00 00 CB 06 88 80	Plastic Rivet	プラスチックリベット			
	42 00 00 CB 06 86 50	Plastic Washer	ルシラーワッシャー			
	32 00 00 MZ 06 66 10	Rear Panel Connector Assembly	リアーパネルコネクター Ass'y			
	42 00 00 LB 30 03 30	3P Housing 5051-3	3Pハウジング			
	42 00 00 LB 60 10 40	7P —do.— 3021-7	7P 〃			
	42 00 00 LB 60 10 50	11P —do.— 3021-11	11P 〃			
	42 00 00 LB 10 03 40	Connector Terminal 2759-T	コネクトコンターミナル連鎖状			
	32 00 00 AA 08 01 60	Rotary Metal Stay	回転金具ステー			
	32 00 00 AA 08 01 80	Rotary Metal	回転金具			
	32 00 00 AA 07 44 70	Rotary Screw	回転ネジ			
	32 00 00 MZ 06 66 50	Connector Assembly A	コネクターAss'yA	European model		

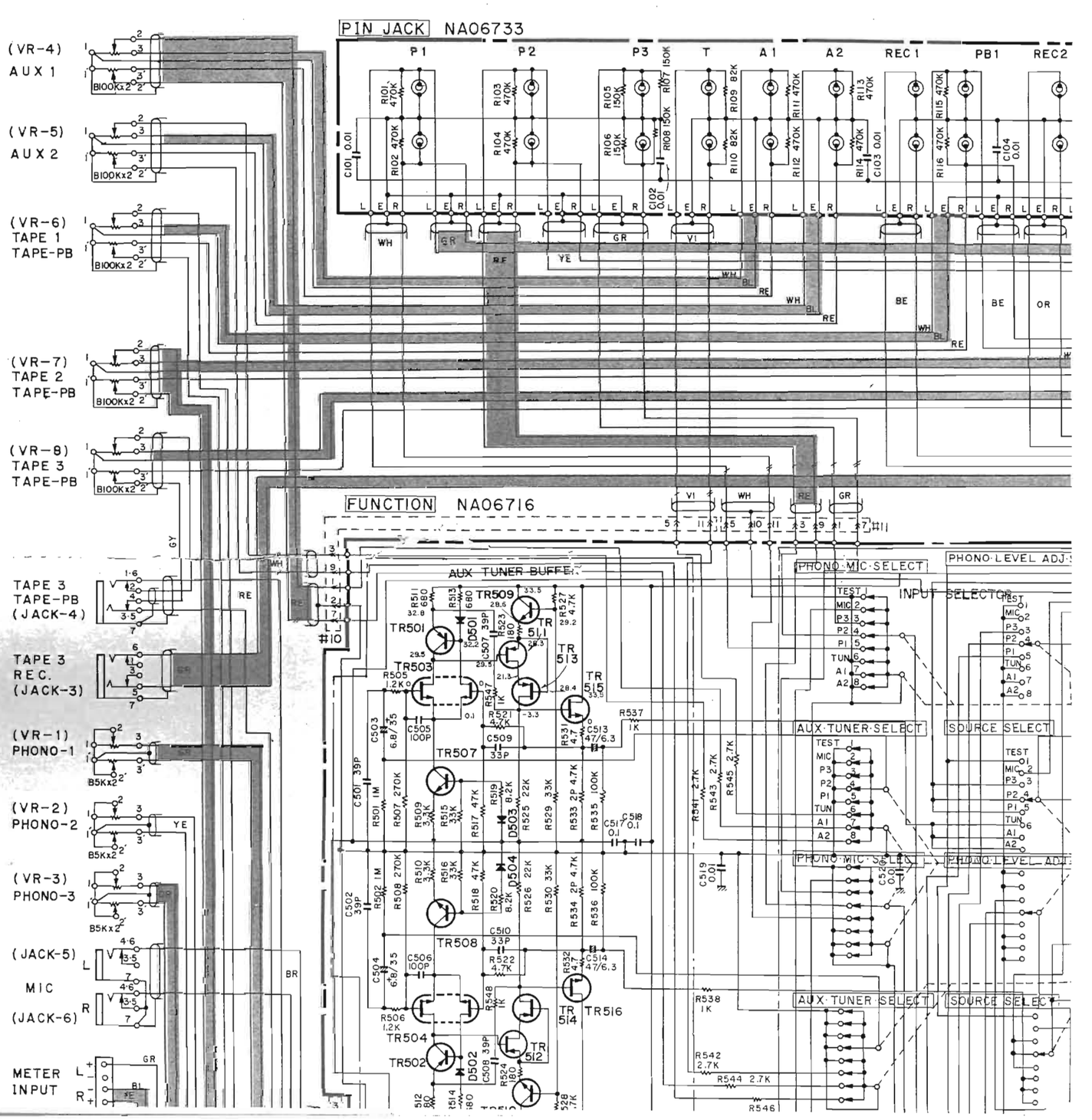
Ref. No.	Part No.	Description		Remarks	Common Models
	32 00 00 MZ 06 68 10	Connector Assembly A	コネクター Ass'y A	U.S. model	
	42 00 00 LB 30 03 30	3P Miniature Connector Housing 5051-3	ミニュアチュアコネクトコンハウジング		
	42 00 00 LB 60 10 40	7P —do.— 3021-7	〃		
	42 00 00 LB 60 10 50	11P —do.— 3021-11	〃		
	42 00 00 LB 60 10 60	15P —do.— 3021-15	〃		
	42 00 00 LB 60 05 80	6P Connector Housing 2139-6A	コネクトコンハウジング		CT-7000
	42 00 00 LB 60 11 20	12P —do.— 2139-12	〃		
	42 00 00 LB 10 03 40	Connector Terminal 2759-T	コネクトコンターミナル連鎖状		
	42 00 00 LB 10 02 40	—do.— 2578-T	〃		CT-7000
	32 00 00 MZ 06 66 60	Connector Assembly B	コネクター Ass'y B		
	42 00 00 LB 60 10 40	7P Housing 3021-7	7 P ハウジング		
	42 00 00 LB 10 03 40	Connector Terminal 2759-T	コネクトコンターミナル連鎖状		

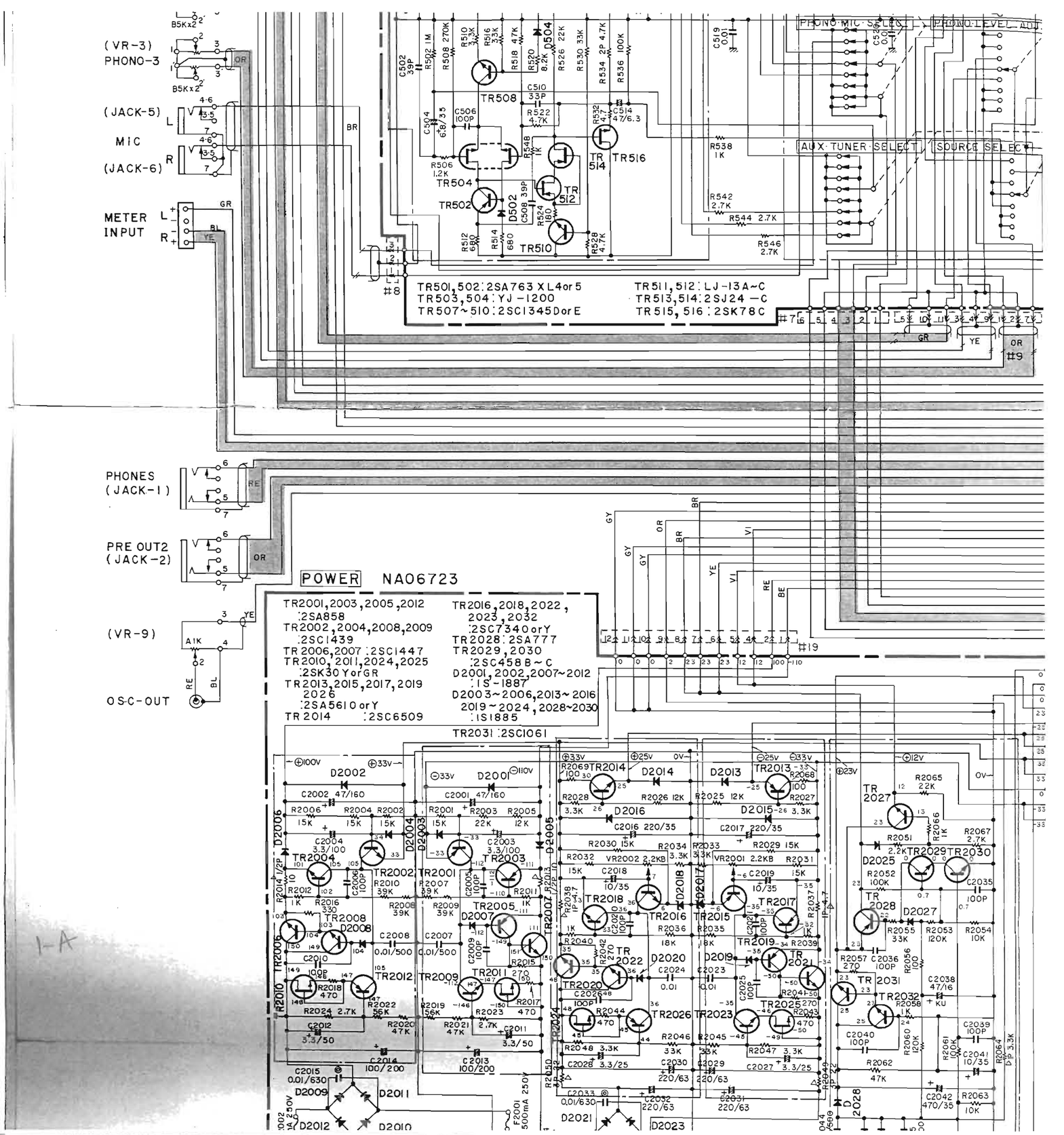
LEVEL DIAGRAM

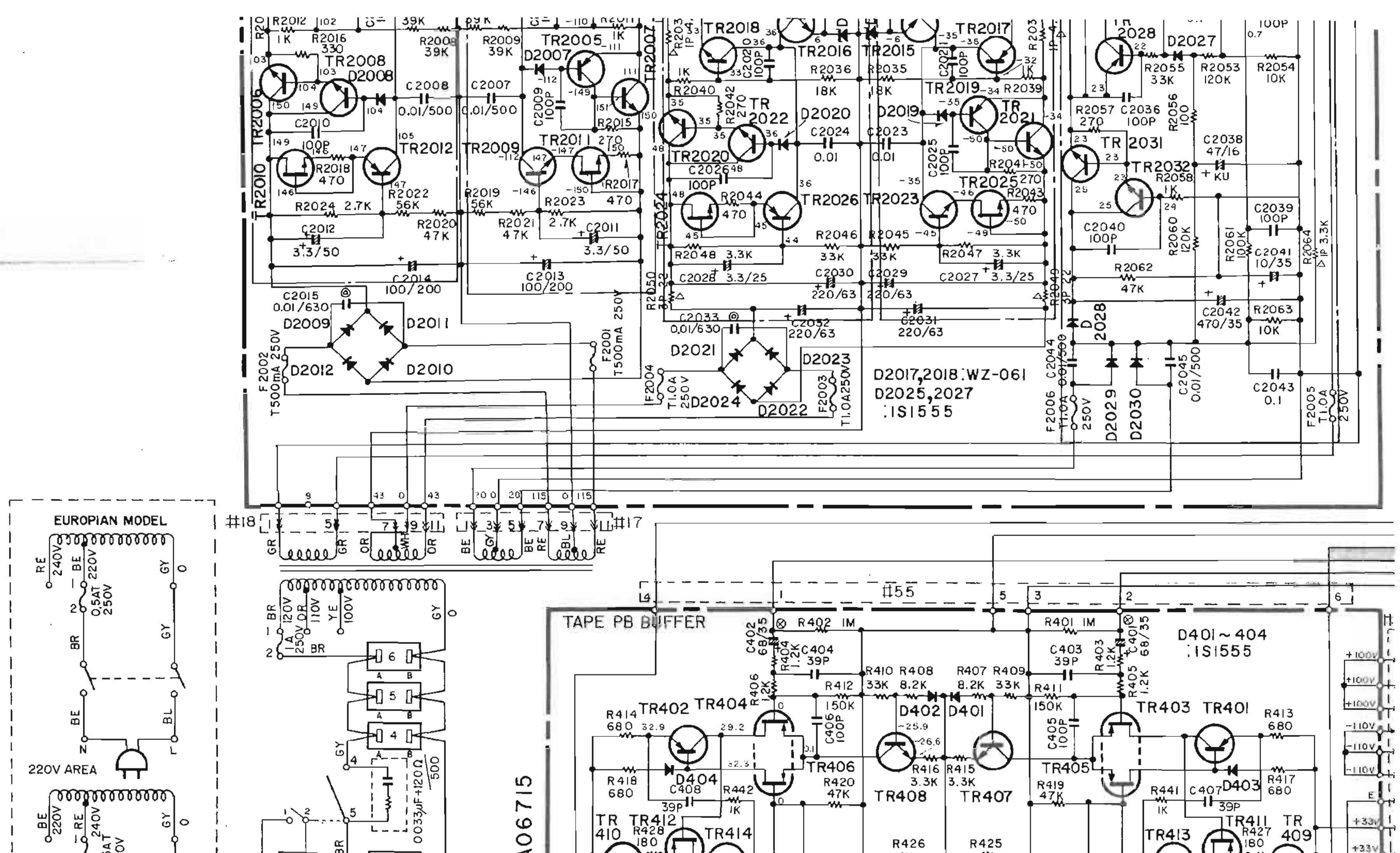


BLOCK DIAGRAM




PIN JACK NA06733
P1
P2
P3
T
A1
A2
REC1
PB1
REC2
(VR-4)
AUX 1
(VR-5)
AUX 2
(VR-6)
TAPE 1
TAPE-PB
(VR-7)
TAPE 2
TAPE-PB
(VR-8)
TAPE 3
TAPE-PB
FUNCTION NA06716
TAPE 3
TAPE-PB
(JACK-4)
TAPE 3
REC.
(JACK-3)
(VR-1)
PHONO-1
(VR-2)
PHONO-2
(VR-3)
PHONO-3
(JACK-5)
MIC
(JACK-6)
METER
INPUT
AUX TUNER BUFFER
PHONO MIC SELECT
PHONO LEVEL ADJ
INPUT SELECTOR
AUX TUNER SELECT
SOURCE SELECT
TR501
TR502
TR503
TR504
TR507
TR508
TR509
TR511
TR512
TR513
TR514
TR515
TR516
D501
D502
D503
D504

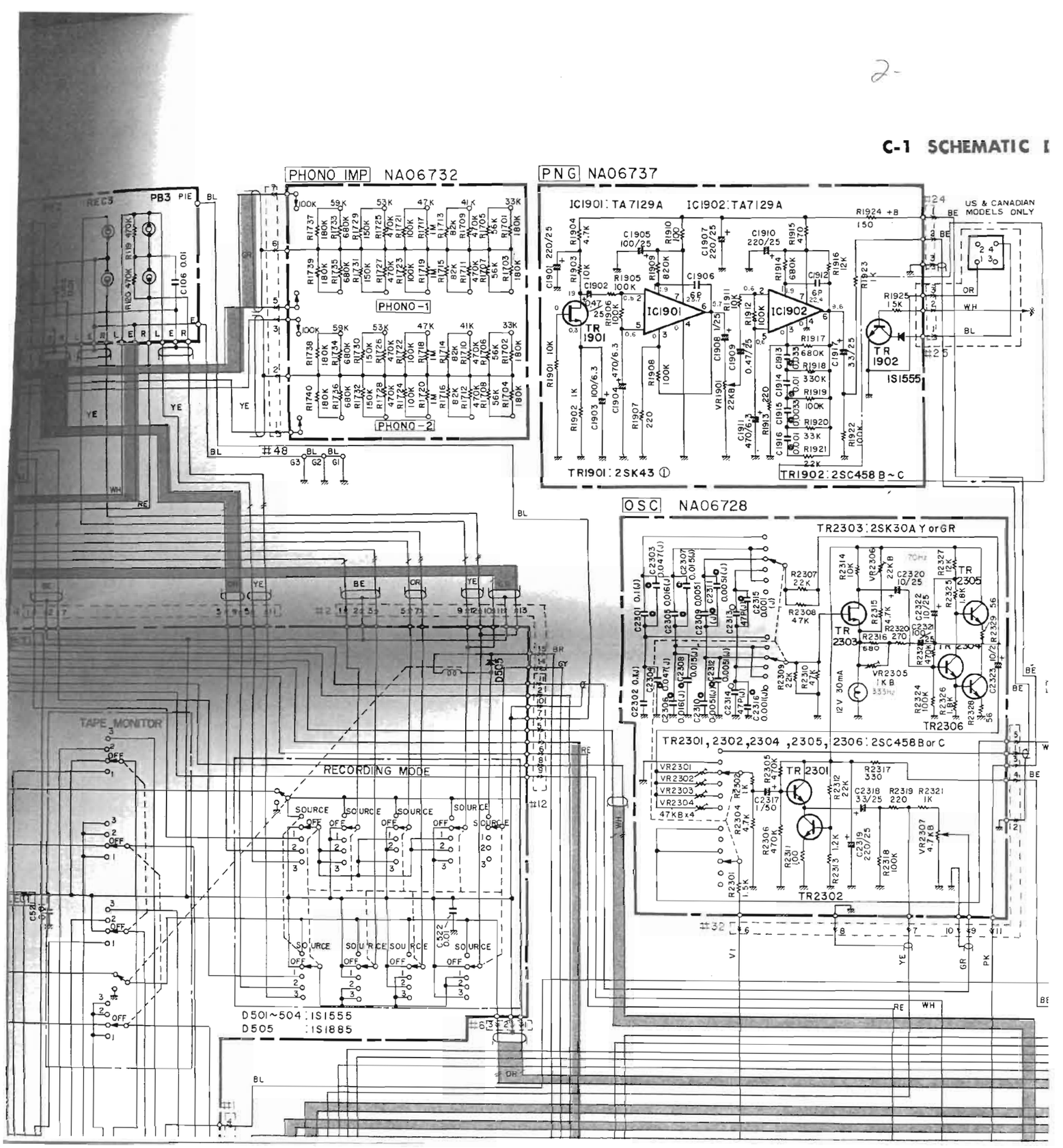

(VR-3)
PHONO-3
(JACK-5)
L
MIC
(JACK-6)
R
METER
INPUT
L
R
PHONES
(JACK-1)
PRE OUT2
(JACK-2)
(VR-9)
OSC-OUT
POWER NA06723
TR501,502:2SA763XL4or5
TR503,504:YJ-1200
TR507~510:2SC1345DorE
TR511,512:LJ-13A~C
TR513,514:2SJ24-C
TR515,516:2SK78C
TR2001,2003,2005,2012 :2SA858
TR2002,2004,2008,2009 :2SC1439
TR2006,2007:2SC1447
TR2010,2011,2024,2025 :2SK30YorGR
TR2013,2015,2017,2019 2026 :2SA5610orY
TR2014 :2SC6509
TR2016,2018,2022, 2023,2032 :2SC7340orY
TR2028:2SA777
TR2029,2030 :2SC458B~C
D2001,2002,2007~2012 :1S~1887
D2003~2006,2013~2016 2019~2024,2028~2030 :1S1885
TR2031:2SC1061
PHONO MIC SELECT
PHONO LEVEL ADJ
AUX TUNER SELECT
SOURCE SELECT
POWER
F2001 500mA 250V

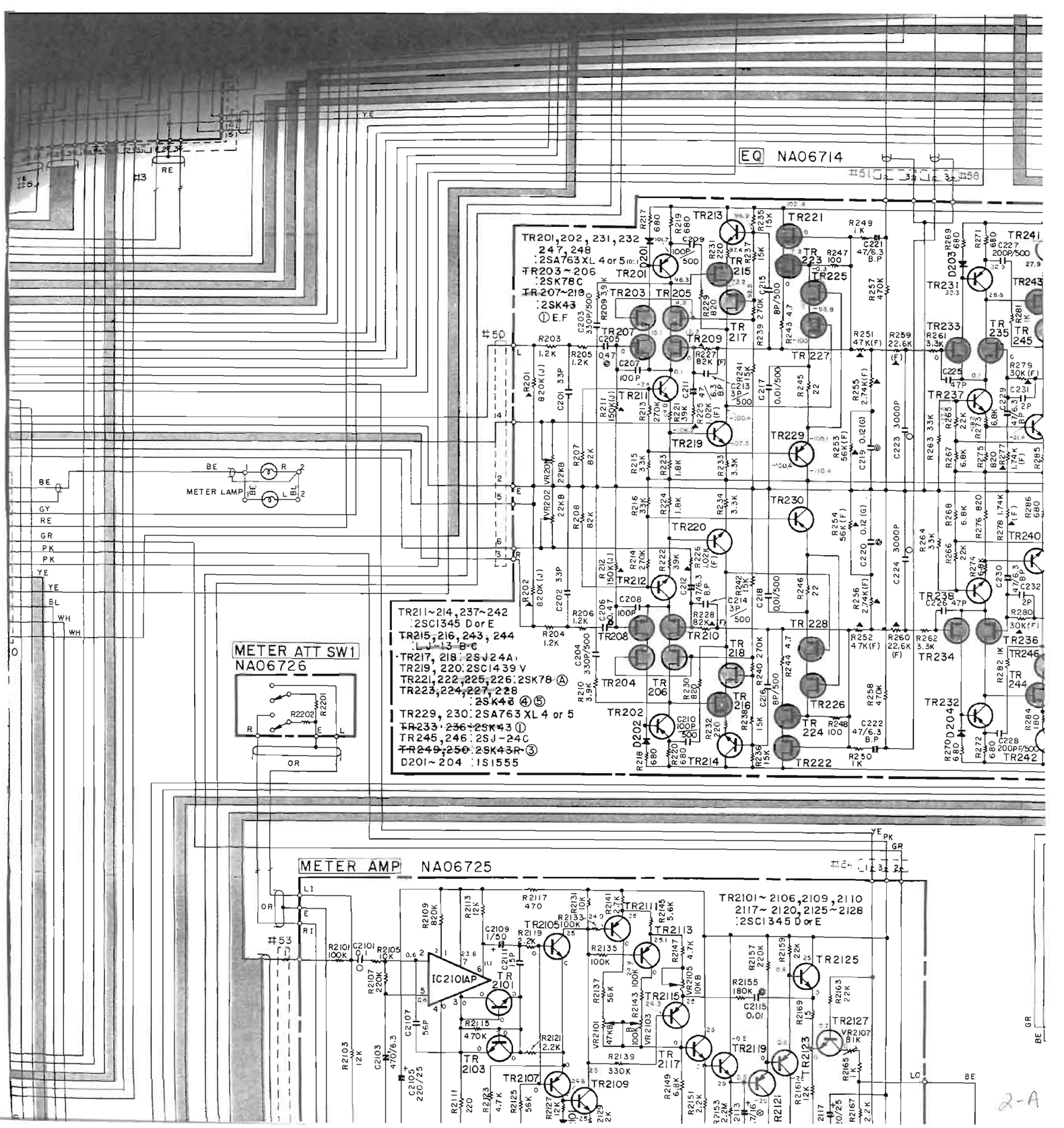


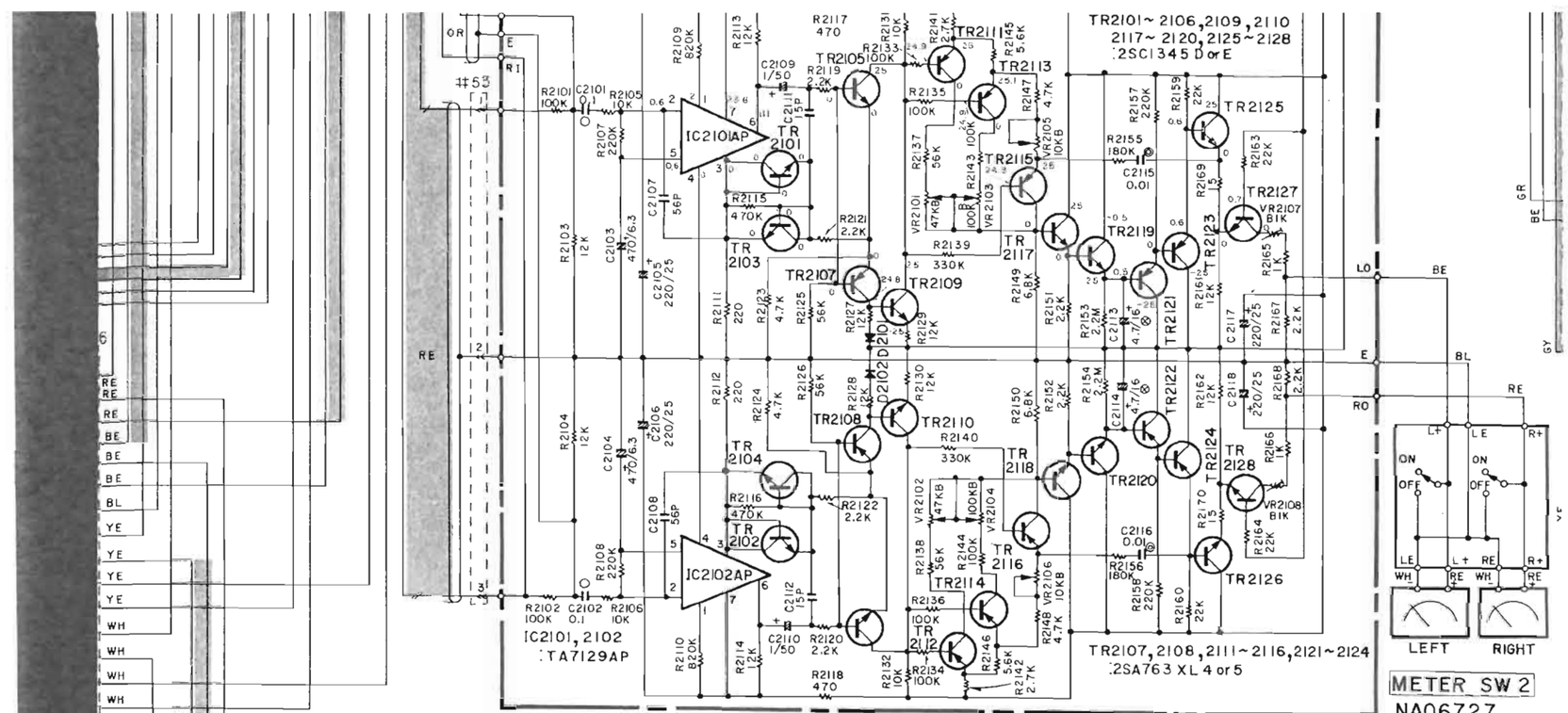
BUFFER AMP
NA06715
TAPE PB BUFFER
EUROPIAN MODEL
220V AREA
240V AREA
D2017,2018:WZ-061
D2025,2027
:1S1555
D401~404
:1S1555
TR401,402
:2SA763XL4or5
TR403~406:2SK43
TR407~410:2SC1345D~E
TR411,412:LJ-13
TR413,414:2SJ-24C
TR415,416:2SK-78C

1-B

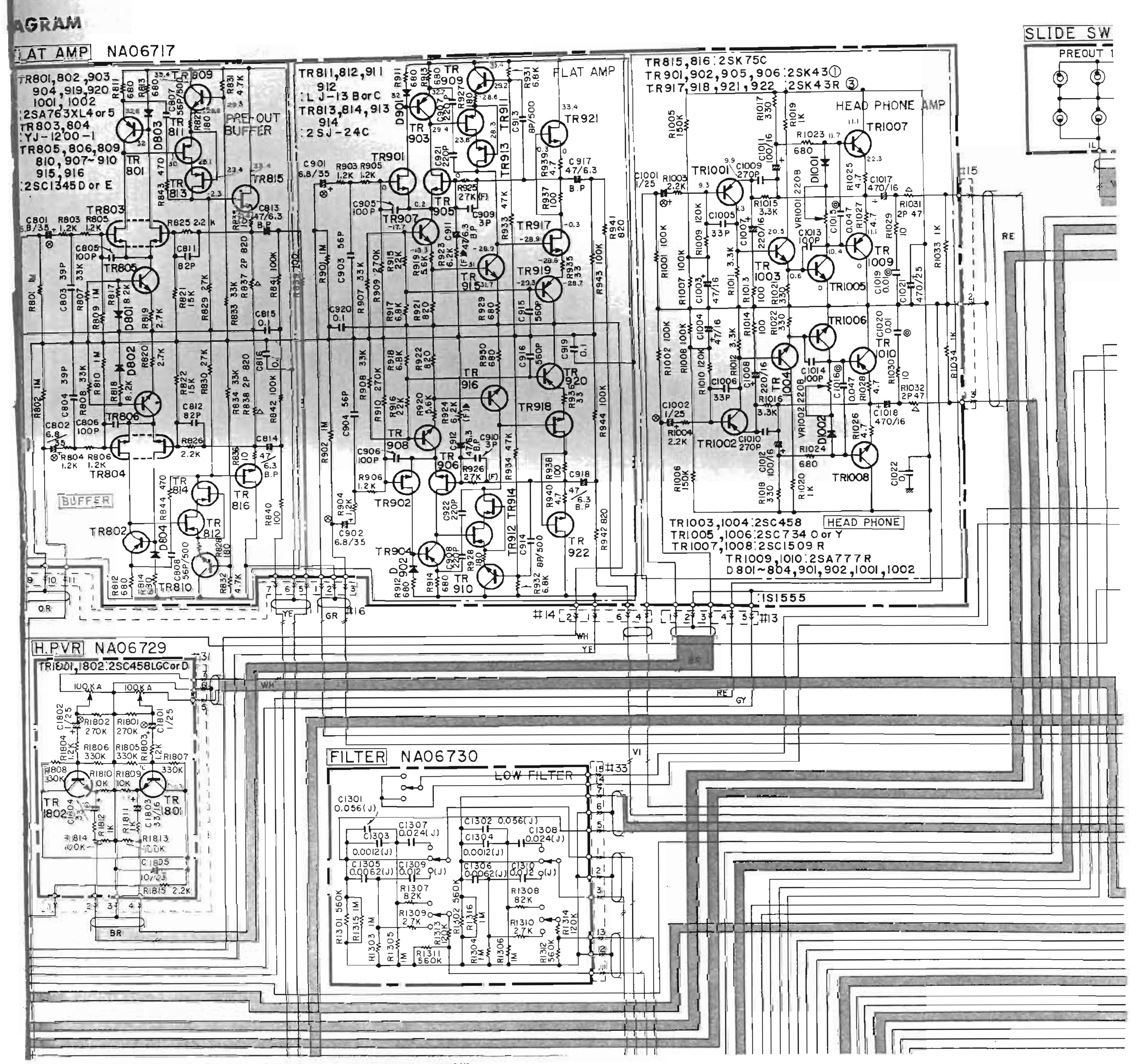
C-1 SCHEMATIC I



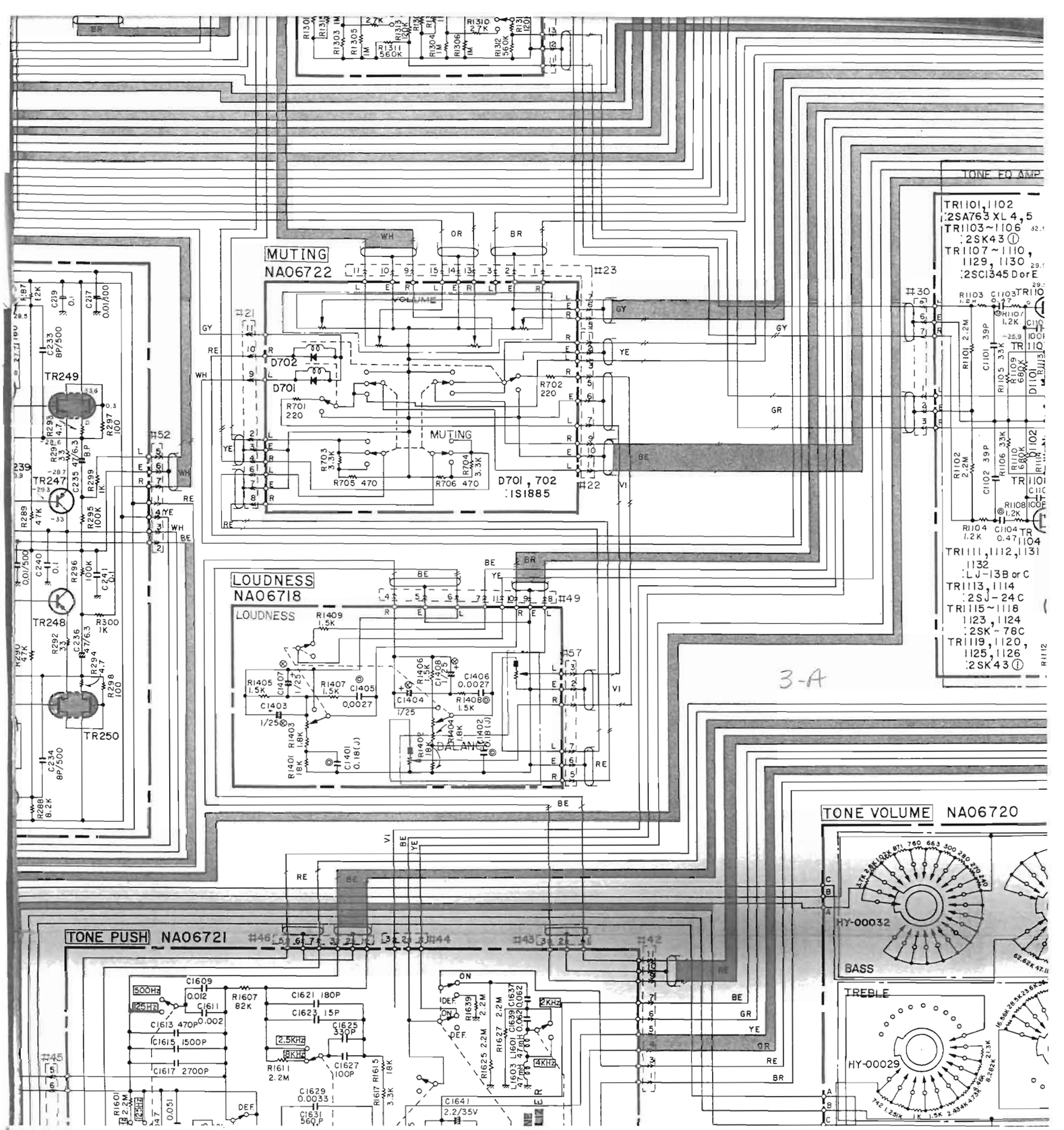

EQ NA06714
TR201,202,231,232
247,248
:2SA763XL 4 or 5
TR203~206
:2SK78C
TR207~210
:2SK43
①E.F
TR211~214,237~242
:2SC1345 D or E
TR215,216,243,244
:L,J,13,B,C
TR217,218:2SJ24A
TR219,220:2SC1439 V
TR221,222,225,226:2SK78 Ⓐ
TR223,224,227,228
:2SK43 ④⑤
TR229,230:2SA763XL 4 or 5
TR233,236:2SK43 ①
TR245,246:2SJ-24C
TR249,250:2SK43R ③
D201~204 :1S1555
METER ATT SW1
NA06726
METER LAMP
METER AMP NA06725
TR2101~2106,2109,2110
2117~2120,2125~2128
:2SC1345 D or E
IC2101AP
#50
#51
#53
#56
2-A

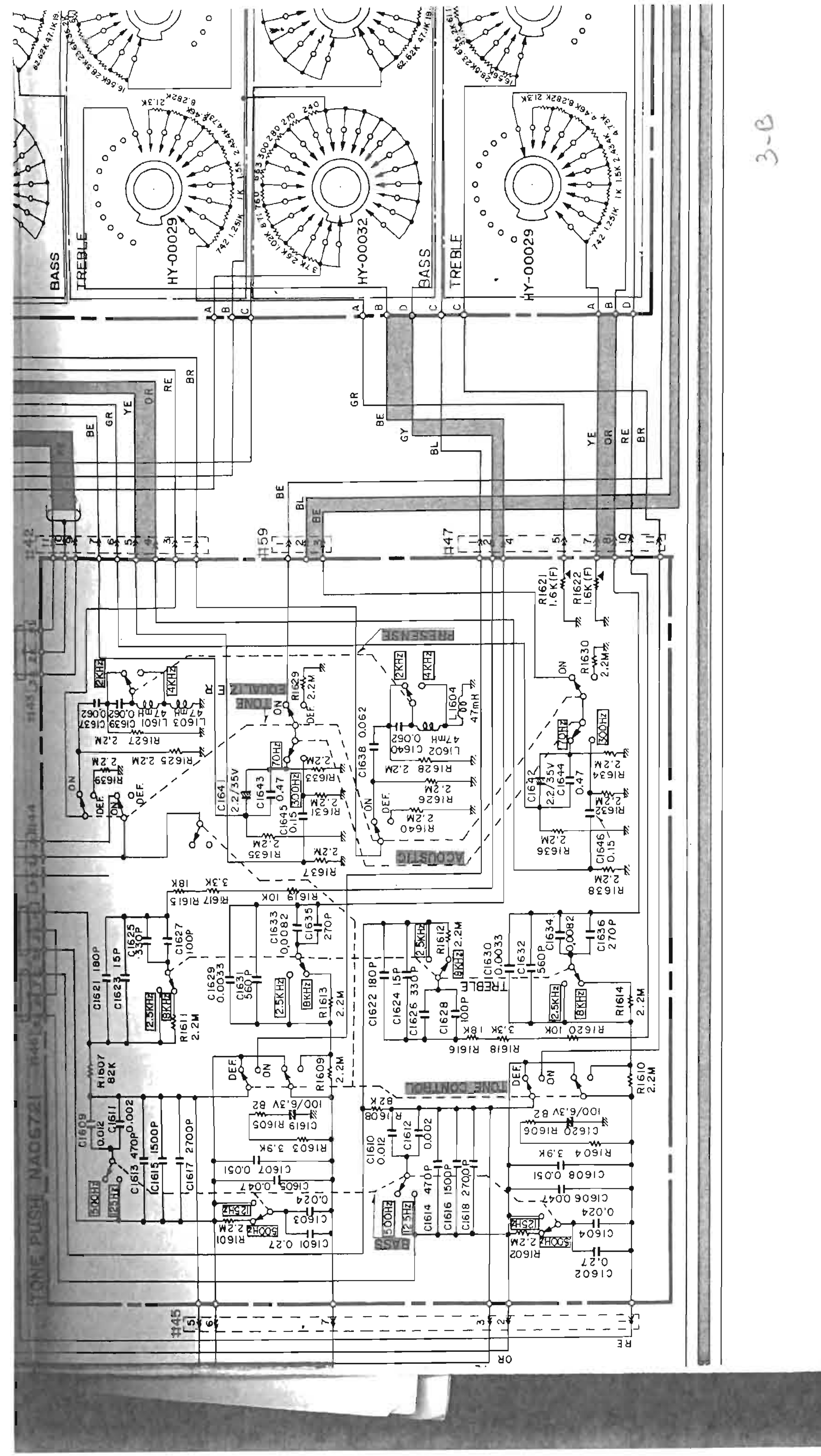

TR2101~2106,2109,2110
2117~2120,2125~2128
:2SC1345 D or E
IC2101AP
IC2102AP
IC2101, 2102
:TA7129AP
TR2107,2108,2111~2116,2121~2124
:2SA763 XL 4 or 5
LEFT
RIGHT
METER SW 2
NA06727

2-B

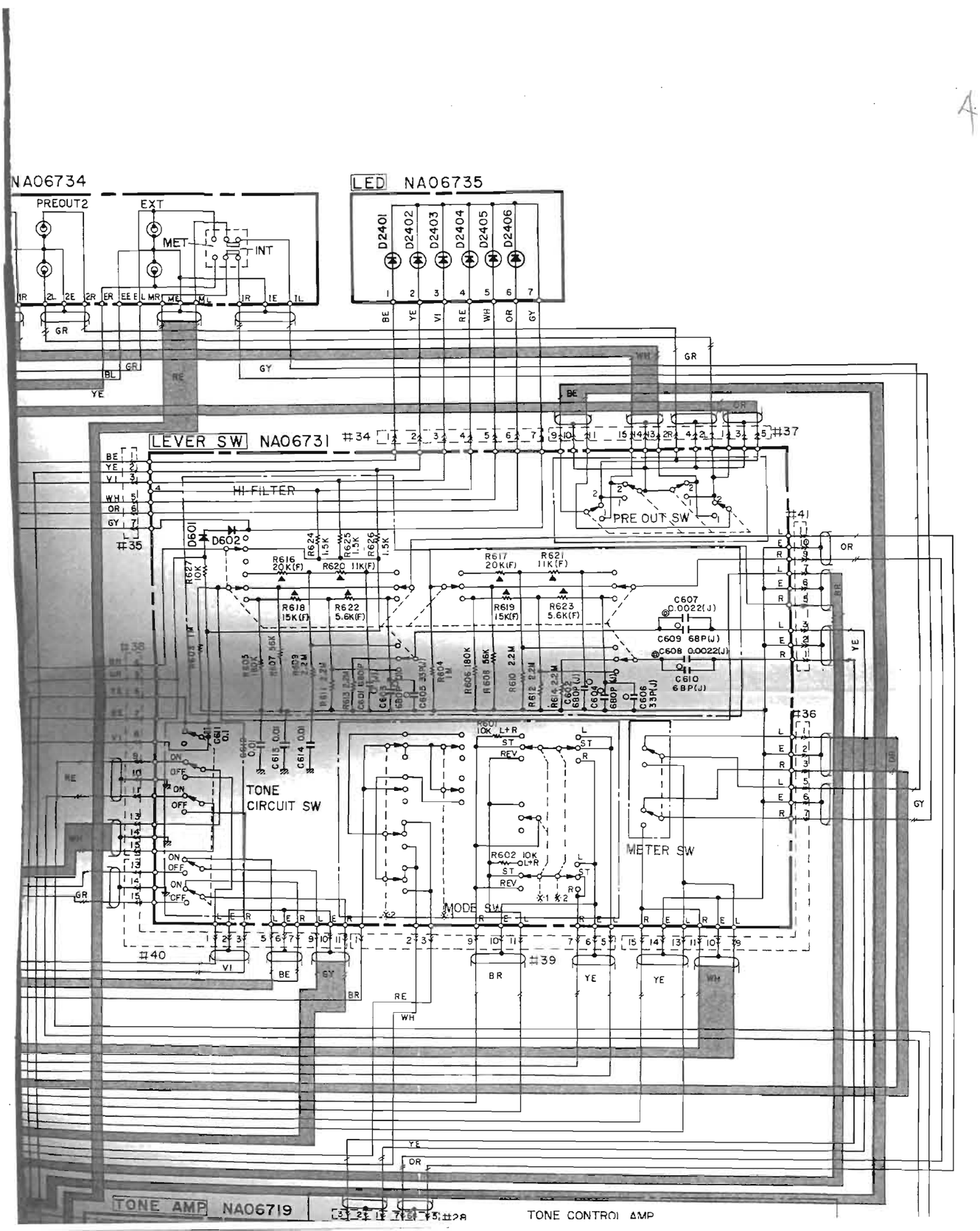


AGRAM
FLAT AMP NA06717
TR801,802,903, 904,919,920, 1001,1002 :2SA763XL4 or 5
TR803,804 :YJ-1200-1
TR805,806,809, 810,907~910, 915,916 :2SC1345 D or E
PRE-OUT BUFFER
BUFFER
TR811,812,911, 912 :LJ-13 B or C
TR813,814,913, 914 :2SJ-24C
FLAT AMP
TR815,816 :2SK75C
TR901,902,905,906 :2SK43①
TR917,918,921,922 :2SK43R ③
HEAD PHONE AMP
HEAD PHONE
TR1003,1004 :2SC458
TR1005,1006 :2SC734 O or Y
TR1007,1008 :2SC1509 R
TR1009,1010 :2SA777R
D801~804,901,902,1001,1002 :1S1555
SLIDE SW
PREOUT 1
H.PVR NA06729
TR1801,1802 :2SC458LG C or D
FILTER NA06730
LOW FILTER


MUTING
NA06722
LOUDNESS
NA06718
TONE PUSH NA06721
TONE VOLUME NA06720
TONE EQ AMP
TR1101,1102
:2SA763 XL 4,5
TR1103~1106
:2SK43 ①
TR1107~1110,
1129,1130
:2SC1345 D or E
TR1111,1112,1131
1132
:LJ-13B or C
TR1113,1114
:2SJ-24C
TR1115~1118
1123,1124
:2SK-78C
TR1119,1120,
1125,1126
:2SK43 ①
D701,702
:1S1885
HY-00032
BASS
HY-00029
TREBLE
3-A



BASS
TREBLE
HY-00029
HY-00032
PRESENSE
ACOUSTIC
TONE CONTROL


NA06734
PREOUT2
EXT
MET
INT
GR
LED NA06735
D2401
D2402
D2403
D2404
D2405
D2406
BE
YE
VI
RE
WH
OR
GY
LEVER SW NA06731
#34
#37
#35
#41
#36
#38
#40
#39
HI FILTER
D601
D602
R624 1.5K
R625 1.5K
R626 1.5K
R627 10K
R616 20K(F)
R620 11K(F)
R617 20K(F)
R621 11K(F)
R618 15K(F)
R622 5.6K(F)
R619 15K(F)
R623 5.6K(F)
PRE OUT SW
C607 0.0022(J)
C609 68P(J)
C608 0.0022(J)
C610 68P(J)
C611 0.1
C612 0.01
C613 0.01
C614 0.01
TONE CIRCUIT SW
ON
OFF
R601 10K L+R ST REV
R602 10K L+R ST REV
METER SW
MODE SW
TONE AMP NA06719
TONE CONTROL AMP

4-A

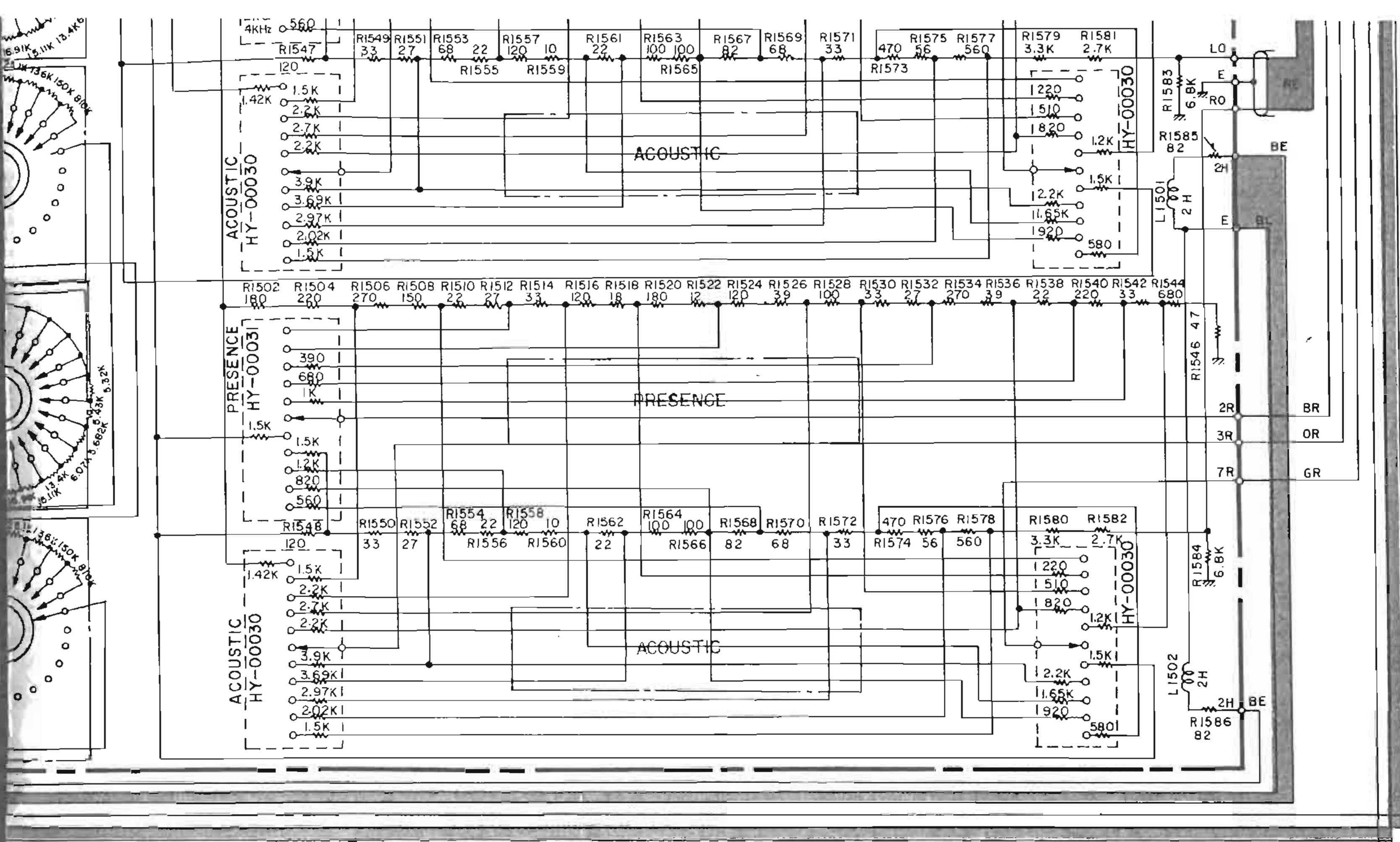
TONE AMP NA0619

TONE CONTROL AMP

PRESENCE HY-00031

ACOUSTIC HY-00030

PRESENCE HY-00031


ACOUSTIC
HY-00030
PRESENCE
HY-00031
ACOUSTIC
HY-00030
ACOUSTIC
PRESENCE
ACOUSTIC
HY-00030
HY-00030
L1501
L1502
LO
RO
BE
BR
OR
GR

4-B