ORDER NO. HAD8612793C9

Service Manual

Stereo Integrated Amplifier

Amplifier

SU-V85A

SU-V85A

Color

(K) . . . . Black Type

Color	Areas
(K)	[E] . . . . . Continental Europe
(K)	[EH] . . . . Holland
(K)	[EB] . . . . Belgium
(K)	[EF] . . . . France
(K)	[EK] . . . . United Kingdom
(K)	[EG] . . . . F.R. Germany
(K)	[Ei] . . . . . Italy
(K)	[XL] . . . . Australia
(K)	[XA] . . . . Asia, Latin America, Middle Near East, Africa & Oceania
(K)	[PA] . . . . East PX.
(K)	[PE] . . . . European Military

SPECIFICATIONS (DIN 45 500)

■ AMPLIFIER SECTION

20 Hz–20 kHz continuous power output
both channels driven 2 × 100W (8Ω)
1 kHz continuous power output
both channels driven 2 × 150W (4Ω)
Total harmonic distortion
rated power at 20 Hz–20 kHz 0.002% (8Ω)
rated power at 1 kHz 0.0007% (8Ω)
half power at 20 Hz–20 kHz 0.002% (8Ω)
half power at 1 kHz 0.0007% (8Ω)
Intermodulation distortion
rated power at 250 Hz: 8 kHz=4:1, 4Ω 0.005%
rated power at 60 Hz: 7 kHz–4:1, SMPTE, 8Ω 0.005%
Power bandwidth
both channels driven, –3 dB 5 Hz–60 kHz (8Ω, 0.025%)
Residual hum and noise 0.8 mV
Damping factor 30 (4Ω), 60 (8Ω)
Input sensitivity and impedance
PHONO MM 2.5 mV/47kΩ
MC 170 μV/220Ω
TUNER, CD, AUX 1
AUX 2, TAPE 1/DA TAPE,
TAPE 2, TAPE 3/EXT 150 mV/18kΩ
PHONO maximum input voltage (1 kHz, RMS)
MM 160 mV
MC 12 mV

S/N
rated power
PHONO MM 79 dB (88 dB, IHF, A)
MC 70 dB (72 dB, 250μV, IHF, A)
TUNER, CD, AUX 1
AUX 2, TAPE 1/DA TAPE,
TAPE 2, TAPE 3/EXT 94 dB (IHF, A: 106 dB)
–26 dB power (4Ω)
PHONO MM 72 dB
MC 65 dB
TUNER, CD, AUX 1
AUX 2, TAPE 1/DA TAPE,
TAPE 2, TAPE 3/EXT 74 dB
50 mW power (4Ω)
PHONO MM 65 dB
MC 62 dB
TUNER, CD, AUX 1
AUX 2, TAPE 1/DA TAPE,
TAPE 2, TAPE 3/EXT 65 dB
Frequency response
PHONO RIAA standard curve ±0.2 dB (20 Hz–20 kHz)
TUNER, CD, AUX 1
AUX 2, TAPE 1/DA TAPE,
TAPE 2, TAPE 3/EXT 0.8 Hz–150 kHz (–3 dB) +0, –0.1 dB (20 Hz–20 kHz)
Tone controls
BASS 50 Hz, +10 dB––10 dB
TREBLE 20 kHz, +10 dB––10 dB
Subsonic filter 20 Hz, 6 dB/oct.
Loudness control (volume at –30 dB) 50 Hz, +9 dB
Muting –20 dB
Output voltage and impedance
TAPE 1, 2 REC OUT 150 mV

Channel balance, AUX 250 Hz–6,300 Hz ±1 dB
Channel separation, AUX 1 kHz 55 dB
Headphones output level and impedance 700 mV/330Ω
Load impedance
MAIN or REMOTE 4Ω–16Ω
MAIN and REMOTE 8Ω–16Ω

■ GENERAL

Power consumption 750W
Power supply
For United Kingdom and Australia
AC 50 Hz/60 Hz, 110V/127V/220V/240V
For continental Europe AC 50 Hz/60 Hz, 220V
For others
AC 50 Hz/60 Hz, 110V/127V/220V/240V
Dimensions (W×H×D) 430 × 158 × 393 mm (16-15/16" × 6-7/32" × 15-15/32")
Weight 11.7 kg (25.74 lb.)

Notes:
1. Specifications are subject to change without notice.
Weight and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer (H.P. 3045 system).

Specifications are subject to chnge without notice for further improvement.

Technics

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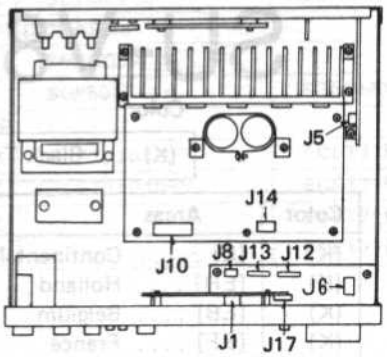
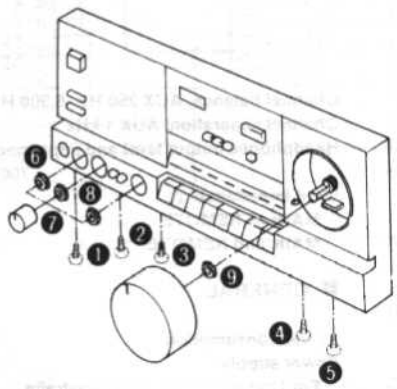
Tokyo 105, Japan

Ref. No. 1	How to remove the front panel and sub P.C.B.
Procedure 1	

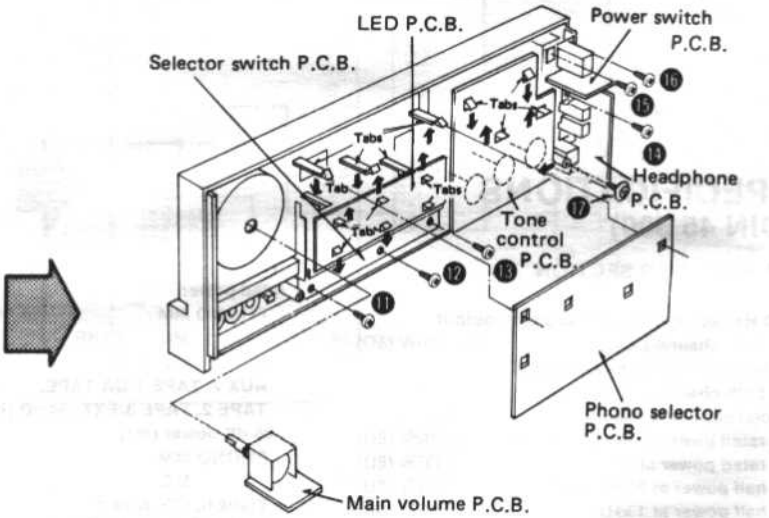
1. Remove the cabinet.
2. Remove the connectors J1, J2, J5, J6, J10 and J14.



3. Remove the 5 screws (❶ ~ ❺).
4. Remove the 3 nuts (❻ , ❽)
5. Remove the front panel.

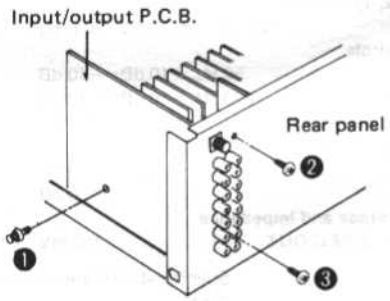


6. Remove the phono selector P.C.B. from the 5 tabs.
7. Remove the LED P.C.B. from the 6 tabs.
8. Remove the 3 setscrews (⓫ ~ ⓭) from the selector switch P.C.B.
9. Remove the tone control P.C.B. from the 4 tabs.
10. Remove the 2 setscrews (⓮, ⓱) from the headphone P.C.B. and then remove it from the tabs.
11. Remove the 2 setscrews (⓯, ⓰) from the power switch P.C.B.

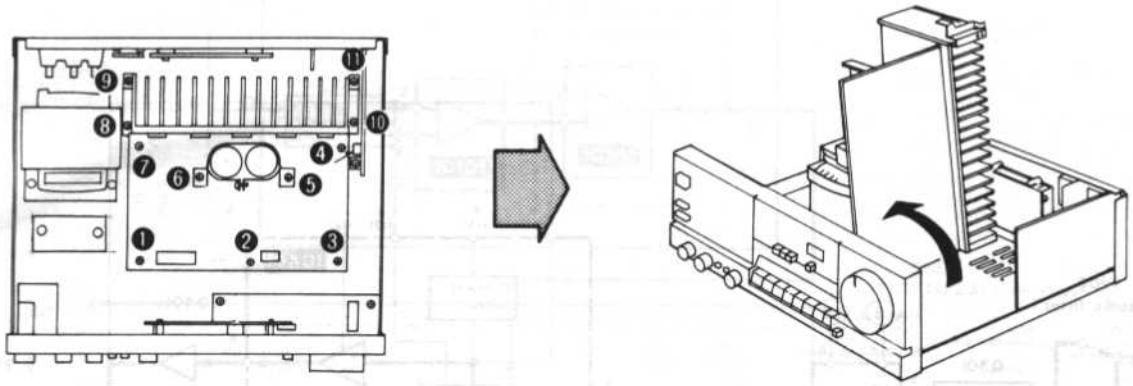


Ref. No. 2	How to remove the input/output P.C.B.
Procedure 2	

1. Remove the 3 setscrews (❶ ~ ❸) from the input/output P.C.B.



Ref. No. 3	How to remove the main P.C.B.
Procedure 3	1. Remove the 11 setscrews (❶ ~ ⓫) from the main P.C.B. and heat-sink. 2. Remove the P.C.B. by raising it in the direction of the arrow.



■ PROTECTION CIRCUITRY

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

■ BEFORE REPAIR AND ADJUSTMENT

(1) Turn off the power supply. Using a 10Ω, 5W resistor, shortcircuit both ends of power supply capacitors (C601, C602) in order to discharge the voltage.

(2) Before turning on the power switch of the set . . .

A. Connect the voltage controller to the primary side.

B. Connect the AC ampere meter to the primary side or connect the DC voltage metar to the "±B" circuit of the secondary side.

C. Turn the VR of ICQ (VR501 and VR502) to minimum (counterclockwise).

D. After setting the output to zero of the voltage contoller, turn on the power switch of the set.
And increase the output of voltage controller gradually.
Then, check carefully whether the current value of primary side become more than followings value or whether the DC voltage of secondary side is increasing slowly.

E. If the value of current is increasing unusually or the DC voltage is not increasing, lower the output level of voltage contoller immediately.

F. Check the transistors of voltage amplifier and current amplifier IC501.

G. After repairing, adjust the ICQ.

- The current value of the primary side at no signal. (Confirm the power supply voltage of each area and provided voltage of the set.)

Power supply voltage	AC110V	AC127V	AC220V	AC240V
Consumed current 50/60Hz	270 ~ 730mA	240 ~ 630mA	130 ~ 370mA	120 ~ 330mA

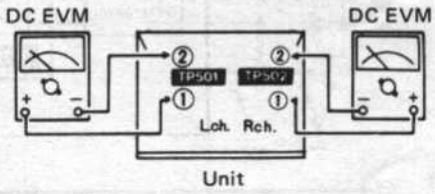
■ MEASUREMENTS AND ADJUSTMENTS

Control positions and equipment used.

- Volume knob . . . . . ∞ (Minimum)
- Main speaker selector . . . . . off
- Remote speaker selector . . . . . off
- DC electronic voltmeter (EVM)

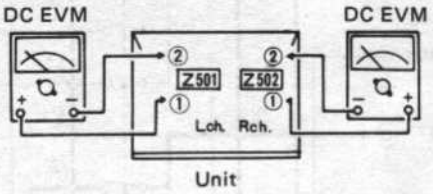
VOLTAGE CONTROL (V) AMP. IDLING (ICQ) ADJUSTMENT

1. Test equipment connection is shown in figure. (Connect the DC EVM. on both channels.)
2. Completely turn the (V) amp. adjusting volumes **(VR451, VR452)** counter-clockwise.
3. Turn ON the set when it is cold, and immediately adjust **VR451** and **VR452** so that the voltage is **25mV.** Also, check that the voltage is **25 – 30mV** (standard: **27mV)** after lapse of **10 – 15 minutes.** (Below **30mV** after lapse of **20 min.)**

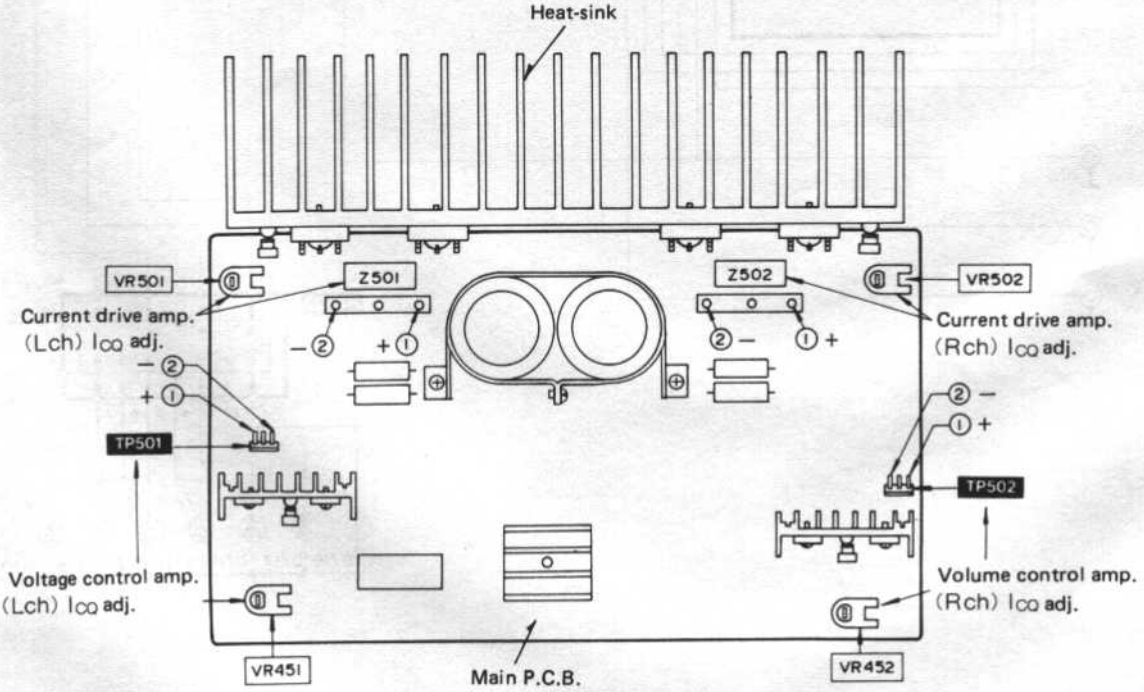


CURRENT DRIVE (C) AMP. IDLING (ICQ) ADJUSTMENT

1. Test equipment connection is shown in figure. (Connect the DC EVM. on both channels.)
2. Completely turn the (C) amp. adjusting volumes **(VR501, VR502)** counterclockwise.
3. Turn ON the set when it is cold, and after the adjustment of the (V) amp. ICQ, adjust **VR501** and **VR502** so that the voltage is **3mV.** Also, check that the voltage is **4 – 7mV** (standard: **5mV)** after lapse of **10 – 15 minutes.** (Below **10mV** after lapse of **20 min.)**

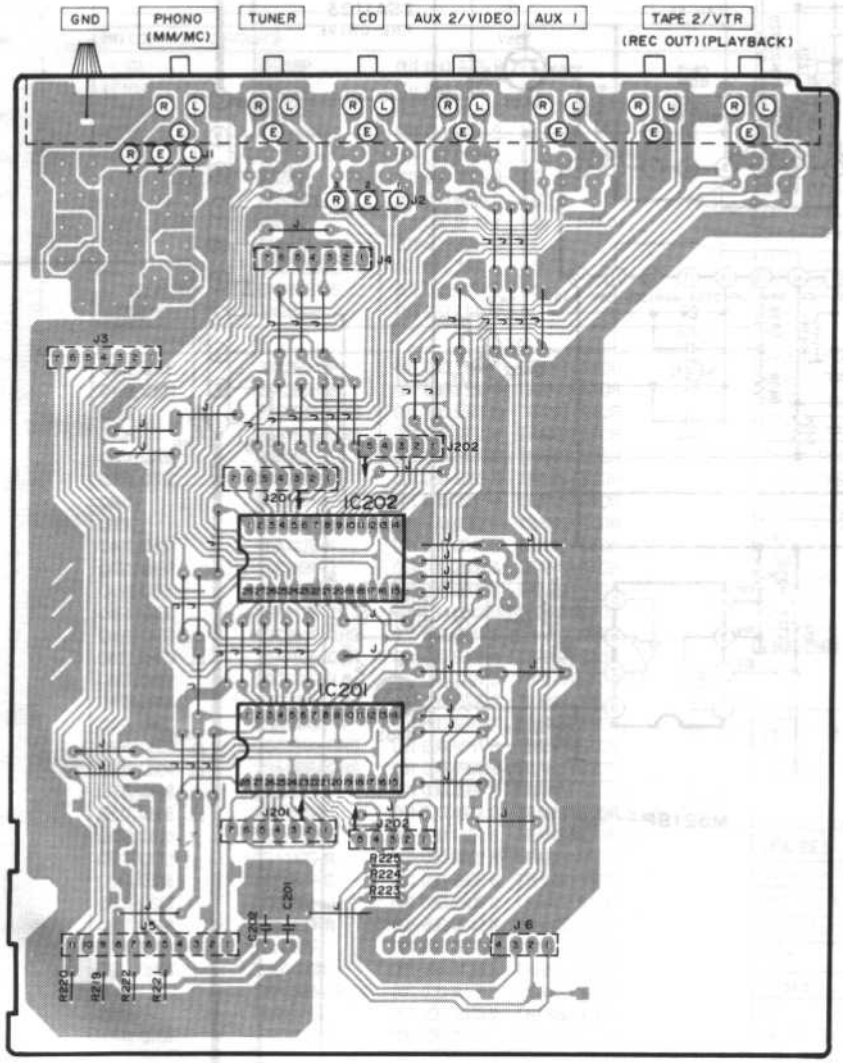


- **Adjustment points**

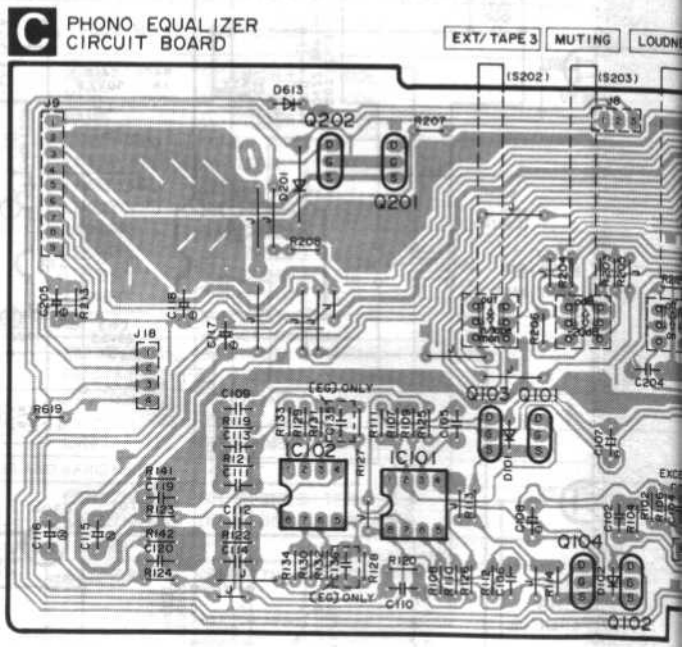


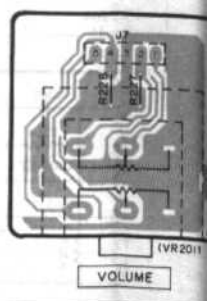
■ PRINTED CIRCUIT BOARDS

B INPUT SELECTOR CIRCUIT BOARD

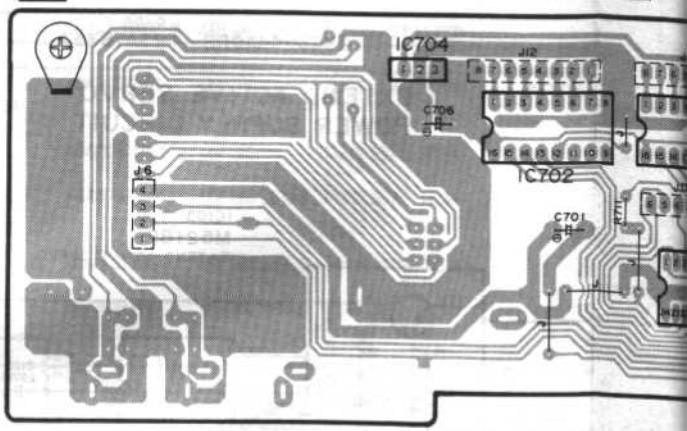


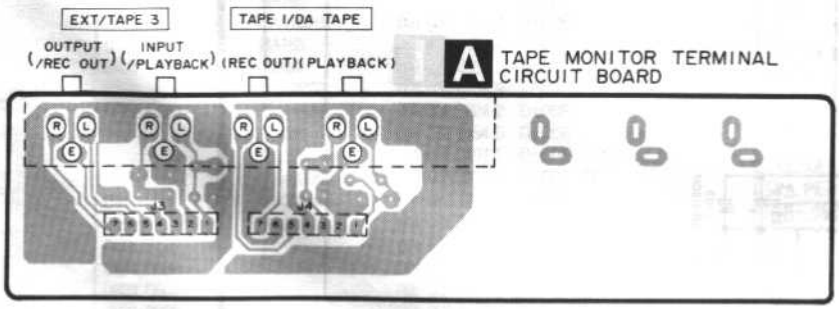
C PHONO EQUALIZER CIRCUIT BOARD



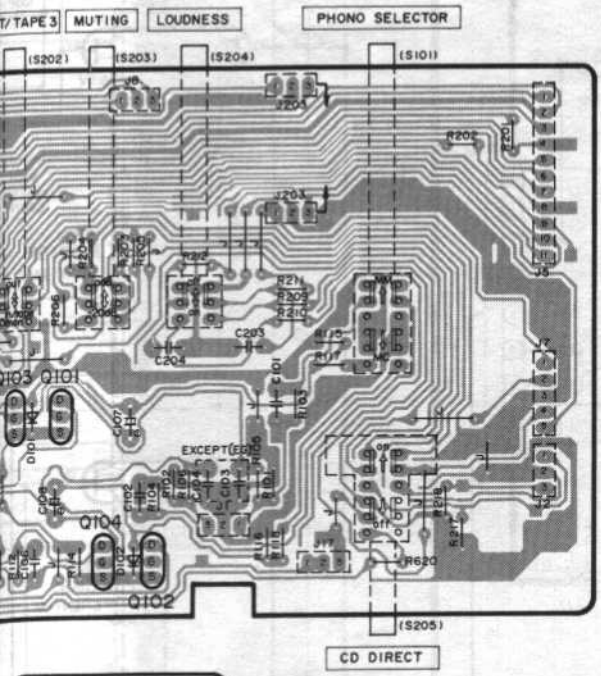


D LED DRIVE CIRCUIT BOARD

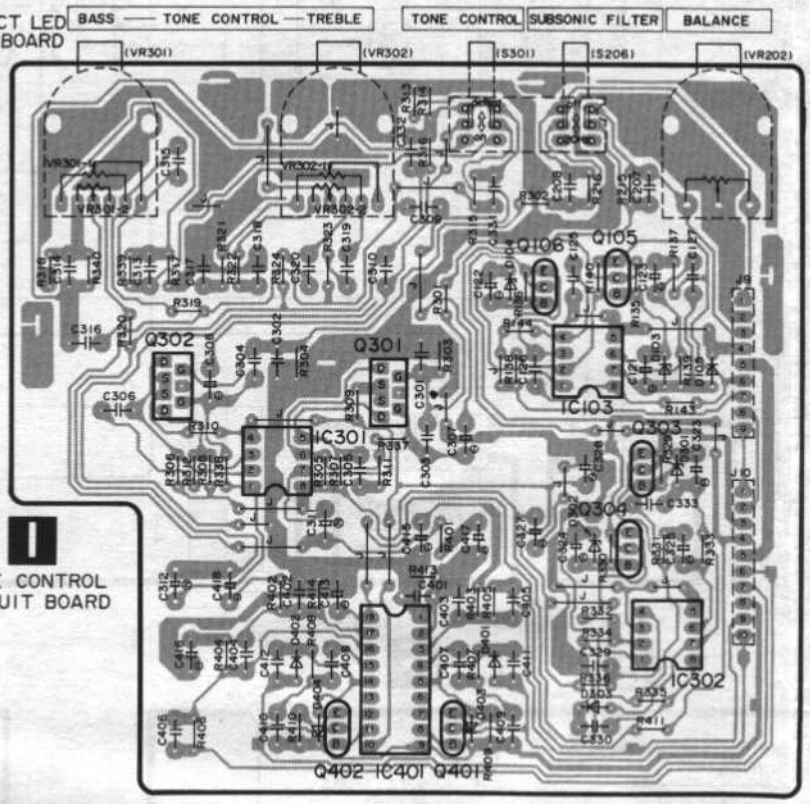




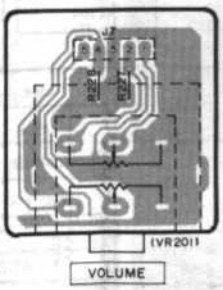
A TAPE MONITOR TERMINAL CIRCUIT BOARD



E CD DIRECT LED CIRCUIT BOARD

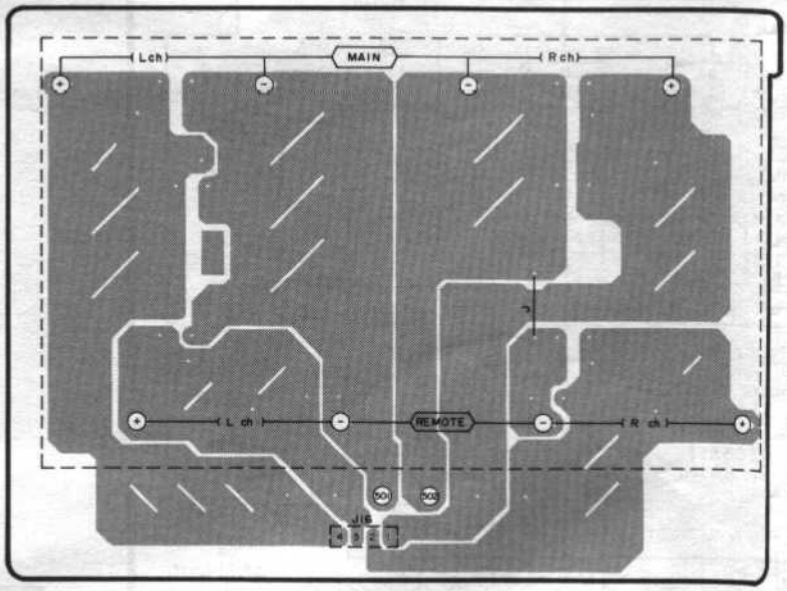


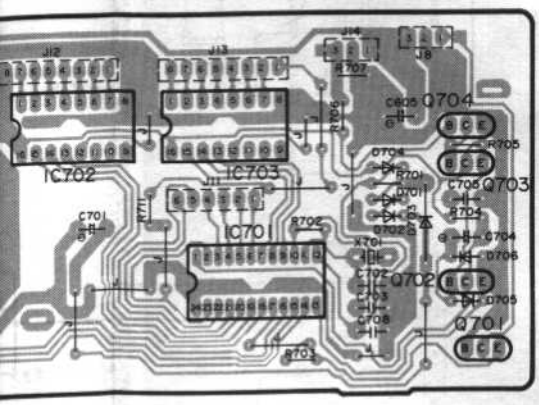
I TONE CONTROL CIRCUIT BOARD



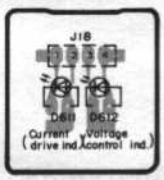
G VOLUME CONTROL CIRCUIT BOARD

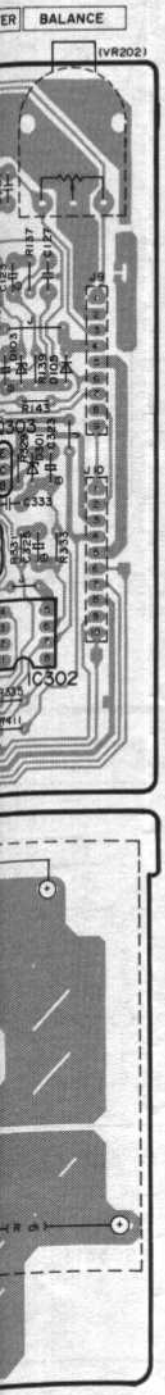
N SPEAKER TERMINAL CIRCUIT BOARD



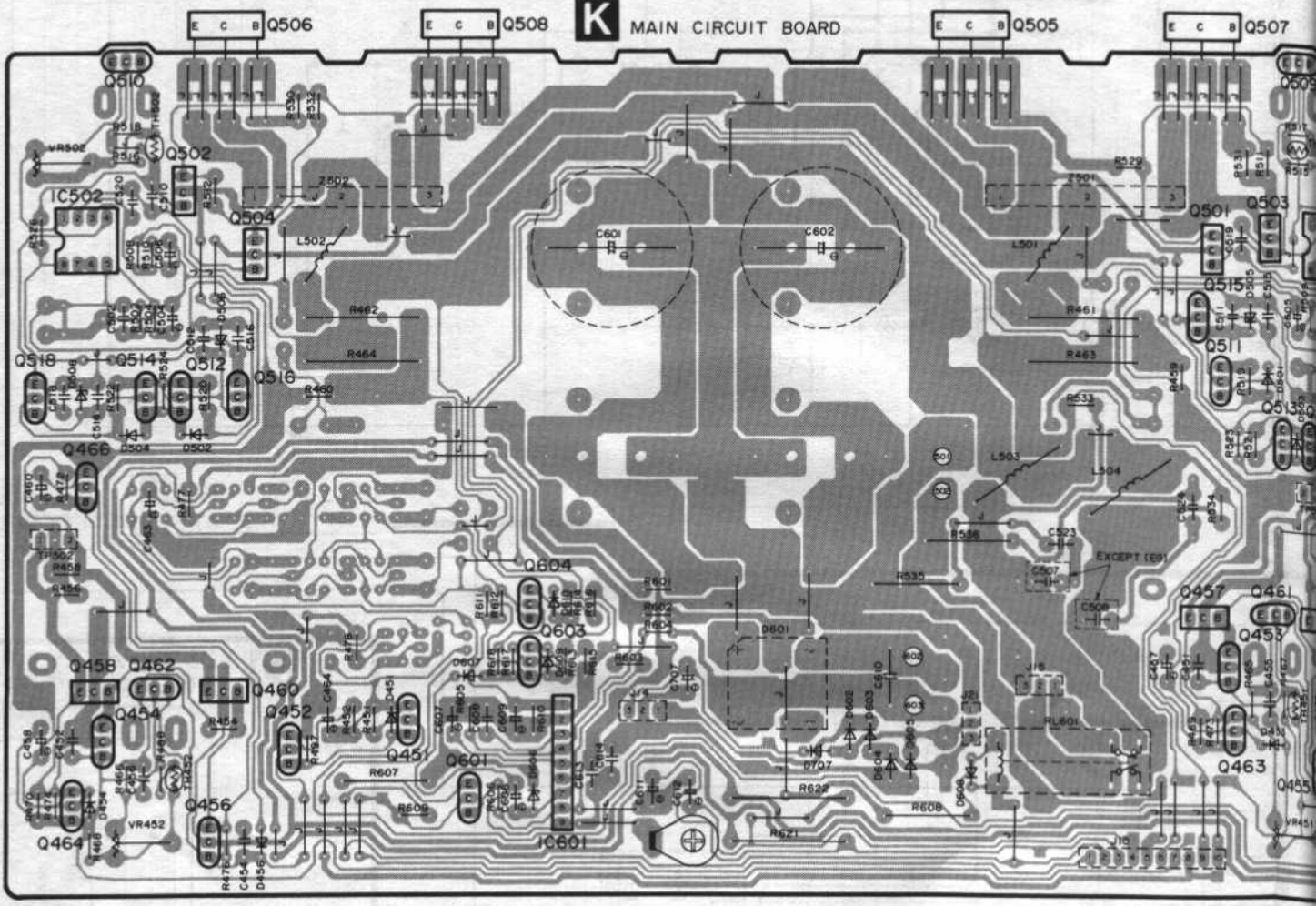


F CURRENT DRIVE VOLTAGE CONTROL LED CIRCUIT BOARD

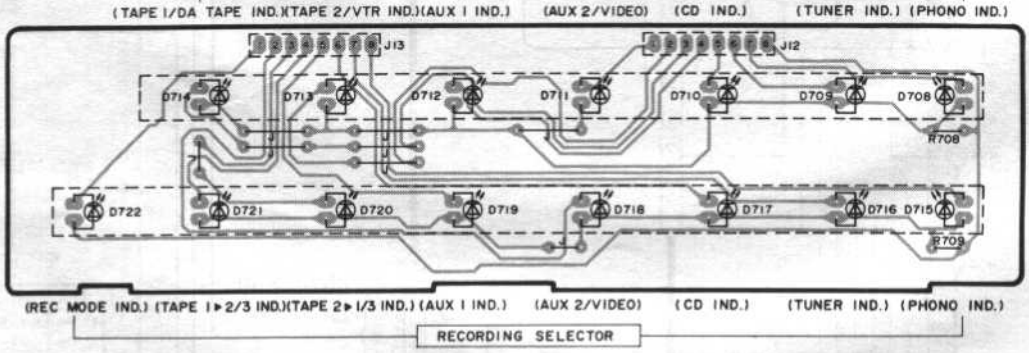




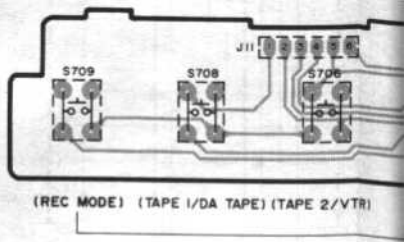
K MAIN CIRCUIT BOARD

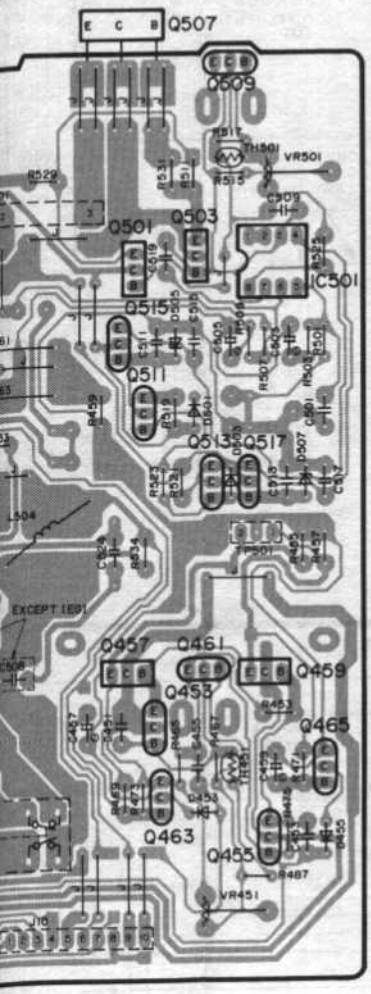


J INPUT/REC SELECTOR LED CIRCUIT BOARD

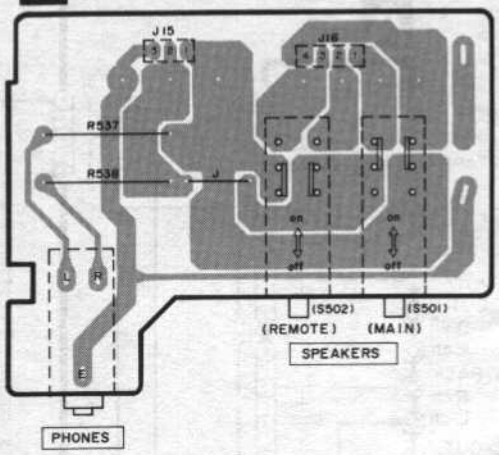


H INPUT/REC SELECTOR SWITCH



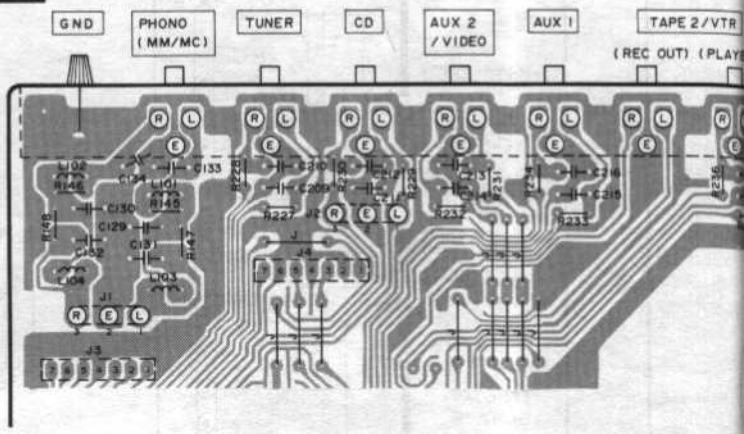


L HEADPHONE JACK/SPEAKER SELECTOR SWITCH CIRCUIT BOARD



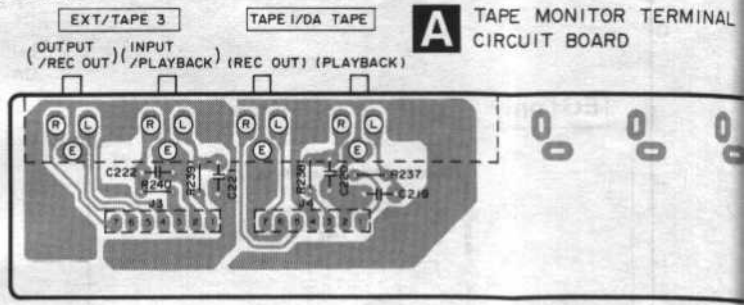
(EG) ONLY

B INPUT SELECTOR CIRCUIT BOARD

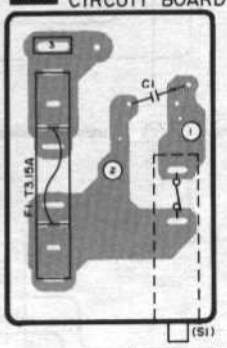


(EG) ONLY

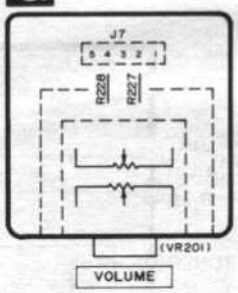
A TAPE MONITOR TERMINAL CIRCUIT BOARD



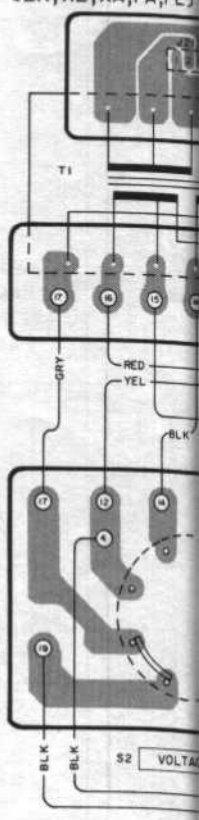
M FUSE/POWER SWITCH CIRCUIT BOARD



G

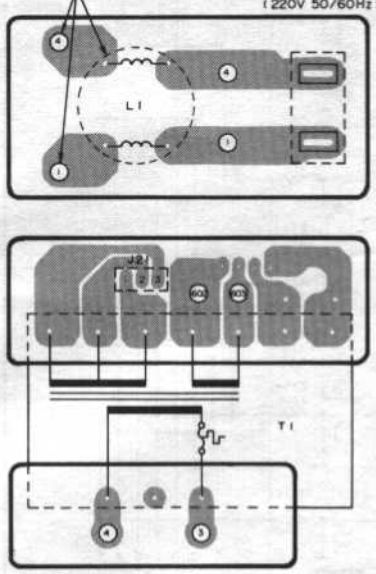


(EK, XL, XA, PA, PE)

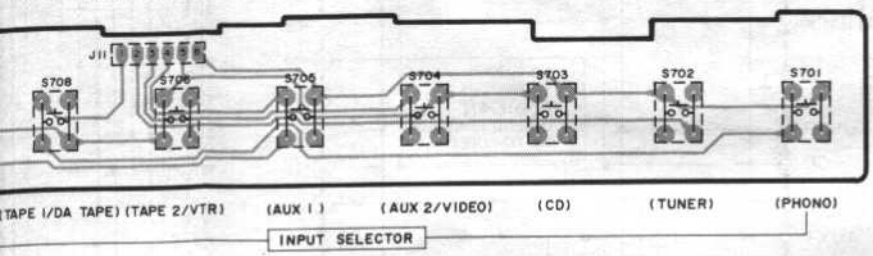


(EG) ONLY

AC IN (220V 50/60Hz)

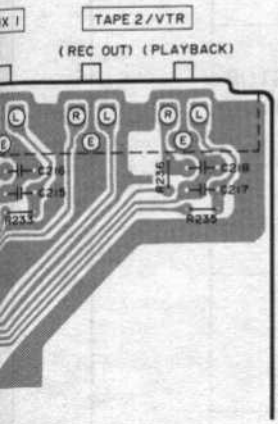


UT/REC SELECTOR SWITCH CIRCUIT BOARD

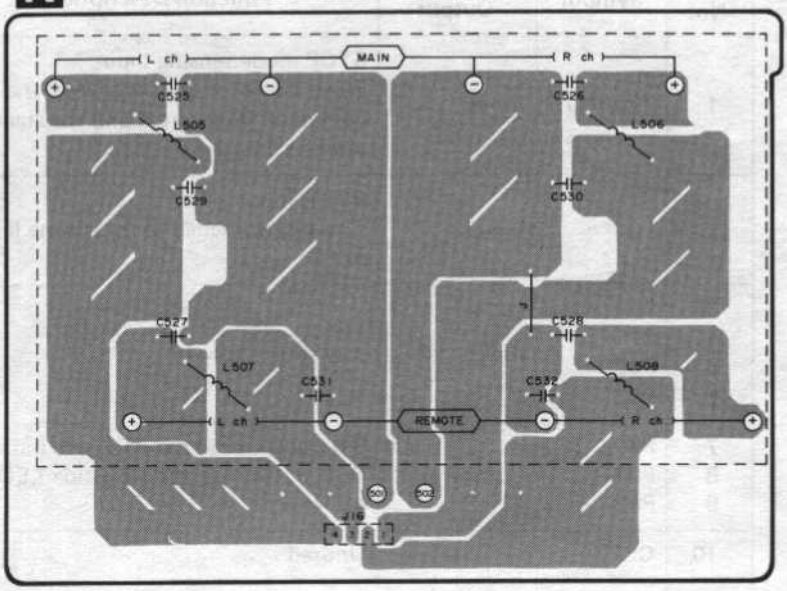


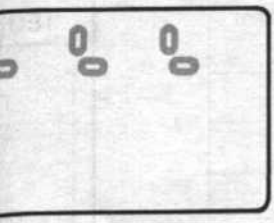
(EG) ONLY

N SPEAKER TERMINAL CIRCUIT BOARD

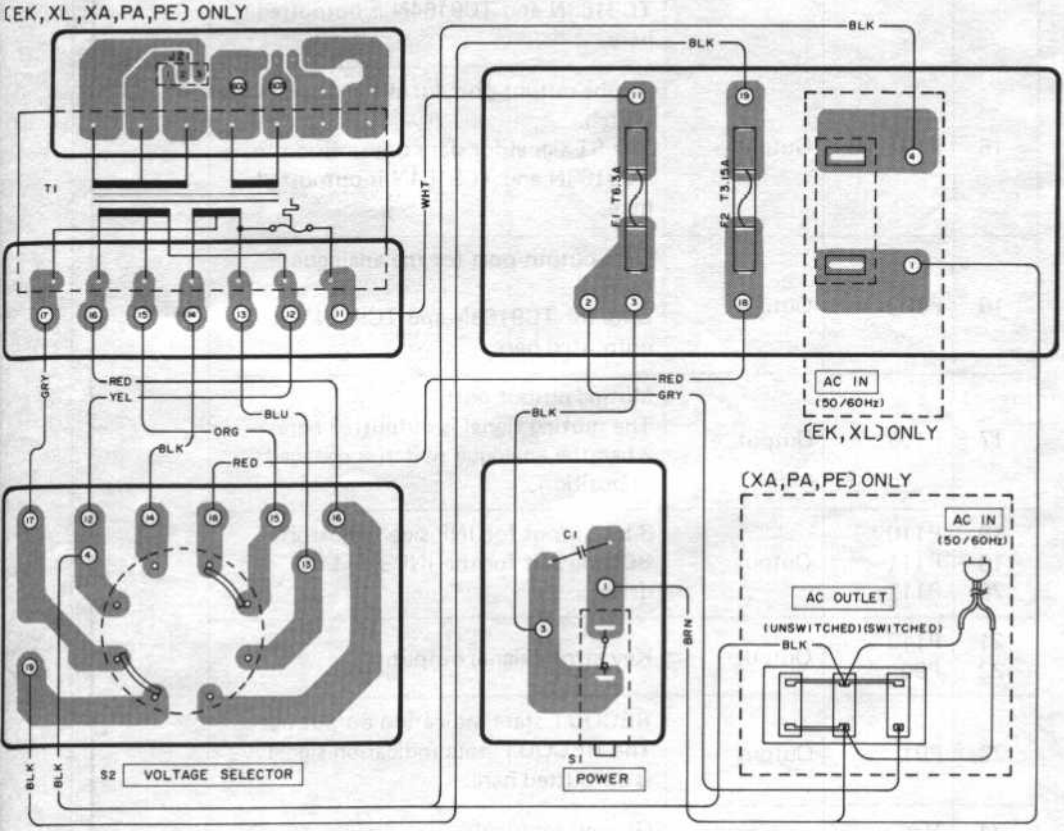


ONITOR TERMINAL
BOARD





(EK, XL, XA, PA, PE) ONLY

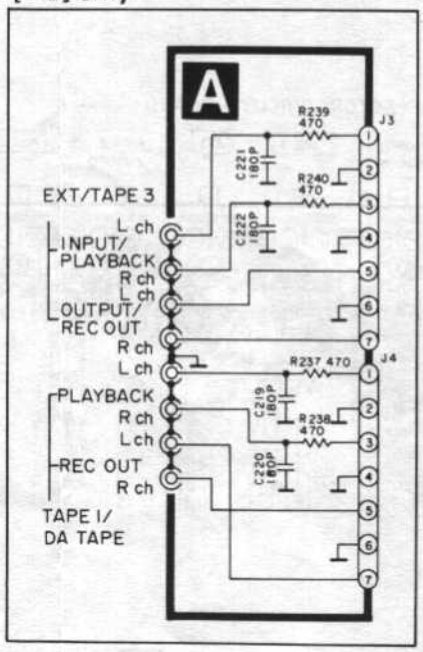


■ FUNCTION OF IC TERMINALS

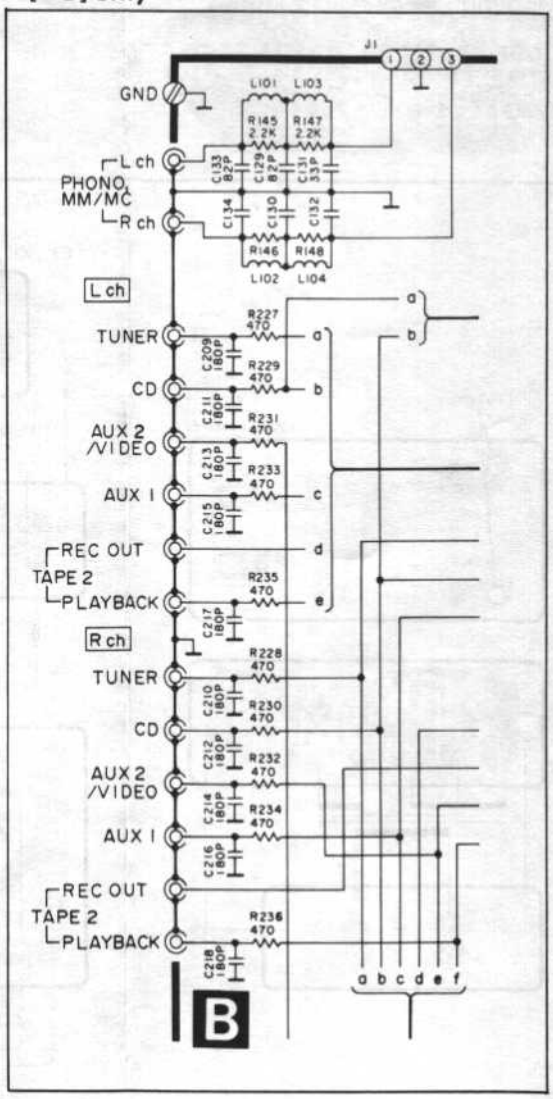
- **IC701 (UPD7566CS044) for Controlling the Analogue Switch Operations**

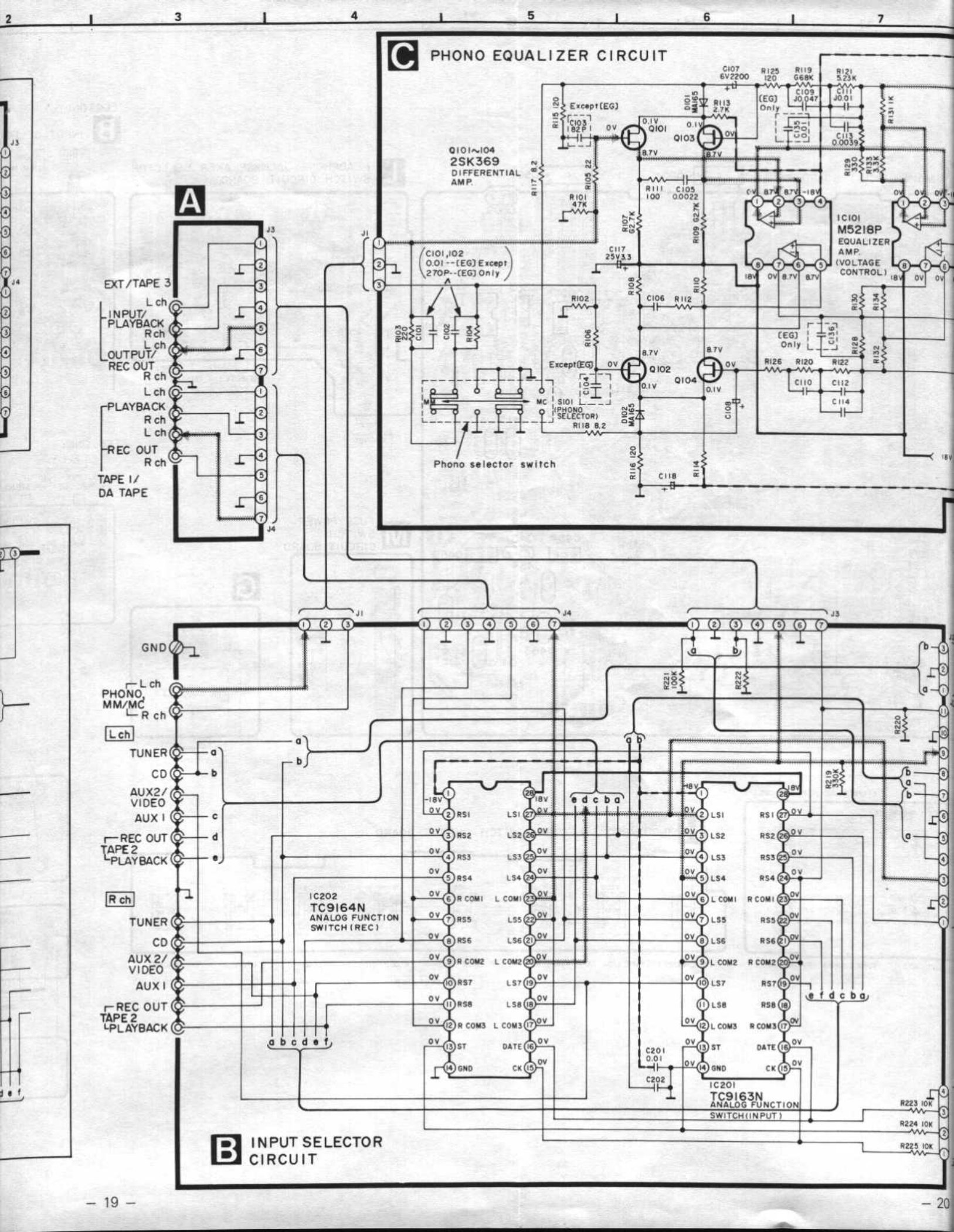
Pin No.	Symbol	Input/ Output	Function Description
1	P00/INTO	Input	STOP mode sensing input. When a high pulse is accepted, the STOP command is executed and the stand-by mode is entered.
2	P01	Input	P91 is inputted here. This pin is inteded to detect the level of P91
3 4 5 6	P10 P11 P12 P13	Input	Key source input
7 8 9	P80 P81 P82	Output	3-bit output for the REC-side indicator. BCD output for the REC-side LED driver.
10	CL2	– – –	Unused
11	CL1	– – –	External clock input (f=400kHz) This serves as the source for the system clock.
12	VDD	– – –	Power supply terminal (+5V)
13	RESET	– – –	CPU reset signal input terminal.
14	P100	Output	Clock output port for the analogue switch. The CK signal for data transmission to TC9163N and TC9164N is outputted here.
15	P101	Output	Strobe output port for the analogue switch. The ST signal for data transmission to TC9163N and TC9164N is outputted here.
16	P102	Output	Data output port for the analogue switch. Data for TC9163N and TC9164N is outputted here.
17	P103	Output	Muting output port. The muting signal is outputted here when the analogue switch is changed in position.
18 19 20	P110 P111 P112	Output	3-bit output for INP-side indicator. BCD output for the INP-side LED driver.
21 22	P113 P90	Output	Key strobe signal output.
23	P91	Output	RECOUT state indication output port. The RECOUT state indication signal is outputted here.
24	Vss	– – –	Ground terminal.

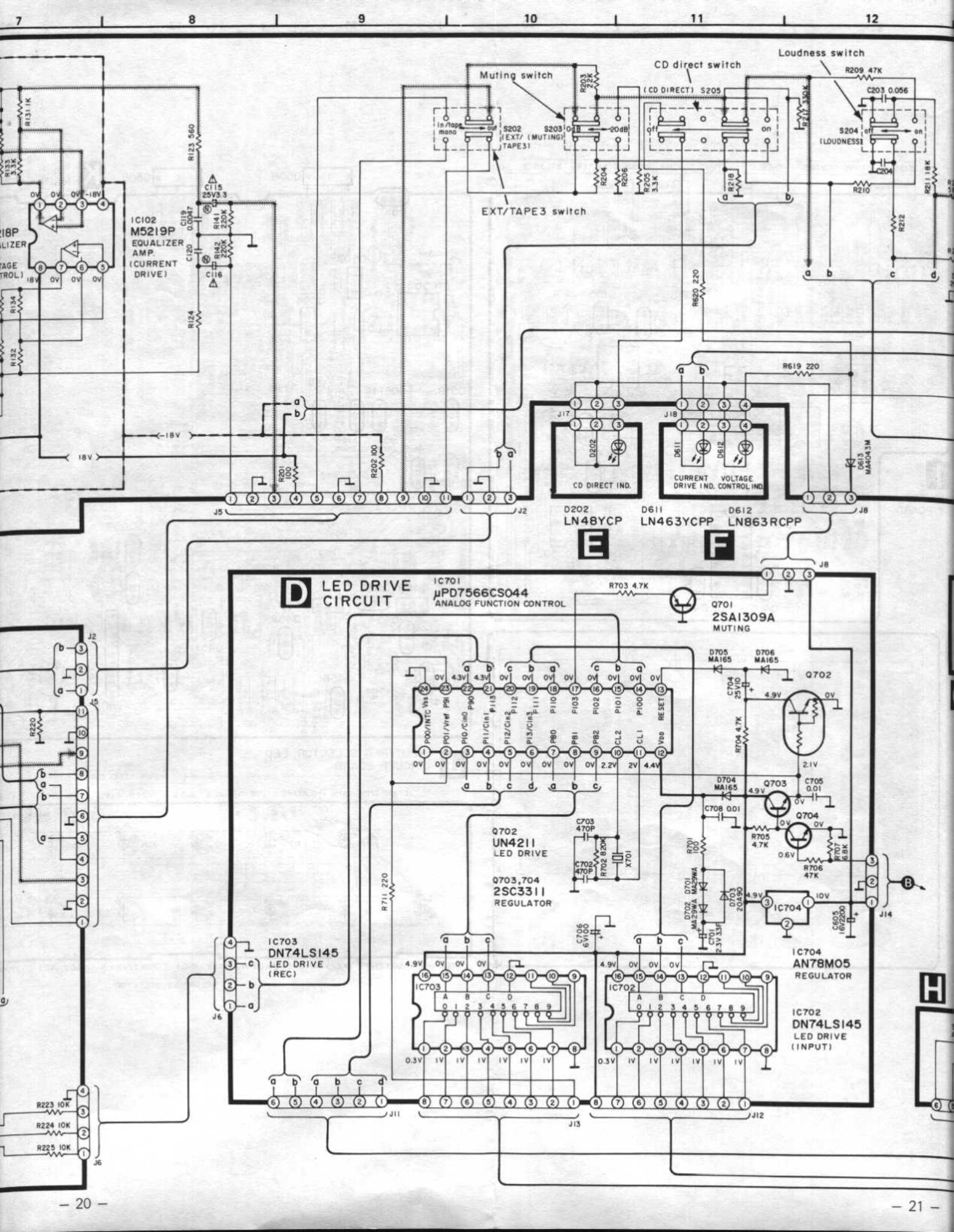
[EG] only

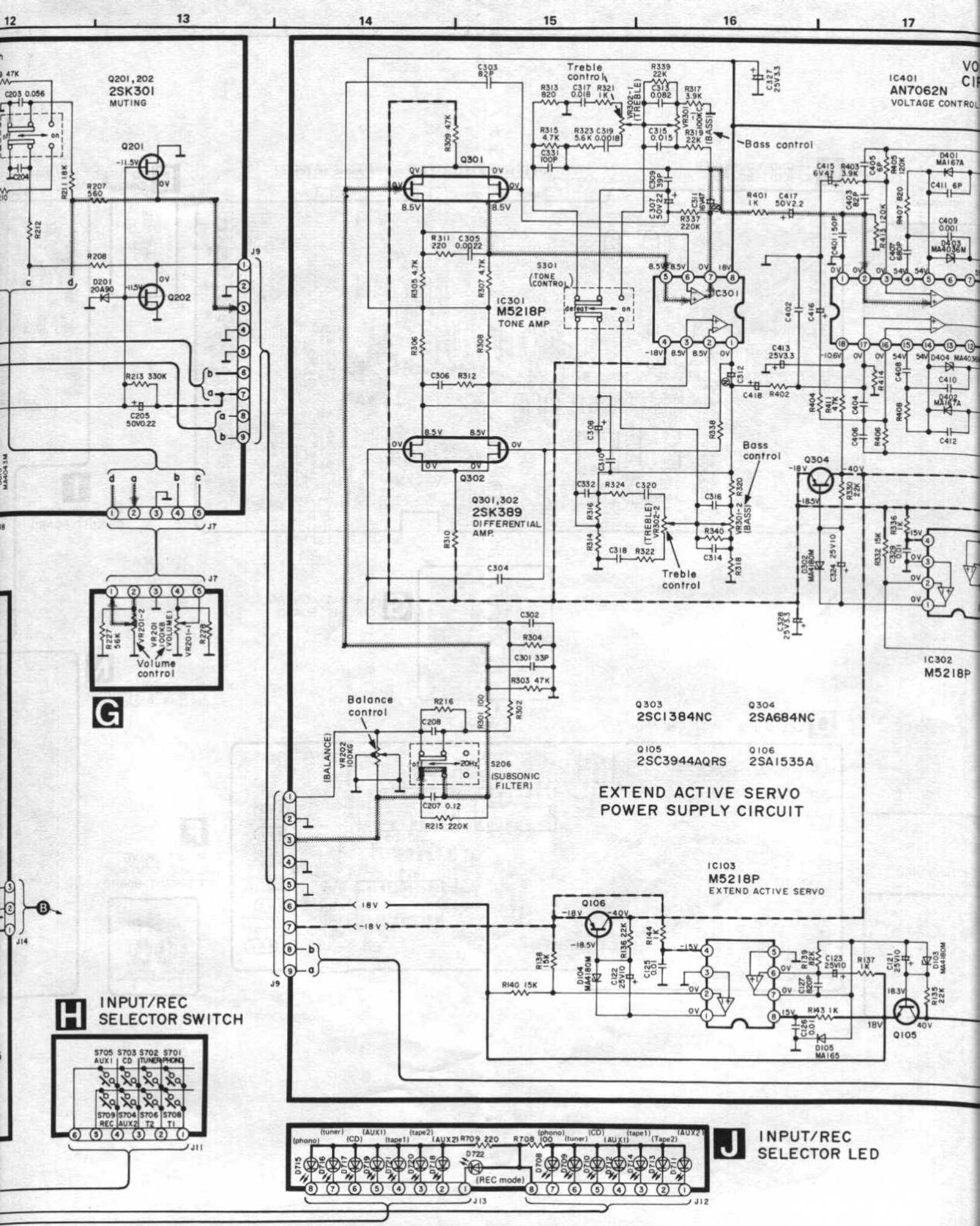


[EG] only



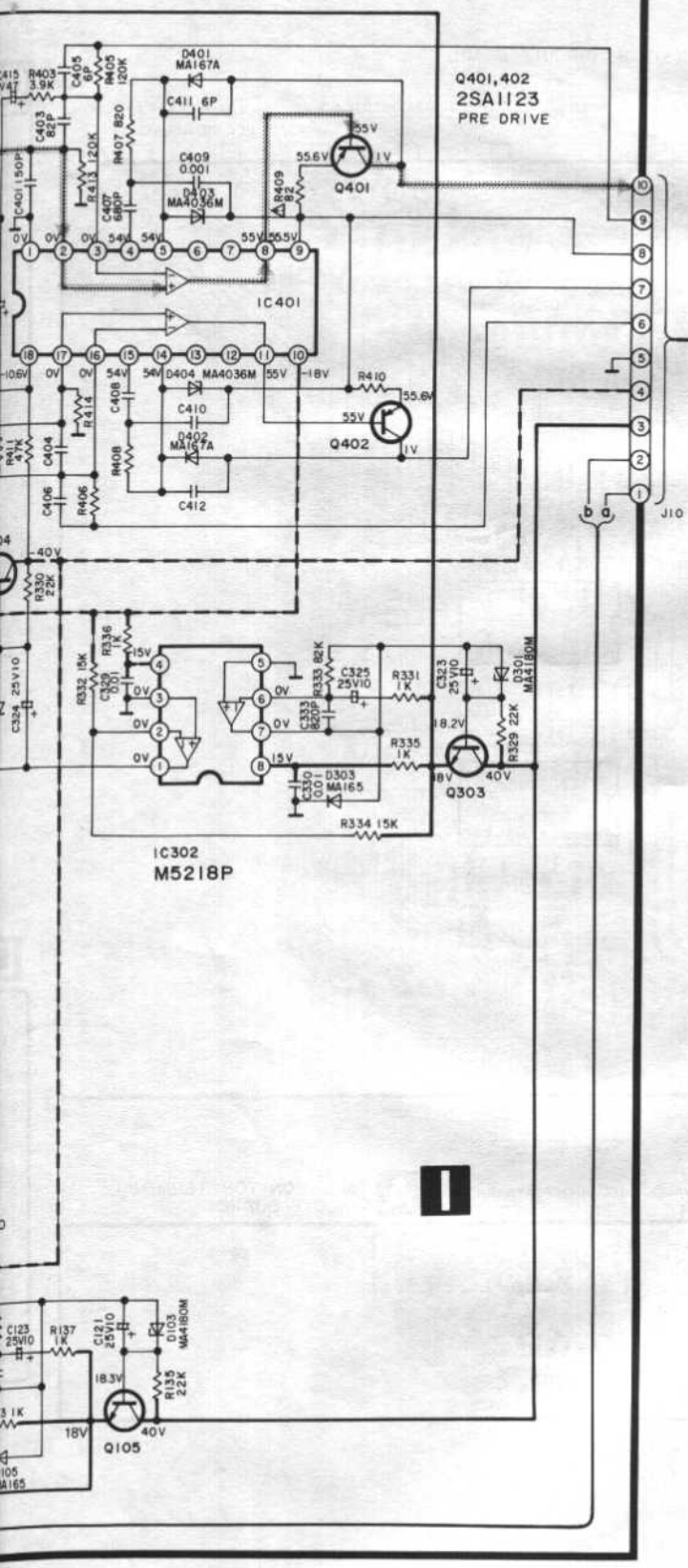

C PHONO EQUALIZER CIRCUIT
Q101~104
2SK369
DIFFERENTIAL AMP.
IC101
M5218P
EQUALIZER AMP.
(VOLTAGE CONTROL)
Except(EG)
(EG) Only
Phono selector switch
S101 (PHONO SELECTOR)
A
EXT/TAPE 3
INPUT/PLAYBACK
OUTPUT/REC OUT
PLAYBACK
REC OUT
TAPE 1/DA TAPE
J1
J3
J4
B INPUT SELECTOR CIRCUIT
GND
PHONO MM/MC
L ch
R ch
TUNER
CD
AUX2/VIDEO
AUX 1
REC OUT TAPE 2 PLAYBACK
IC202
TC9164N
ANALOG FUNCTION SWITCH (REC)
IC201
TC9163N
ANALOG FUNCTION SWITCH (INPUT)


7
8
9
10
11
12
Loudness switch
CD direct switch
Muting switch
(CD DIRECT) S205
S202 (EXT/ (MUTING) TAPE3)
S203
S204 (LOUDNESS)
EXT/TAPE3 switch
IC102
M5219P
EQUALIZER AMP. (CURRENT DRIVE)
R209 47K
C203 0.056
R123 560
R620 220
R619 220
CD DIRECT IND.
CURRENT DRIVE IND.
VOLTAGE CONTROL IND.
D202 LN48YCP
D611 LN463YCPP
D612 LN863RCPP
E
F
D
LED DRIVE CIRCUIT
IC701
μPD7566CS044
ANALOG FUNCTION CONTROL
Q701
2SA1309A
MUTING
Q702
UN4211
LED DRIVE
Q703,704
2SC3311
REGULATOR
IC703
DN74LS145
LED DRIVE (REC)
IC704
AN78M05
REGULATOR
IC702
DN74LS145
LED DRIVE (INPUT)
H
– 20 –
– 21 –

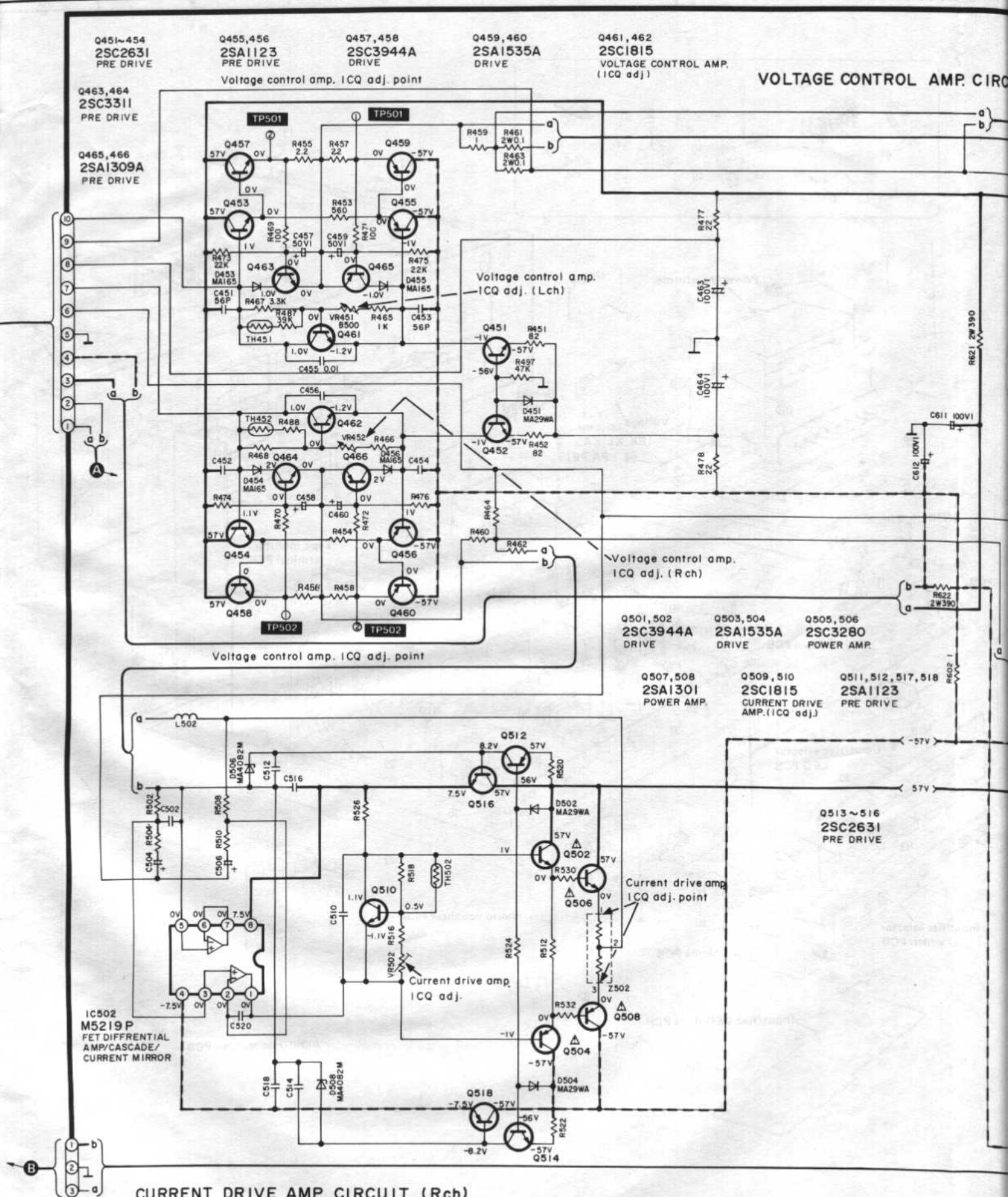

Q201, 202
2SK301
MUTING
Q201
Q202
D201
20A90
R213 330K
C205
50V0.22
J9
J7
G
Volume control
VR201-2
VR201
100KB
(VOLUME)
VR201-1
J14
B
H
INPUT/REC
SELECTOR SWITCH
S705 S703 S702 S701
AUX1 CD TUNER PHONO
S709 S704 S706 S708
REC AUX2 T2 T1
J11
Q301
Q302
Q301,302
2SK389
DIFFERENTIAL
AMP.
IC301
M5218P
TONE AMP
S301
(TONE
CONTROL)
Treble
control
Bass control
VR302-1
(TREBLE)
VR301-1
(BASS)
VR302-2
(TREBLE)
VR301-2
(BASS)
IC401
AN7062N
VOLTAGE CONTROL
Q304
Q303
2SC1384NC
Q304
2SA684NC
Q105
2SC3944AQRS
Q106
2SA1535A
EXTEND ACTIVE SERVO
POWER SUPPLY CIRCUIT
IC302
M5218P
IC103
M5218P
EXTEND ACTIVE SERVO
Balance
control
(BALANCE)
VR202
100KG
S206
(SUBSONIC
FILTER)
20Hz
J
INPUT/REC
SELECTOR LED
(REC mode)
J13
J12

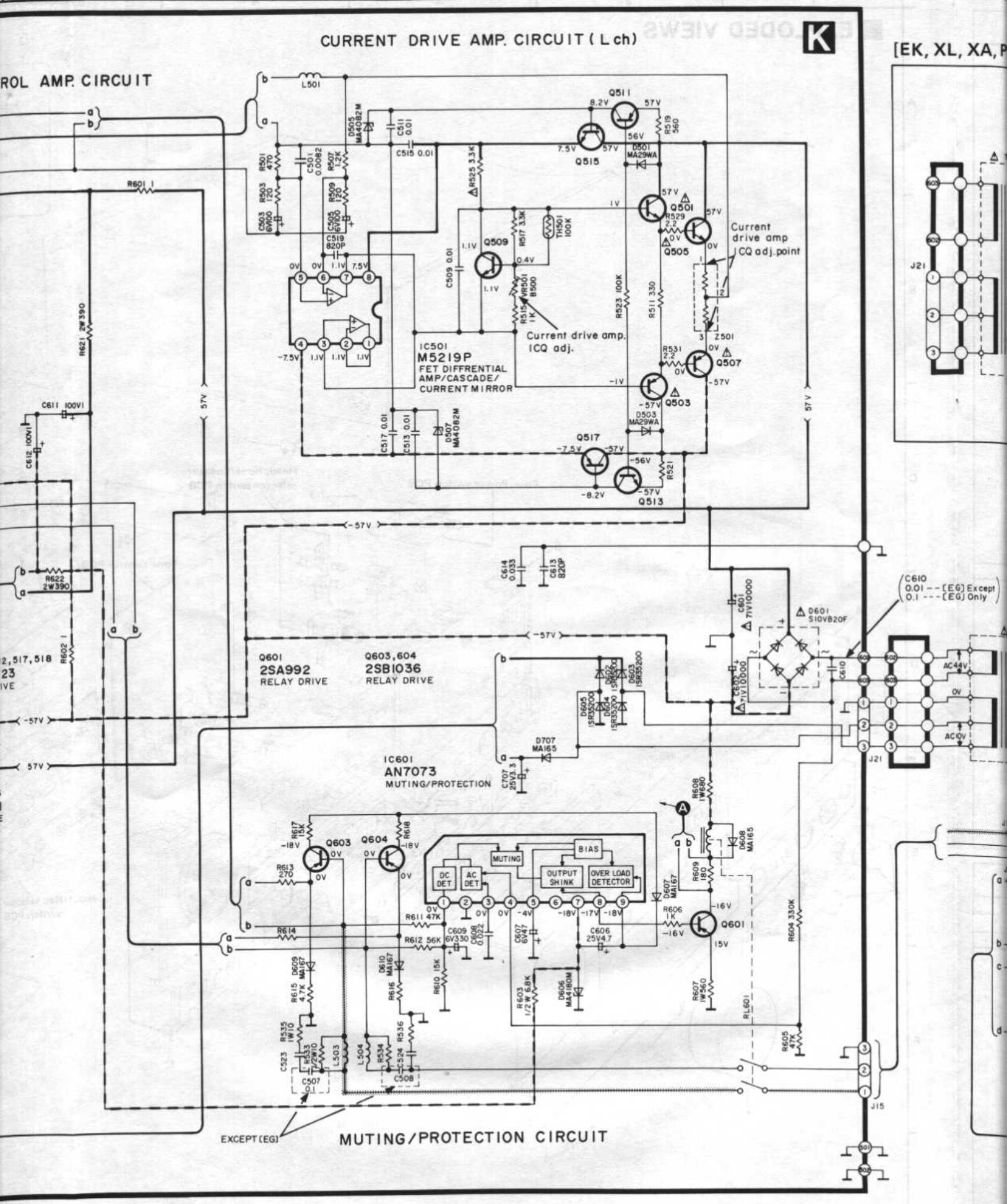
VOLTAGE CONTROL AMP CIRCUIT

IC401
AN7062N
VOLTAGE CONTROL AMP.

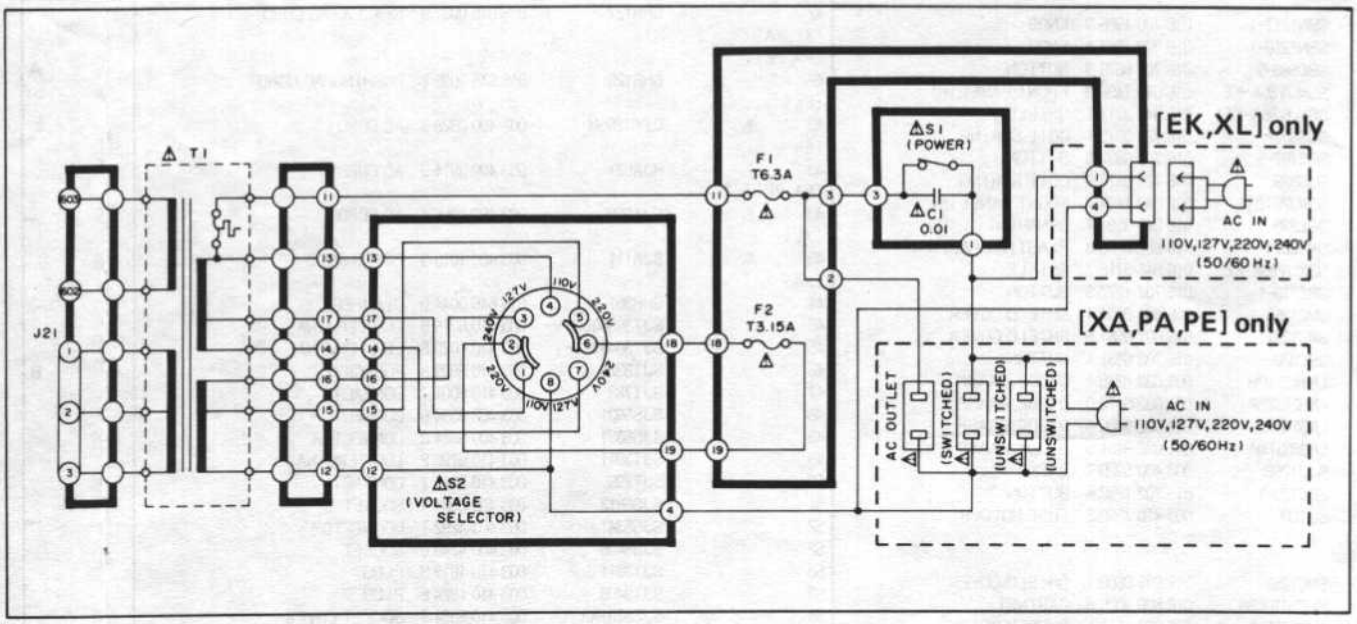


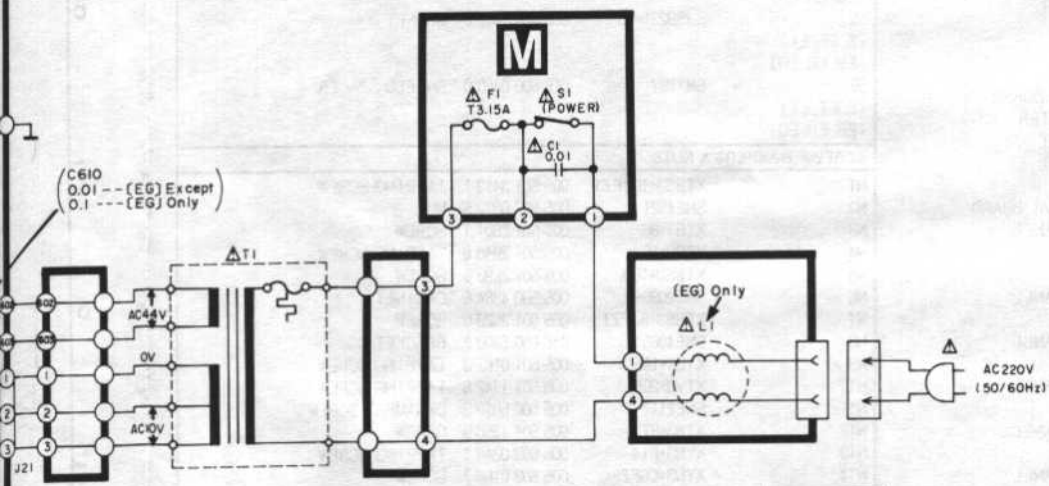
REC
OR LED

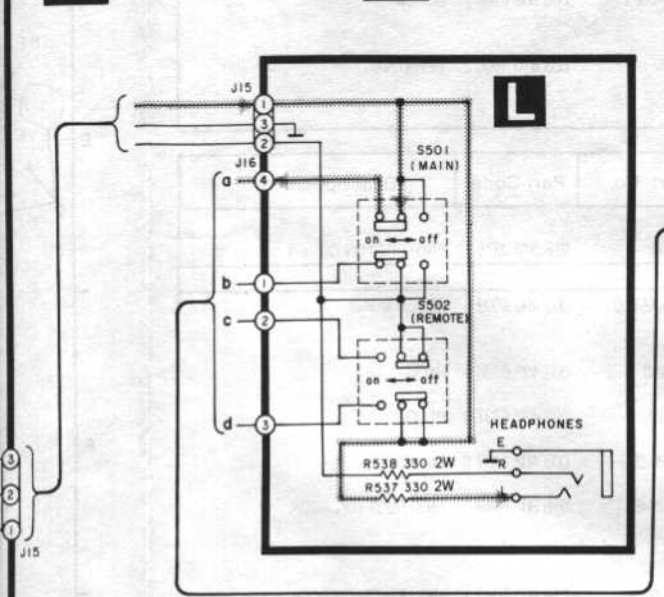

Q451~454
2SC2631
PRE DRIVE
Q455,456
2SA1123
PRE DRIVE
Q457,458
2SC3944A
DRIVE
Q459,460
2SA1535A
DRIVE
Q461,462
2SC1815
VOLTAGE CONTROL AMP.
(ICQ adj)
VOLTAGE CONTROL AMP. CIRC
Q463,464
2SC3311
PRE DRIVE
Q465,466
2SA1309A
PRE DRIVE
Voltage control amp. ICQ adj. point
TP501
TP502
Voltage control amp. ICQ adj. (Lch)
Voltage control amp. ICQ adj. (Rch)
Q501,502
2SC3944A
DRIVE
Q503,504
2SA1535A
DRIVE
Q505,506
2SC3280
POWER AMP.
Q507,508
2SA1301
POWER AMP.
Q509,510
2SC1815
CURRENT DRIVE AMP.(ICQ adj.)
Q511,512,517,518
2SA1123
PRE DRIVE
Q513~516
2SC2631
PRE DRIVE
IC502
M5219P
FET DIFFRENTIAL AMP/CASCADE/ CURRENT MIRROR
Current drive amp. ICQ adj. point
Current drive amp. ICQ adj.
CURRENT DRIVE AMP. CIRCUIT (Rch)

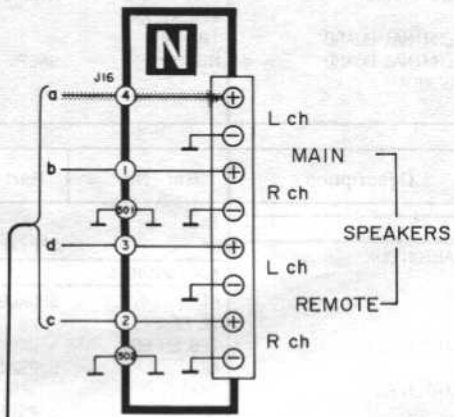

CURRENT DRIVE AMP. CIRCUIT (L ch)
K
[EK, XL, XA, P
ROL AMP. CIRCUIT
IC501
M52119P
FET DIFFRENTIAL
AMP/CASCADE/
CURRENT MIRROR
Current drive amp.
ICQ adj.
Current drive amp
ICQ adj.point
Q601
2SA992
RELAY DRIVE
Q603,604
2SB1036
RELAY DRIVE
IC601
AN7073
MUTING/PROTECTION
MUTING
BIAS
DC DET
AC DET
OUTPUT SHINK
OVER LOAD DETECTOR
EXCEPT (EG)
MUTING/PROTECTION CIRCUIT
C610
0.01 --- (EG) Except
0.1 --- (EG) Only
AC44V
0V
AC40V
J21
J15

[EK, XL, XA, PA, PE] only

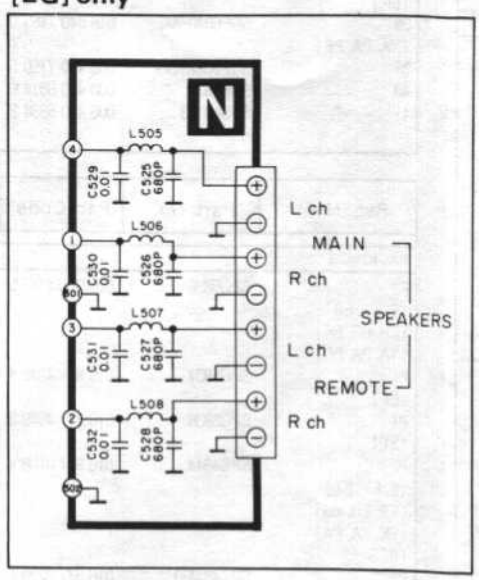








[EG] only



■ SCHEM

(This schem
with the de

1. **S1** : Power
2. **S2 (For [EK]** : Voltag (127V
3. **S101** : Phono (■ M
4. **S202** : Tape (■ s
5. **S203** : Mutin (■ C
6. **S204** : Loudn (■ c
7. **S205** : CD di (■ c
8. **S206** : Subso (■ c
9. **S301** : Tone (■ c
10. **S501** : Main s (■ c
11. **S502** : Remo (■ c
12. **S701 ~ S706,** : Input **S70 S70 S70**

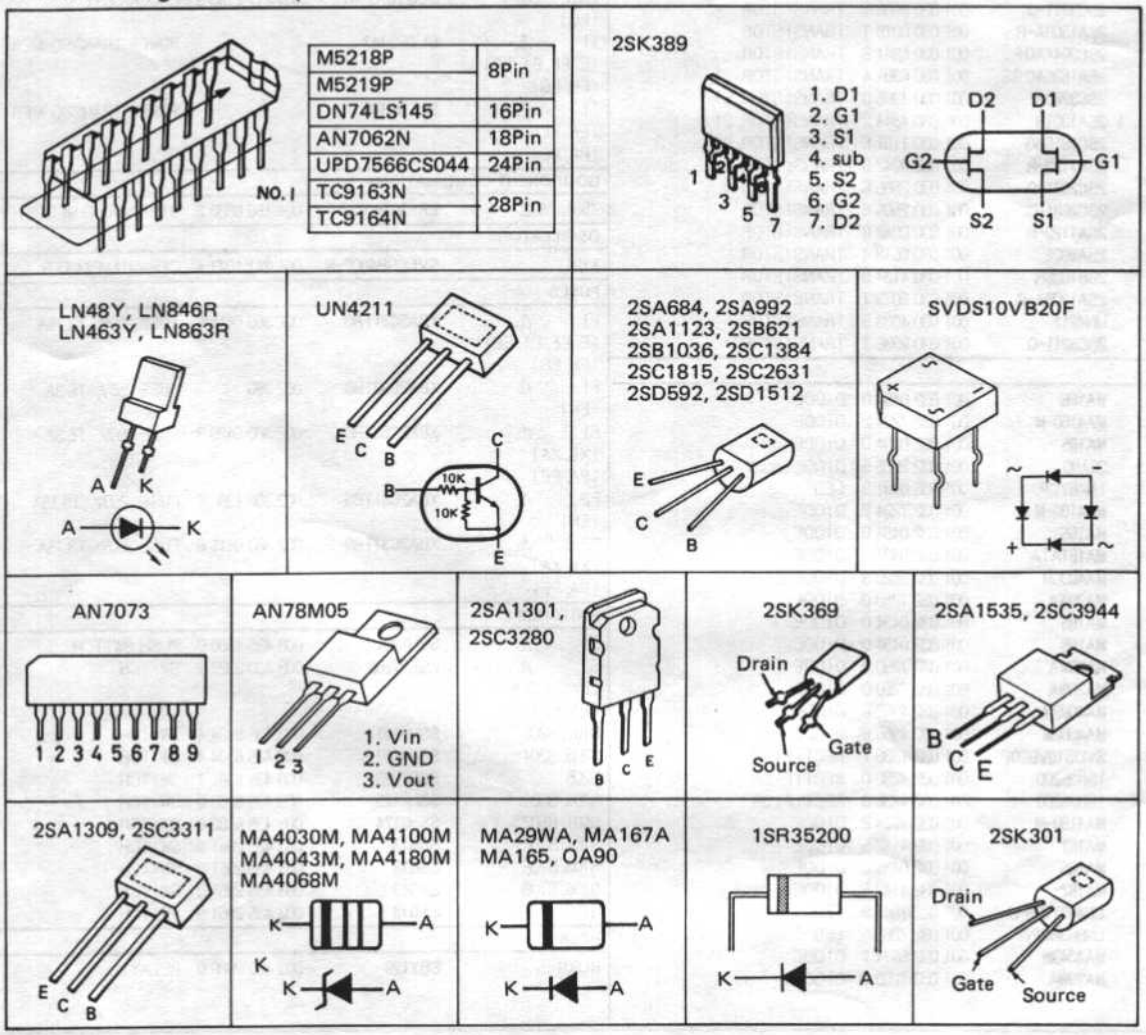
SCHEMATIC DIAGRAM

(This schematic diagram may be modified at any time with the development of new technology.)

1. **S1** : Power switch in **"on"** position.
2. **S2 (For [EK], [XA], [XL], [PA], [PE] area)**
   : Voltage selector switch in **"220V"** position.
   (127V ↔ 110V ↔ 220V ↔ 240V)
3. **S101** : Phono selection switch in **"MM"** position.
   (■ MM, ▂ MC)
4. **S202** : Tape 3 mon/ext switch in **"source/out"** position.
   (■ source/out, ▂ tape/in)
5. **S203** : Muting switch in **"0dB"** position.
   (■ 0dB, ▂ −20dB)
6. **S204** : Loudness switch in **"off"** position.
   (■ off, ▂ on)
7. **S205** : CD direct switch in **"off"** position.
   (■ off, ▂ on)
8. **S206** : Subsonic filter switch in **"off"** position.
   (■ off, ▂ 20Hz)
9. **S301** : Tone control switch in **"defeat"** position.
   (■ defeat, ▂ on)
10. **S501** : Main speaker switch in **"off"** position.
    (■ off, ▂ on)
11. **S502** : Remote speaker switch in **"off"** position.
    (■ off, ▂ on)
12. **S701 ~ S706, S708, S709**
    : Input selector switch in **"phono"** position.
    S701 : phono, **S702** : tuner, **S703** : CD
    S704 : aux 2, **S705** : aux 1, **S706** : tape 2
    S708 : tape 1, **S709** : rec mode

13. Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
14. ⟿ Phono signal (Lch)
15. ——≺ ≻—— Positive voltage lines.
    - - -≺ ≻- - - Negative voltage lines.
16. Important safety notice:
    Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

• Terminal guide of IC, transistor and diode



ORDER NO. HAD8705130S4

Service Manual

Supplement

Stereo Integrated Amplifier

Amplifier

SU-V85A

Color

(K) . . . . Black Type

Color	Areas
(K)	[PA] . . . East PX.
(K)	[PE] . . . European Military.

Please use this manual together with the service manual for Model No. SU-V85A, Order No. HAD8612793C9.

CHANGES

■ SPECIFICATIONS

(OLD)

(DIN 45 500)

■ AMPLIFIER SECTION

20 Hz ~ 20 kHz continuous power output	
both channels driven	2 x 100W (8Ω)
1 kHz continuous power output	
both channels driven	2 x 150W (8Ω)
Total harmonic distortion	
rated power at 20 Hz ~ 20 kHz	0.002% (8Ω)
rated power at 1 kHz	0.0007% (8Ω)
Intermodulation distortion	
rated power at 250 Hz : 8 kHz = 4 : 1, 4Ω	0.005%
rated power at 60 Hz : 7 kHz = 4 : 1, SMPTE, 8Ω	0.005%
Power bandwidth	
both channels driven, –3 dB	5 Hz ~ 60 kHz (8Ω, 0.025%)
Load impedance	
MAIN or REMOTE	4Ω ~ 16Ω
MAIN and REMOTE	8Ω ~ 16Ω
Input sensitivity and impedance	
PHONO MM	2.5mV/47kΩ
PHONO MC	170μV/220Ω
TUNER, CD, AUX 1, AUX 2, TAPE 1/DA TAPE, TAPE 2, TAPE 3/EXT	150mV/18kΩ
PHONO maximum input voltage (1 kHz, RMS)	
MM	160mV
MC	12mV
S/N	
rated power	
PHONO MM	79 dB (88 dB, IHF, A)
PHONO MC	70 dB (72 dB, 250μV, IHF, A)
TUNER, CD, AUX 1, AUX 2, TAPE 1/DA TAPE, TAPE 2, TAPE 3/EXT	94 dB (IHF, A : 106 dB)

(NEW)

(IHF '78)

■ AMPLIFIER SECTION

Rated minimum sine wave RMS power output	
20 Hz ~ 20 kHz both channels driven	
0.003% total harmonic distortion	120 W per channel (8Ω)
1 kHz continuous power output	
both channels driven	
0.003% total harmonic distortion	130 W per channel (8Ω)
Total harmonic distortion	
rated power at 20 Hz ~ 20 kHz	0.003% (8Ω)
rated power at 1 kHz	0.003% (8Ω)
Intermodulation distortion	
rated power at 250 Hz : 8 kHz = 4 : 1, 8Ω	0.005%
rated power at 50 Hz : 7 kHz = 4 : 1, SMPTE, 8Ω	0.005%
Power bandwith	
both channels driven, –3 dB	5 Hz ~ 60 kHz (8Ω, 0.02%)
Load impedance	
MAIN or REMOTE	6Ω ~ 16Ω
MAIN and REMOTE	12Ω ~ 16Ω
Input sensitivity and impedance	
PHONO MM	0.25 mV (2.5 mV, IHF '66)/47 kΩ
PHONO MC	17μV (170μV, IHF '66)/220Ω
TUNER, CD, AUX 1, AUX 2, TAPE 1/DA TAPE, TAPE 2, TAPE 3/EXT	15 mV (150 mV, IHF '66)/18 kΩ
PHONO maximum input voltage	
MM	150 mV
MC	10 mV
S/N (IHF, A)	
PHONO MM	77 dB (88 dB, IHF '66)
PHONO MC	75 dB (72 dB, IHF '66)
TUNER, CD, AUX 1, AUX 2, TAPE 1/DA TAPE, TAPE 2, TAPE 3/EXT	82 dB (106 dB, IHF '66)

Technics

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Matsushita Electric Trading Co., Ltd.
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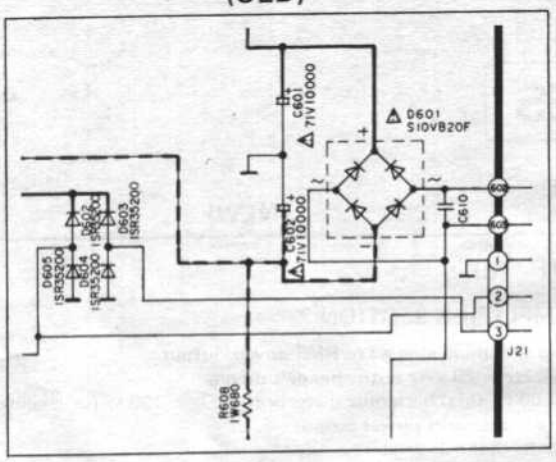
No. 4-1, Hamamatsu-cho 2-Chome, Minato-ku,
Tokyo 105, Japan

■ REPLACEMENT PARTS LIST

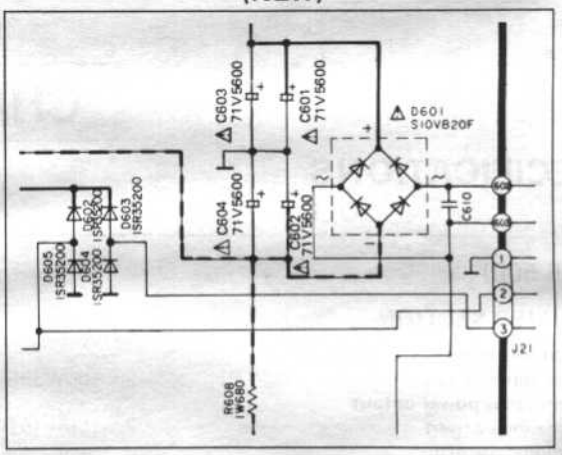
Ref. No.	Change of Part No. OLD → NEW		Part Name & Description	Per Set (Pcs.)	Remarks
TRANSFORMER					
T1 ⚠	SLT5Q148	**SLT5Q149**	Power Transformer	1	Change
CABINET AND CHASSIS					
28	SMN2039	----------	Bracket	0	Deletion
38	SGP6940–4A	**SGP6940–4B**	Rear Panel	1	Change
CAPACITOR					
C601 ⚠	ECET71R103Y	**ECET71R562U**	Electrolytic, 71V, 5600μF	1	Change
C602 ⚠	ECET71R103Y	**ECET71R562U**	Electrolytic, 71V, 5600μF	1	Change
C603 ⚠	----------	**ECET71R562U**	Electrolytic, 71V, 5600μF*	1	Addition
C604 ⚠	----------	**ECET71R562U**	Electrolytic, 71V, 5600μF	1	Addition

■ SCHEMATIC DIAGRAM

(OLD)



(NEW)



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