

Service Manual

Cassette Deck

RS-CH750

Colour

(K) Black Type

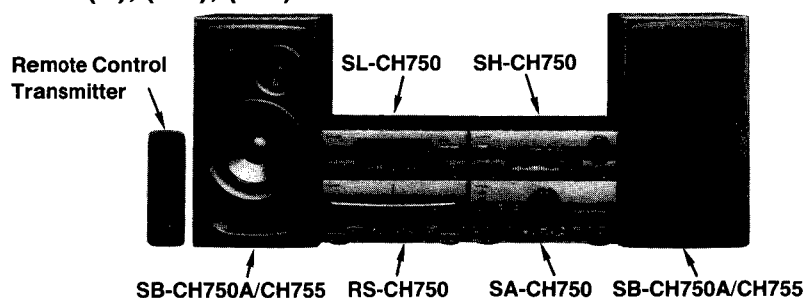
Area

Suffix for Model No.	Area	Colour
(E)	Europe, Asia, Latin America, Middle Near East, Africa and Oceania	(K)

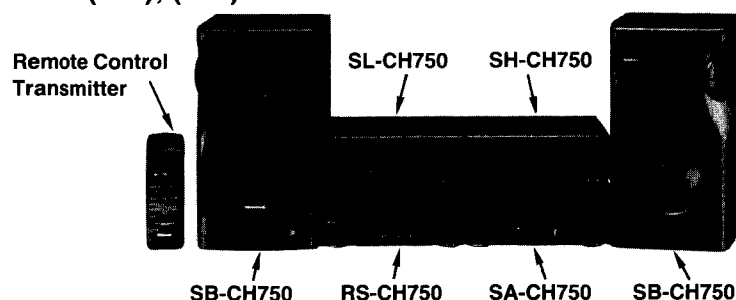
System: SC-CH750

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

Cassette Deck  * DOLBY B-C NR HX PRO
• For (E), (EB), (EG) areas



• For (GC), (GN) areas



■ RS-TR165 MECHANISM SERIES (AR300)

SPECIFICATIONS

Deck system	Stereo cassette deck
Track system	4-track, 2-channel
Recording system	AC bias
Erasing system	AC erase
Tape speed	4.8 cm/sec. (17 1/2 ips)
Bias frequency	80 kHz
Heads	
DECK 1 (playback)	Permalloy head
DECK 2 (record/playback)	Permalloy head
(erasure)	Double gap ferrite head
Motors	DC servo motor
Wow and flutter	0.1% (WRMS)
Fast forward and rewind time	Approx. 110 seconds with C-60 cassette tape
Frequency response (When Dolby NR OFF, CCRT ON)	
NORMAL	20 Hz-17 kHz
	30 Hz-15 kHz (DIN)
CrO ₂	20 Hz-18 kHz
	30 Hz-17 kHz (DIN)
METAL	20 Hz-20 kHz
	30 Hz-19 kHz (DIN)

S/N (CrO₂ type tape)

Dolby NR off	56 dB (A-WTD)
Dolby B NR on	66 dB (CCIR)
Dolby C NR on	74 dB (CCIR)

■ General

Dimensions (W×H×D)	270×119×262 mm
Weight	3.3 kg

Notes:

- Specifications are subject to change without notice.
- Weight and dimensions shown are approximate.

*Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.

"DOLBY", the double-D symbol  and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

System	Sound processor	Tuner amplifier	Compact disc player	Cassette deck	Speakers
SC-CH750	SH-CH750	SA-CH750	SL-CH750	RS-CH750	*SB-CH750A (E), (EB), (EG) areas *SB-CH755 Switzerland only SB-CH750 (GC), (GN) areas

*Made in PAES

Technics

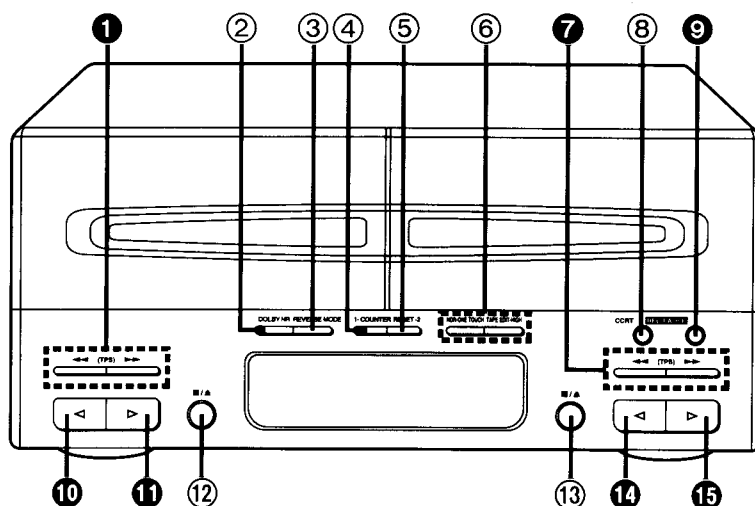
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NOTE:
Refer to the service manual for Model No. SA-CH750 (Order No. AD9211379C8) for information on "ACCESSORIES", "STACKING THE COMPONENTS", "CONNECTIONS" and "PACKAGING".

LOCATION OF CONTROLS



The functions indicated by the numbers with black background (for example ❶) can also be activated from the remote control.

❶ Deck 1 fast-forward/rewind/tape program sensor (TPS) buttons

[◀◀ (TPS) ▶▶]

Press to advance or rewind the tape, or to quickly search for the beginning of a program while the tape is being played.

❷ Dolby noise reduction button (DOLBY NR)

Press to reduce hissing noise on the tape. This system has both the Dolby B-type and Dolby C-type noise reduction.

❸ Reverse mode select button and indicators (REVERSE MODE)

Press to select the reverse mode (for playback and recording).

❹ Deck 1 counter reset button (COUNTER RESET 1)

Press to reset the tape counter indicator to "0000".

❺ Deck 2 counter reset button (COUNTER RESET 2)

❻ One-touch tape edit buttons (NOR, HIGH)

Press to start the tape-to-tape recording.

❼ Deck 2 fast-forward/rewind/tape program sensor (TPS) buttons [◀◀ (TPS) ▶▶]

❽ CCRT (computer control record tuning) button (CCRT)

Press to adjust the recording level, equalizer and bias before recording.

❾ Record pause button (REC PAUSE)

Press to put deck 2 into the record standby mode.

❿ Deck 1 reverse-side playback button (◀)

Press to start the playback in the reverse direction.

⓫ Deck 1 forward-side playback button (▶)

Press to start the playback in the forward direction.

⓬ Deck 1 stop/cassette holder open button (■/▲)

Press to stop the tape or open the cassette holder.

⓭ Deck 2 stop/cassette holder open button (■/▲)

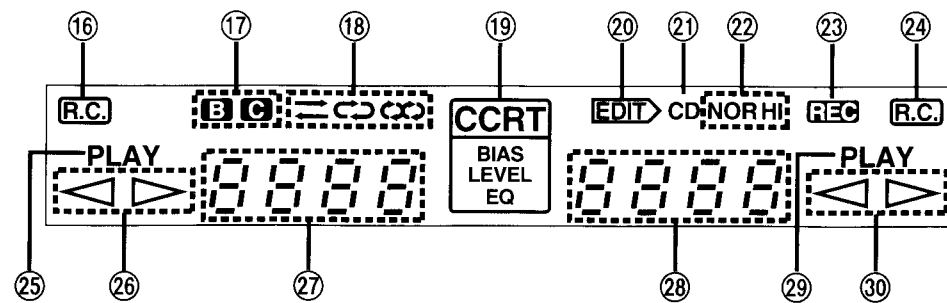
⓮ Deck 2 reverse-side playback button (◀)

Press to start the playback or recording in the forward direction.

⓯ Deck 2 forward-side playback button (▶)

Press to start the playback or recording in the reverse direction.

●Display Section



- ①⑥ **Deck 1 remote indicator (R.C.)**
Lights to show that you can operate deck 1 with remote control.
- ①⑦ **Dolby noise reduction indicators (B, C)**
Lights to show the type of Dolby noise reduction you select.
- ①⑧ **Reverse mode indicators (←, →, ∞)**
Lights to show the reverse mode you select.
- ①⑨ **CCRT indicator (CCRT, BIAS, LEVEL, EQ)**
Lights when CCRT function is activated.
- ②⑦ **Edit indicator (EDIT)**
Lights when you are editing CD or making a tape-to-tape recording.
- ②① **CD indicator (CD)**
Lights together with the edit indicator when you are editing CD.
- ②② **Tape edit indicators (NOR, HI)**
Lights together with the edit indicator when you are making a tape-to-tape recording.
- ②③ **Recording indicator (REC)**
Lights when in the recording or recording standby mode.
- ②④ **Deck 2 remote indicator (R.C.)**
Lights to show that you can operate deck 2 with remote control.
- ②⑤ **Deck 1 play indicator (PLAY)**
Lights when you play the cassette tape.
Flashes when you quickly search for the beginning of a program while the tape is being played (TPS).
- ②⑥ **Deck 1 tape travel direction indicator (◁, ▷)**
Lights to show the direction of the tape travel.
- ②⑦ **Deck 1 tape counter**
Show the amount of tape movement.
- ②⑧ **Deck 2 tape counter**
- ②⑨ **Deck 2 play indicator (PLAY)**
Lights when you play or record the cassette tape.
Flashes when you quickly search for the beginning of a program while the tape is being played (TPS), or while in the recording standby mode.
- ③⑦ **Deck 2 tape travel direction indicator (◁, ▷)**

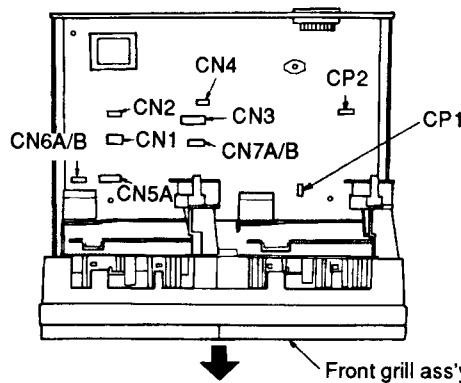
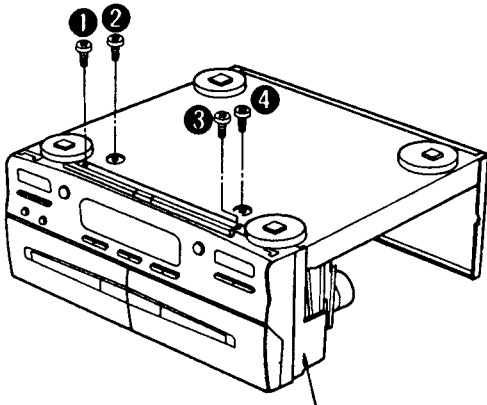
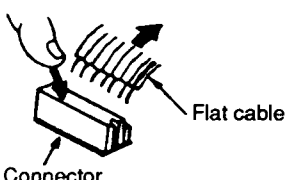
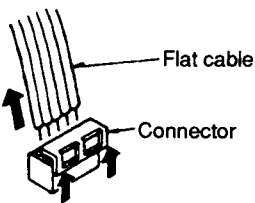
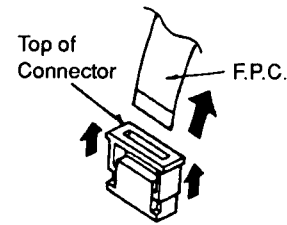
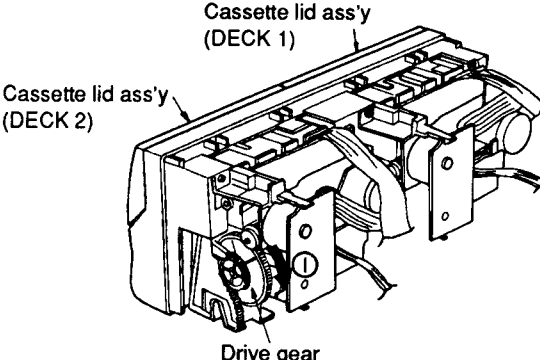
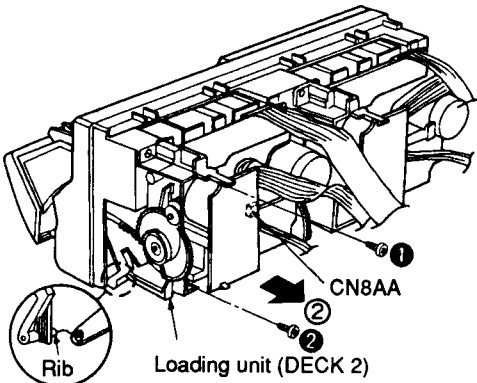
■ DISASSEMBLY INSTRUCTIONS

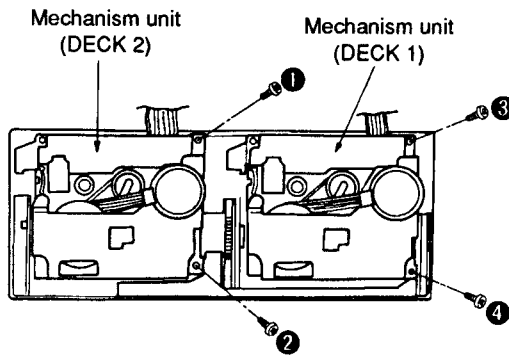
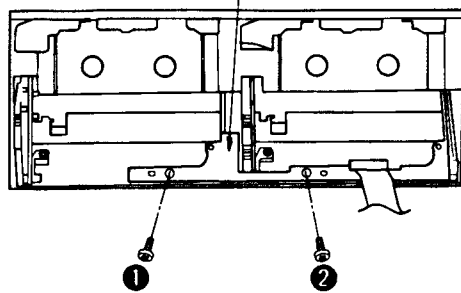
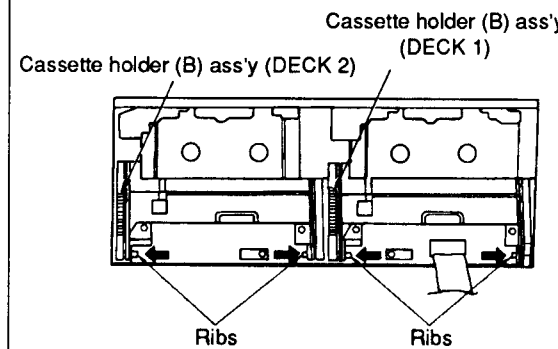
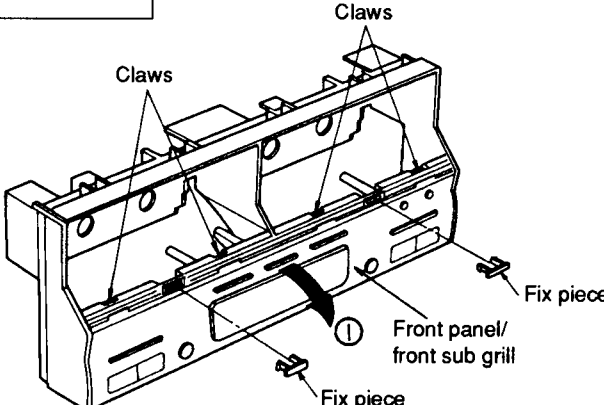
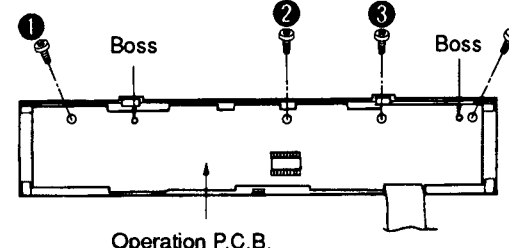
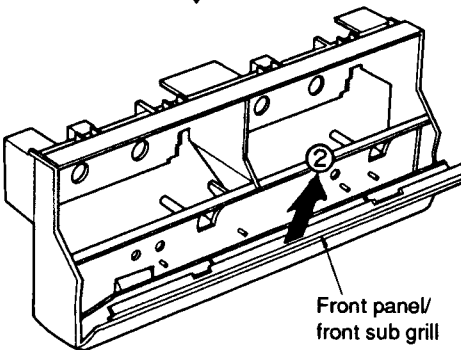
“ATTENTION SERVICER”

Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1	Removal of the Cabinet	Ref. No. 2	Removal of the Cassette Lid Ass'y (DECK 1 and DECK 2)
Procedure 1	1. Remove the 6 screws (①~⑥). 2. Remove the cabinet in the direction of arrow.	Procedure 1→2	1. Turn the drive gear in the direction of arrow, and open the cassette holder (B) ass'y. 2. Remove the cassette lid ass'y in the direction of arrow.

Ref. No. 3	Removal of the Front Grill Ass'y
Procedure 1→3	1. Remove the 4 screws (①~④). 2. Remove the 2 connectors (CP1, CP2). 3. Remove the 6 flat cables (CN1, CN2, CN3, CN4, CN6A/B, CN7A/B). 4. Remove the FPC P.C.B. (CN5A). 5. Remove the front grill ass'y in the direction of arrow. ■ Removal of the Flat cable and F.P.C. ● Push the top of the connector and then pull out the flat cable. (CN1, CN3) 1. Lift up the connector. 2. Pull out the flat cable. (CN2, CN4, CN6A/B, CN7A/B) ● Lift up the top of the connector and pull out the F.P.C..
Ref. No. 4	Removal of the Loading Unit (DECK 1 and DECK 2)
Procedure 1→3→4	(* This removal procedure describes for DECK 2. For DECK 1, perform the same procedure.) 1. Turn the drive gear in the direction of arrow ①, and then open the cassette lid ass'y. 2. Remove the connector (CN8AA). 3. Remove the 2 screws (①, ②). 4. Release the loading unit from the rib, and then remove it in the direction of arrow ②.

Ref. No. 3	Removal of the Front Grill Ass'y
Procedure 1→3	 Front grill ass'y 2. Remove the 2 connectors (CP1, CP2). 3. Remove the 6 flat cables (CN1, CN2, CN3, CN4, CN6A/B, CN7A/B). 4. Remove the FPC P.C.B. (CN5A). 5. Remove the front grill ass'y in the direction of arrow. 1. Remove the 4 screws (1~4). ■ Removal of the Flat cable and F.P.C. • Push the top of the connector and then pull out the flat cable. (CN1, CN3)  Flat cable Connector 1. Lift up the connector. 2. Pull out the flat cable. (CN2, CN4, CN6A/B, CN7A/B)  Flat cable Connector • Lift up the top of the connector and pull out the F.P.C..  Top of Connector F.P.C.
Ref. No. 4	Removal of the Loading Unit (DECK 1 and DECK 2)
Procedure 1→3→4	(* This removal procedure describes for DECK 2. For DECK 1, perform the same procedure.)  Cassette lid ass'y (DECK 1) Cassette lid ass'y (DECK 2) Drive gear  Loading unit (DECK 2) CN8AA Rib 2. Remove the connector (CN8AA). 3. Remove the 2 screws (1, 2). 4. Release the loading unit from the rib, and then remove it in the direction of arrow 2. 1. Turn the drive gear in the direction of arrow 1, and then open the cassette lid ass'y.

Ref. No. 5	Removal of the mechanism Unit (DECK 1 and DECK 2)	Ref. No. 6	Removal of the Mechanism Angle Ass'y
Procedure 1→3→4→5	 Mechanism unit (DECK 2) Mechanism unit (DECK 1) • Remove the 4 screws (1~4).	Procedure 1→3→4→5→6	 Mechanism angle ass'y • Remove the 2 screws (1, 2).
Ref. No. 7	Removal of the Cassette Holder (B) Ass'y (DECK 1 and DECK 2)	Ref. No. 8	Removal of the Operation P.C.B.
Procedure 1→3→4→5→6→7	 Cassette holder (B) ass'y (DECK 2) Cassette holder (B) ass'y (DECK 1) Ribs Ribs • Release the ribs of the cassette holder (B) ass'y in the direction of arrow.	Procedure 1→3→4→5→6→7→8	 Claws Claws Front panel/ front sub grill Fix piece 1. Remove the 2 fix pieces. 2. Release the 4 claws, and then open the front panel/front sub grill in the direction of arrow 1.
	 Boss Operation P.C.B. Boss 4. Remove the 4 screws (1~4). 5. Release the 2 bosses.		 Front panel/ front sub grill 3. Remove the front panel/front sub grill in the direction of arrow 2.

Ref. No.
9

Removal of the Loading Motor P.C.B. (DECK 1 and DECK 2)

Procedure
1→3→9

1. Unsolder the loading motor terminals (4 points).
2. Remove the 2 connectors (CN8A/CN8AA).
3. Remove the 2 screws (①, ②).
4. Release the 4 claws.

Ref. No.
10

Removal of the Drive Gear and Clutch Gear Ass'y (DECK 1 and DECK 2)

Procedure
1→3→4→10

1. Remove the 2 washers.
2. Remove the drive gear and the clutch gear ass'y in the direction of arrow.

Ref. No.
11

Removal of the Loading Motor Ass'y (DECK 1 and DECK 2)

Procedure
1→3→4→9→10→11

1. Remove the 2 screws (①, ②).
2. Remove the loading motor ass'y in the direction of arrow.

Ref. No.
12

Removal of the Eject Rod and Leaf Switch Lever (DECK 1 and DECK 2)

Procedure
1→3→4→10→12

■ **Removal of the Eject Rod**
• Release the claw (A), and remove the eject rod in the direction of arrow.

■ **Removal of the Leaf Switch Lever**
• Release the claw (B), and remove the leaf switch lever in the direction of arrow.

Ref. No.
13

Removal of the Cassette Holder Angle and Cassette Holder (A)/(B) Ass'y (DECK 1 and DECK 2)

Procedure
1→3→4→5→6→7→13

1. Release the 2 ribs of cassette holder (B) ass'y in the direction of arrow ①.
2. Release the 2 ribs of cassette holder (A) ass'y in the direction of arrow ②.

Ref. No.
14

Removal of the Switch P.C.B. (DECK 1 and DECK 2)

Procedure
1→3→4→5→6→7→13→14

• Release the claw.

Ref. No.
15

Removal of the Main P.C.B.

Procedure
1→3→15

• Remove the 6 screws (①~⑥).

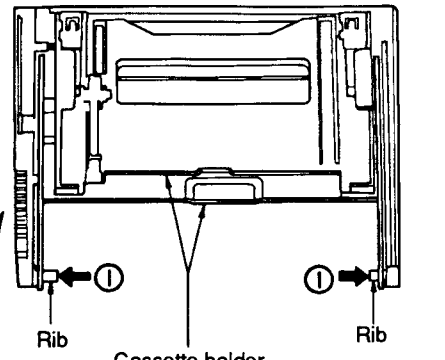
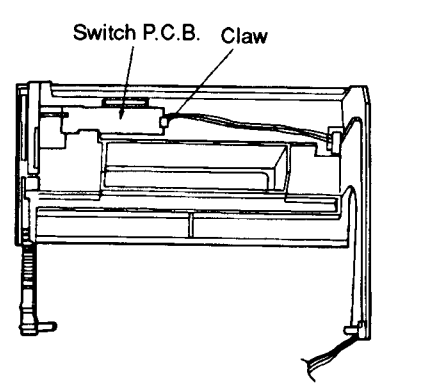
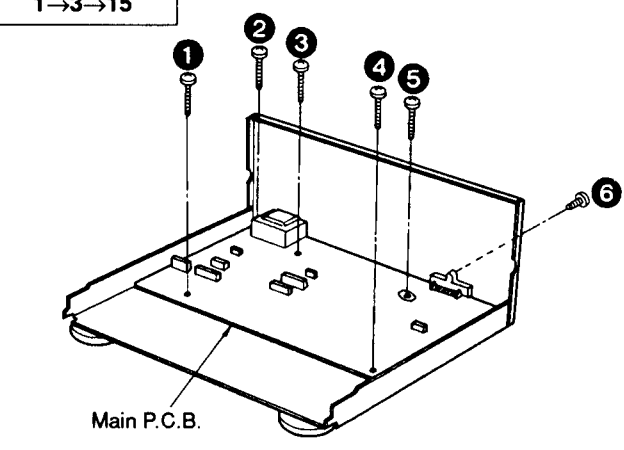
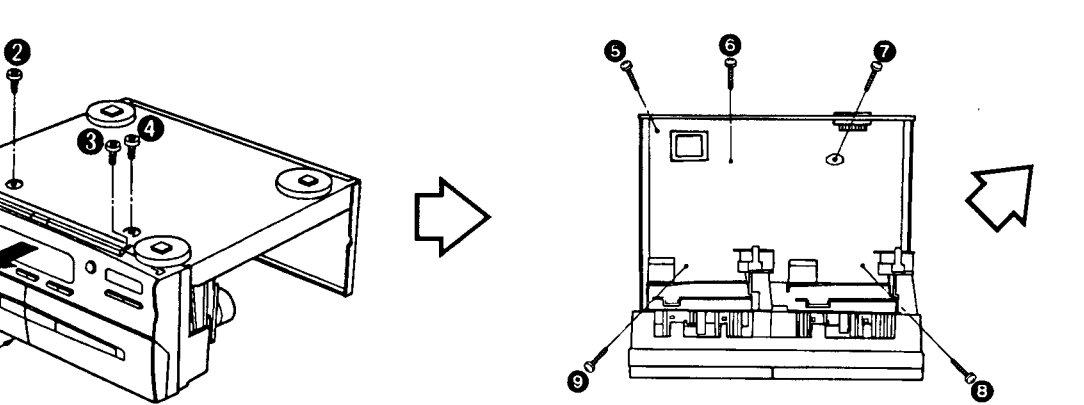
Ref. No.
16

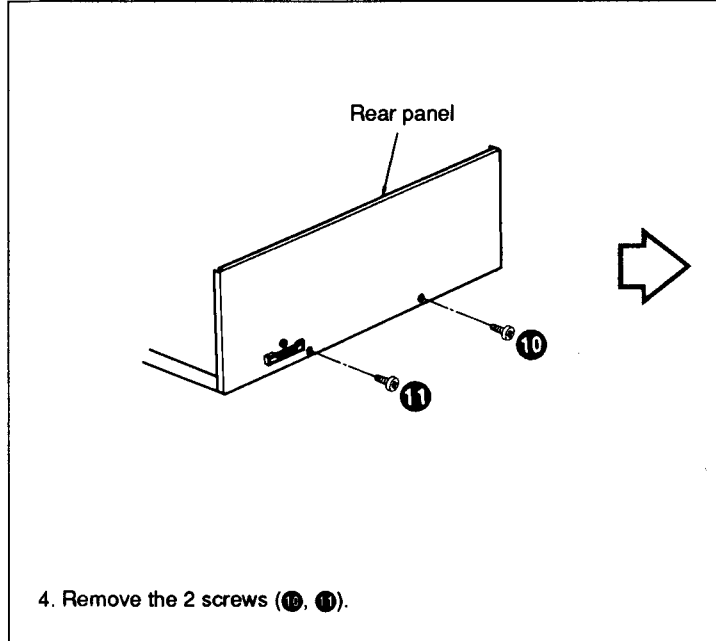
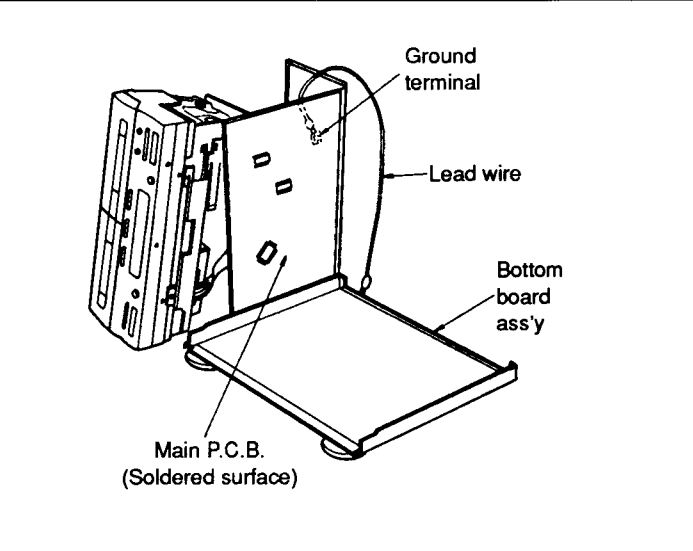
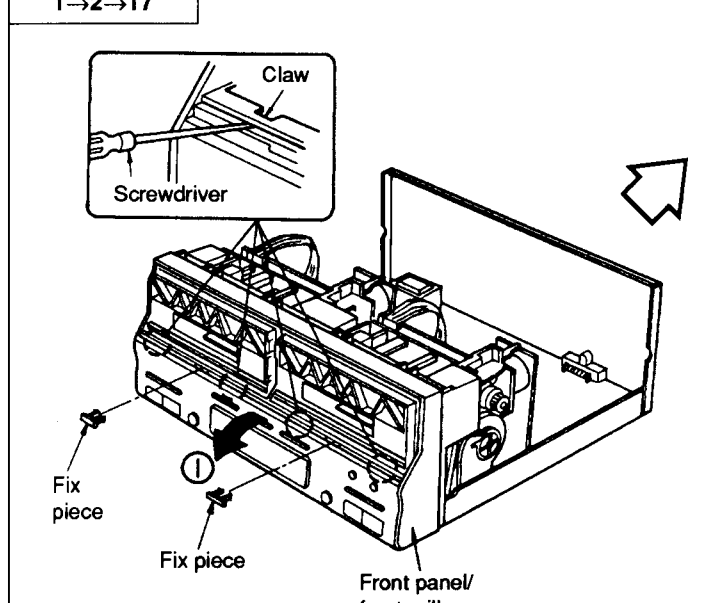
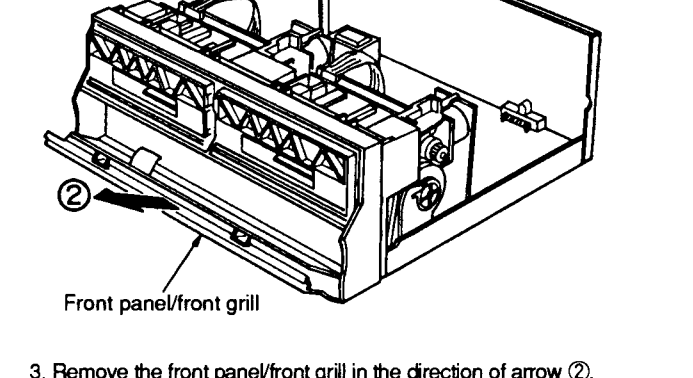
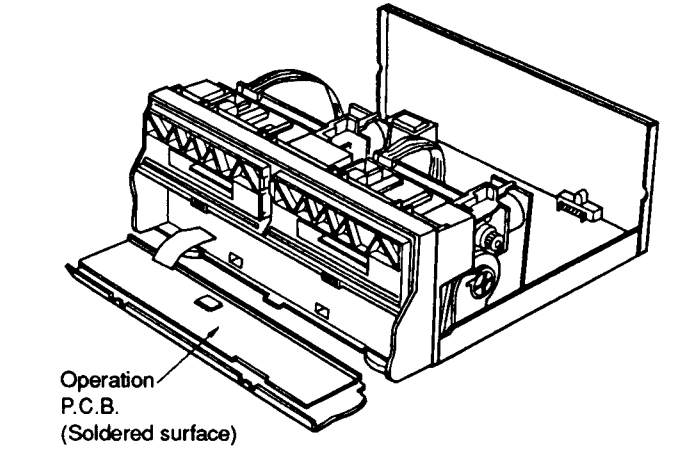
How to check the Main P.C.B.

Procedure
1→16

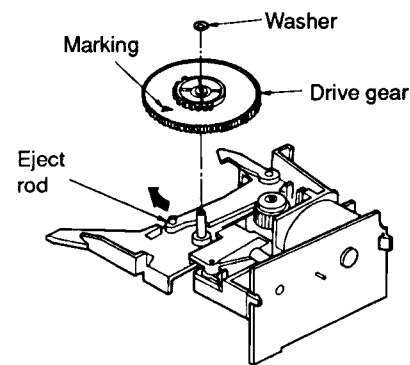
1. Remove the 4 screws (①~④).
2. Remove the front grill ass'y in the direction of arrow.

3. Remove the 5 screws (⑤~⑨).

Ref. No. 13	Removal of the Cassette Holder Angle and Cassette Holder (A)/(B) Ass'y (DECK 1 and DECK 2)	
Procedure 1→3→4→5 →6→7→13	 Cassette holder (B) ass'y Rib Cassette holder angle and Cassette holder (A) ass'y	
1. Release the 2 ribs of cassette holder (B) ass'y in the direction of arrow ①.		2. Release the 2 ribs of cassette holder (A) ass'y in the direction of arrow ②.
Ref. No. 14	Removal of the Switch P.C.B. (DECK 1 and DECK 2)	Ref. No. 15
Procedure 1→3→4→5 →6→7→13→14	 Switch P.C.B. Claw • Release the claw.	 Main P.C.B. • Remove the 6 screws (①~⑥).
Ref. No. 16	How to check the Main P.C.B.	
Procedure 1→16	 Front grill ass'y 1. Remove the 4 screws (①~④). 2. Remove the front grill ass'y in the direction of arrow. 3. Remove the 5 screws (⑤~⑨).	

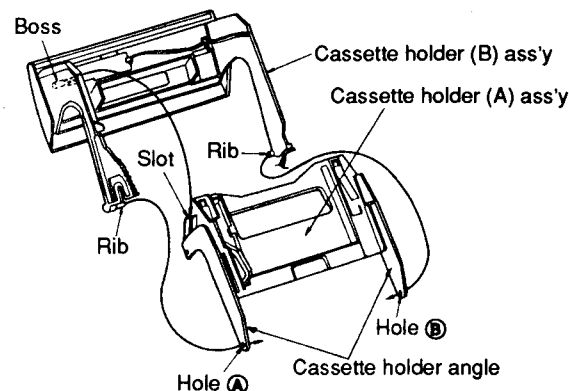
 Rear panel 4. Remove the 2 screws (⑩, ⑪).		 Ground terminal Lead wire Bottom board ass'y Main P.C.B. (Soldered surface) 5. When checking the soldered surfaces of main P.C.B., perform as shown above.
Ref. No. 17	How to check the Operation P.C.B.	
Procedure 1→2→17	 Claw Screwdriver Fix piece Front panel/ front grill 1. Remove the 2 fix pieces. 2. Release the 4 claws with screwdriver, and remove the front panel/front grill in the direction of arrow ①.	 Front panel/front grill 3. Remove the front panel/front grill in the direction of arrow ②.  Operation P.C.B. (Soldered surface) 4. When checking the soldered surfaces of operation P.C.B. and replacing the parts, do as shown above.

■ Installing of Drive Gear

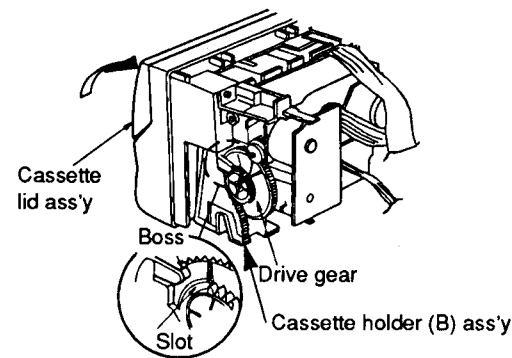


1. Locate the eject rod in the direction of arrow.
2. Place the drive gear so that the marking of drive gear is indicated as shown left.

■ Installing of Cassette Holder Angle and Cassette Holder (B) Ass'y

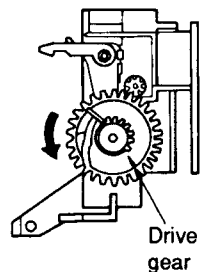


1. Align the boss of cassette holder (B) ass'y to the slot of cassette holder (A) ass'y.
2. Insert the 2 ribs of cassette holder (B) ass'y into the 2 holes (A, B) of cassette holder angle.



3. Close the cassette lid ass'y in the direction of arrow.
4. Make sure the slot of drive gear matches the boss of cassette holder (B) ass'y.

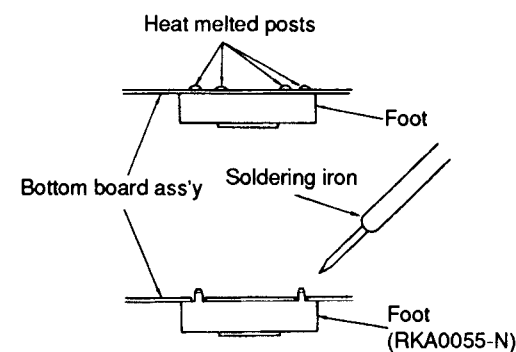
■ Installing of Loading Unit



1. Rotate the drive gear fully in the direction of arrow.

● Replacement of the Foot

1. Remove the 4 heat melted posts on the bottom board ass'y with a pair of nippers or similar tool.
2. To replace the foot (RKA0055-N) on the bottom board ass'y, melt the 4 posts with a soldering iron.



■ MEASUREMENTS AND ADJUSTMENTS

- The RS-CH750 is designed to operate on the power supplied from the SA-CH750 Tuner Amplifier. When using the RS-CH750 with the SA-CH750, short the following test points to each other:

TP603 to TP604, and TP605 to TP606 (see Fig. 1).

- To operate the RS-CH750 alone for testing or servicing, without having power supplied from the SA-CH750, use the following method:

1. Short TP603 to TP604, and TP605 to TP606.
2. Apply 10 V AC power between TP601 and GND, and TP602 and GND.

After testing or servicing, be sure to remove the shorting jumpers between TP603 – TP604 and TP605 – TP606.

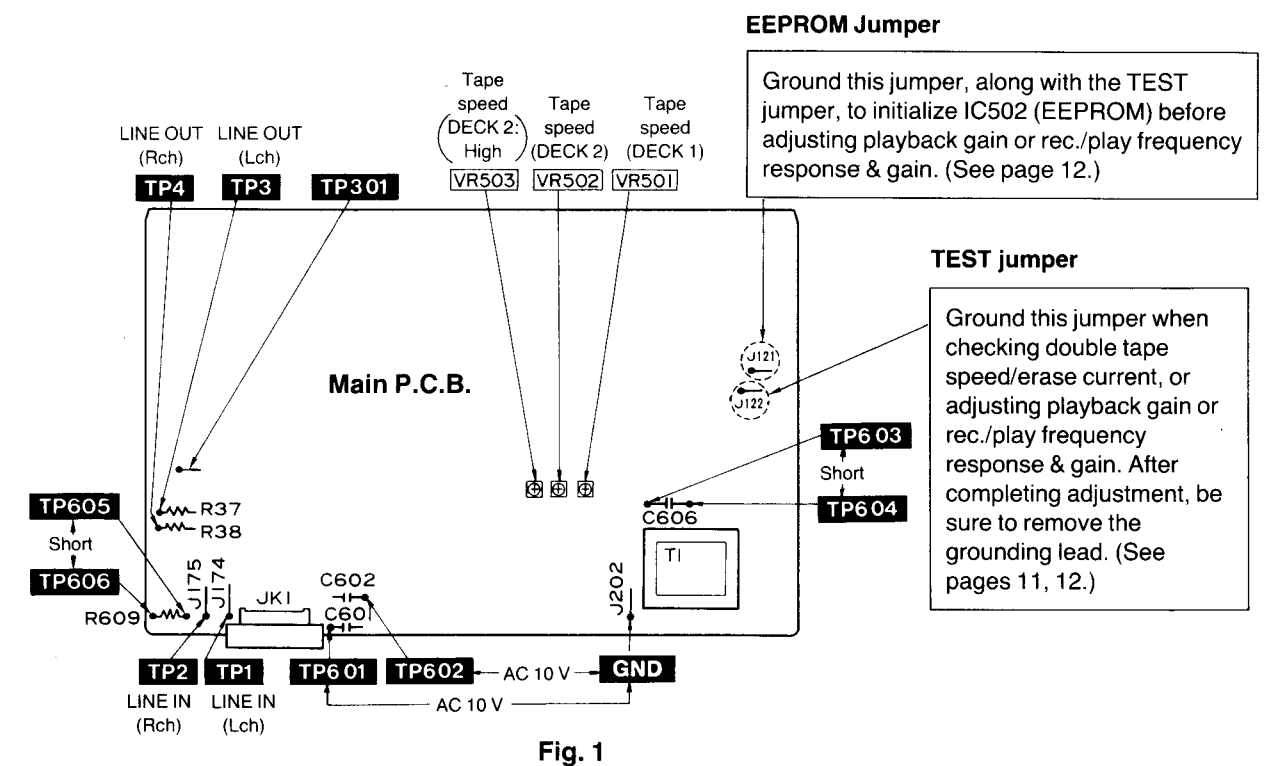


Fig. 1

Measurement Condition

- Reverse-mode selector switch; $\rightarrow$
- One touch tape edit switch; NORMAL
- Dolby NR switch; OFF

Measuring instrument

- EVM (Electronic Voltmeter)
- AF oscillator
- Digital frequency counter

Test tape

- Head azimuth adjustment (8 kHz, -20 dB); QZZCFM
- Tape speed adjustment (3 kHz, -10 dB); QZZCWAT
- Playback frequency response (315 Hz, 12.5 kHz, 10 kHz, 8 kHz, 4 kHz, 1 kHz, 250 Hz, 125 Hz, 63 Hz, -20 dB); QZZCFM

- Make sure heads are clean.
- Make sure capstan and pressure roller are clean.
- Judgeable room temperature $20 \pm 5^\circ\text{C}$ ($68 \pm 9^\circ\text{F}$)

- Playback gain adjustment (315 Hz, 0 dB); QZZCFM

HEAD AZIMUTH ADJUSTMENT (DECK 1/2)

1. Playback the azimuth adjustment portion (8 kHz, -20 dB) of the test tape (QZZCFM). Vary the azimuth adjusting screw until the outputs of the R-CH is maximized.
2. Perform the same adjustment in the play mode.
3. After the adjustment, apply screwlock to the azimuth adjusting screw.

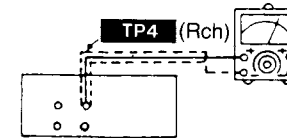


Fig. 2

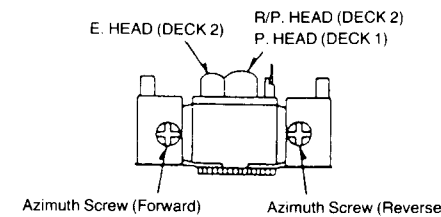


Fig. 3

TAPE SPEED ADJUSTMENT (DECK 1/2)**Normal speed**

1. Playback the middle portion of the test tape (QZZCWAT).
2. Adjust Deck 1 = VR501 and Deck 2 = VR502 so that the output is within the standard value.

Standard value: 3000±15 Hz (NORMAL speed)

High speed [Set the unit to forward (FWD) mode.]

3. Short-circuit the TEST jumper (J122).
4. Press the one touch tape edit (High) button. This will set the high speed mode.
5. Playback the middle portion on the test tape (QZZCWAT).
6. At that time, check if the output from DECK 1 is within the standard value.

Standard value: 6000±600 Hz (HIGH speed)

7. Adjust VR503 so that the output frequency of DECK 2 is within ±30 Hz for the value of the output frequency of DECK 1.

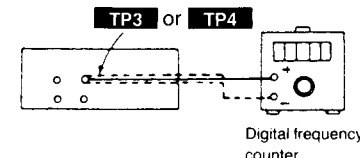


Fig. 4

ERASE CURRENT CONFIRMATION (DECK 2)

1. Short-circuit the TEST jumper (J122).
2. Press the REC PAUSE button.
3. Check if the output at this time between the erase current confirmation point TP301 and GND (chassis) (the output on both edges of R301) is within the standard value.

Standard value: 210 mA±25 mA

4. Disconnect the TEST jumper (J122) from the frame ground.

Note: The test tape is not required when confirming the erase current.

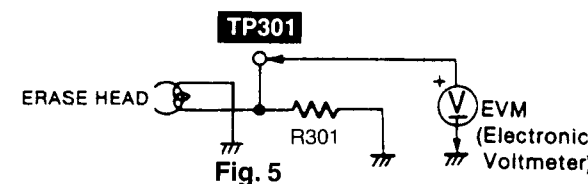
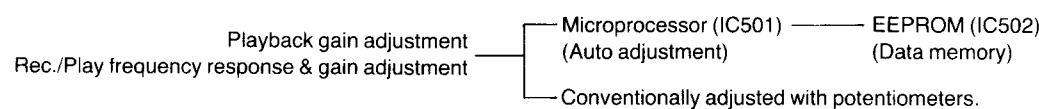


Fig. 5

The RS-CH750 can automatically adjust playback gain and rec./play frequency response & gain.**•Automatic adjustment of playback gain and rec./play frequency response & gain**

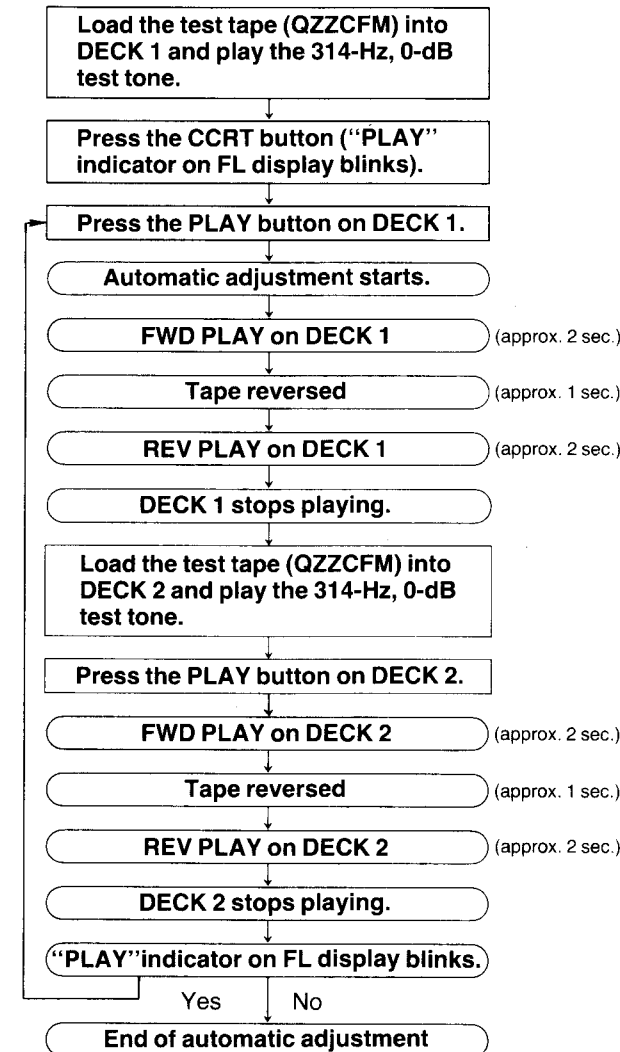
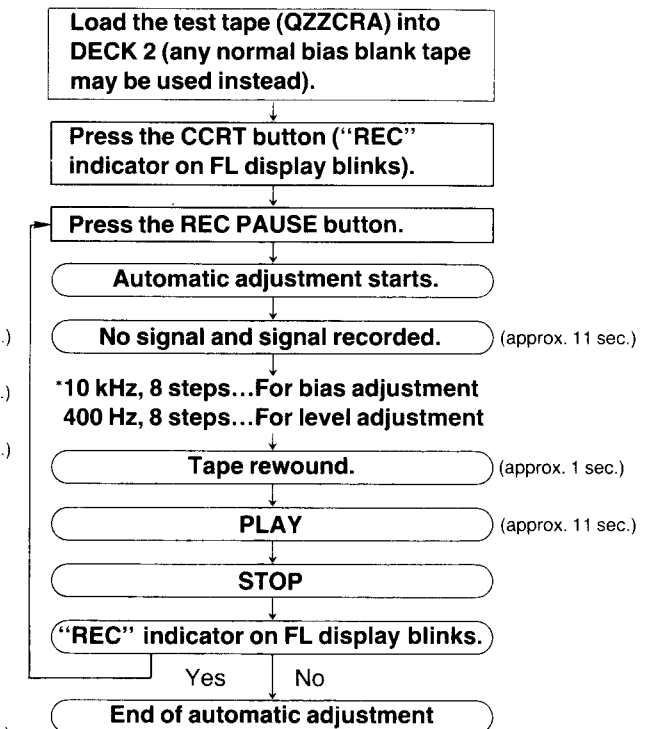
A microprocessor (IC501) used within the RS-CH750 automatically adjusts its playback gain and rec./play frequency response & gain (factory adjustment) and stores adjustment data to an EEPROM chip (IC502). (Potentiometers have conventionally been used for these adjustments.)



If the EEPROM chip (IC502) or any of the head AF signal line components is replaced for servicing, the unit requires re-adjustment. (Refer to page 12.)

•Preparations for Adjustment

1. Connect an AF oscillator to the line inputs, TP1 (L channel) and TP2 (R channel) (see Fig. 1).
2. Connect an AC voltmeter to the line outputs, TP3 (L channel) and TP4 (R channel) (see Fig. 1).
3. Make sure that the power is turned off, and then ground the EEPROM jumper (J121) and TEST jumper (J122) on the Main P.C.B. to the frame ground.
4. Turn on the power (see page 10).
The EEPROM (IC502) is initialized and the FL display shows blinking letters "RC" and "CCRT".
5. Apply a test tone signal (315 Hz, -8 dB) from the AF oscillator to the line inputs (TP1 for channel L, TP2 for channel R).
6. Make sure that no tape is loaded in DECK 1 or DECK 2.
While pressing and holding the REC PAUSE button, adjust the AF oscillator output level until the signal level at the line outputs (TP3 for L channel, TP4 for R channel) is 400 mV. After setting the AF oscillator output level, keep holding down the REC PAUSE button for approx. 5 sec.
7. Release the REC PAUSE button.
8. Disconnect EEPROM jumper (J121) from the frame ground.

•Playback Gain Adjustment**•Rec./Play Frequency Response & Gain Adjustment****Note:**

... Manual ... automatic

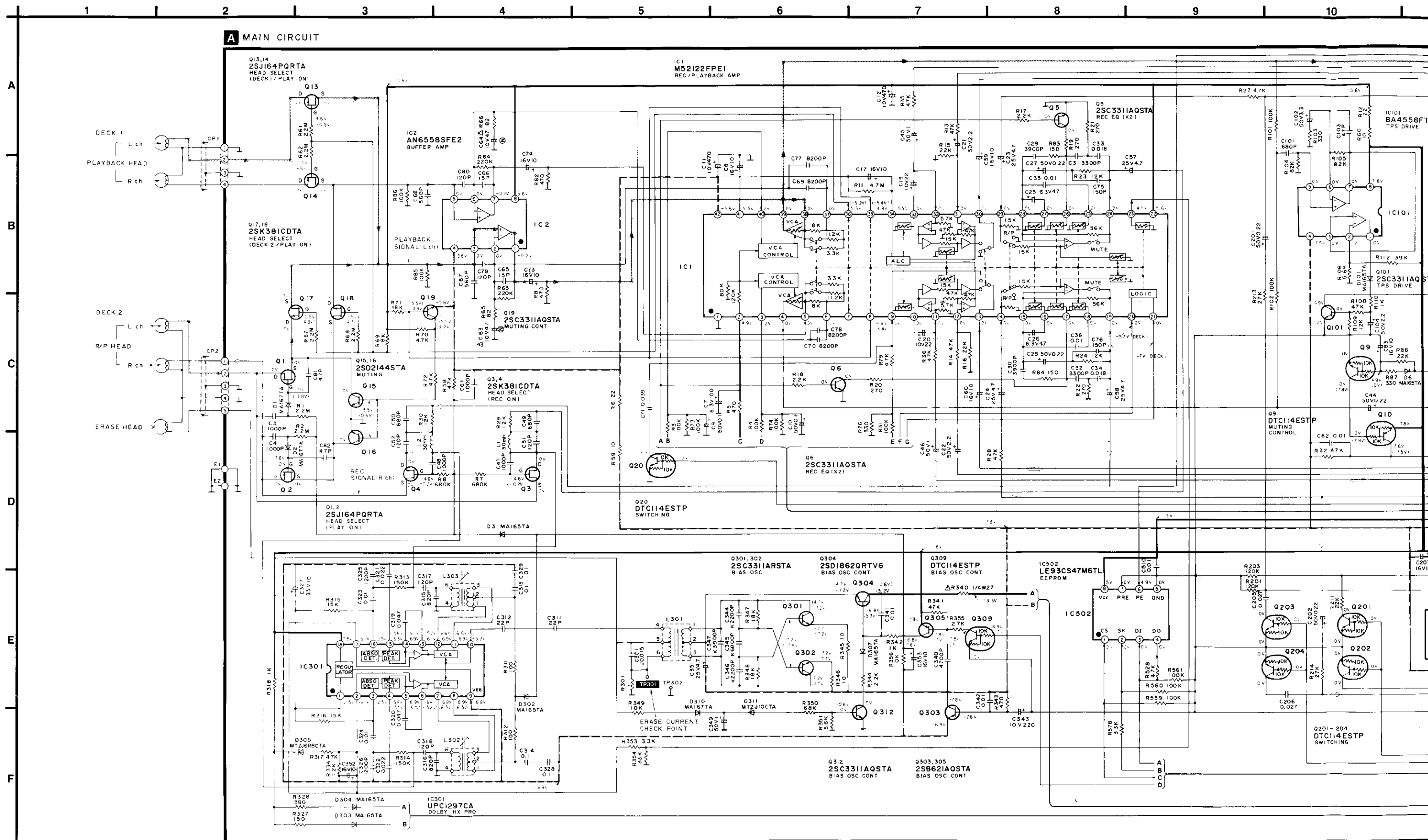
•Post Auto-adjustment Checks

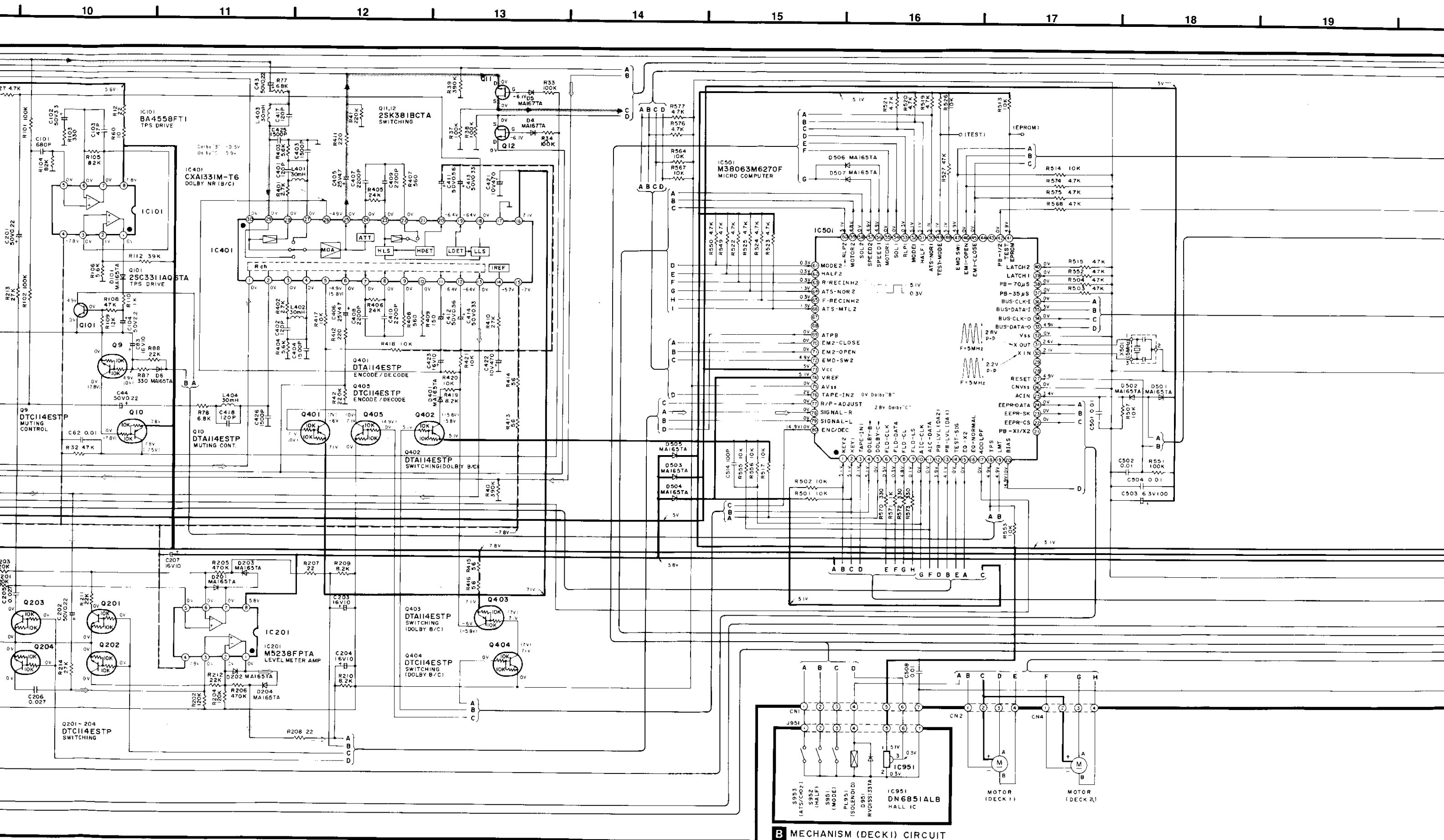
1. Press the CCRT button.
2. CCRT indicator appears on the FL display.
3. Make sure that the FL display shows the following information:

	PLAY indicator on DECK 1	PLAY indicator on DECK 2	REC indicator on DECK 2
OK	Off	Off	Off
NG (readjustment required)	"PLAY" indicator blinks.	"PLAY" indicator blinks.	"REC" indicator blinks.

4. Disconnect TEST jumper (J122) from the frame ground.

■ SCHEMATIC DIAGRAM (Parts list on pages 28~31.)





B MECHANISM (DECK) CIRCUIT

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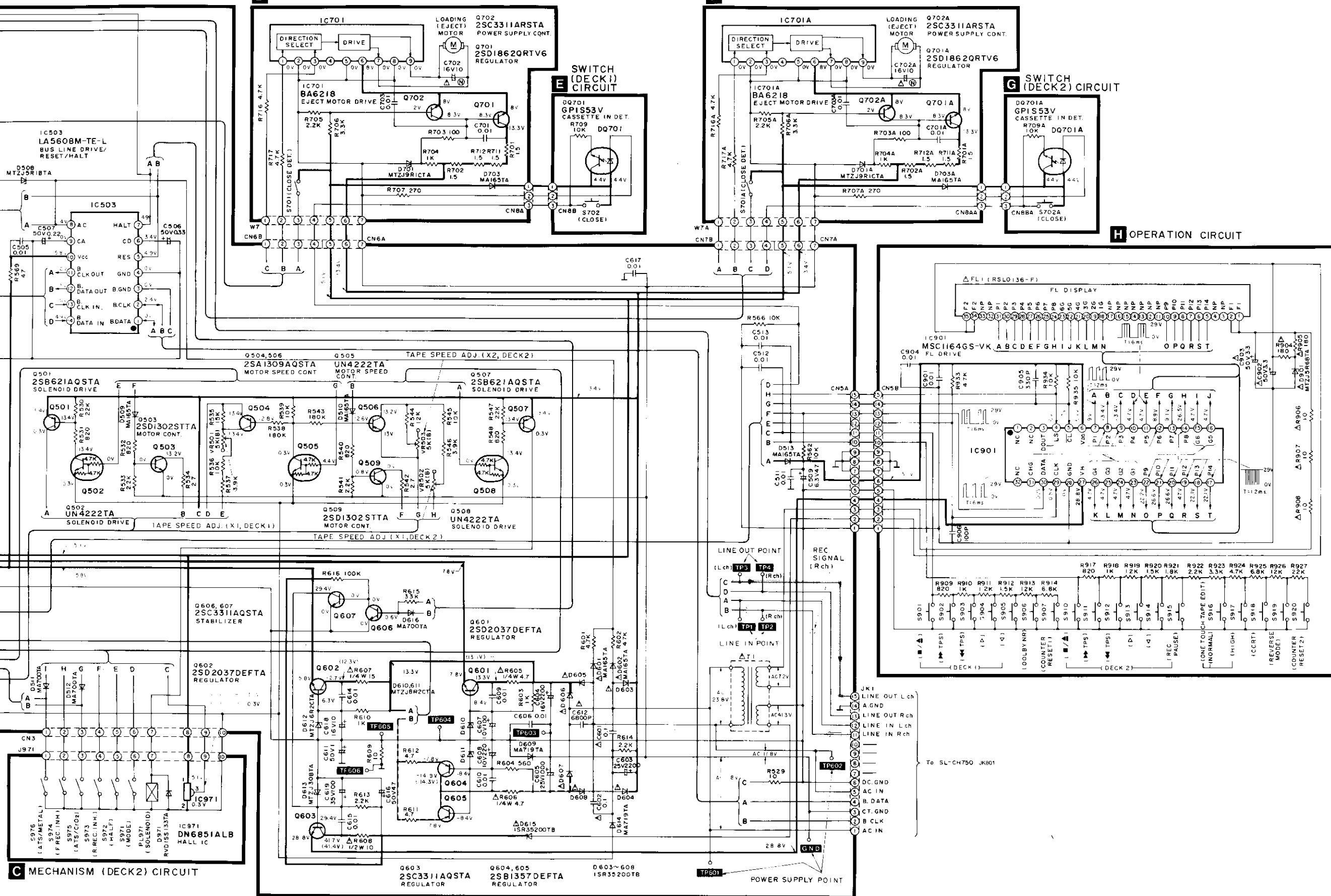
D LOADING MOTOR (DECK1) CIRCUIT

F LOADING MOTOR (DECK2) CIRCUIT

E SWITCH (DECK1) CIRCUIT

G SWITCH (DECK2) CIRCUIT

H OPERATION CIRCUIT



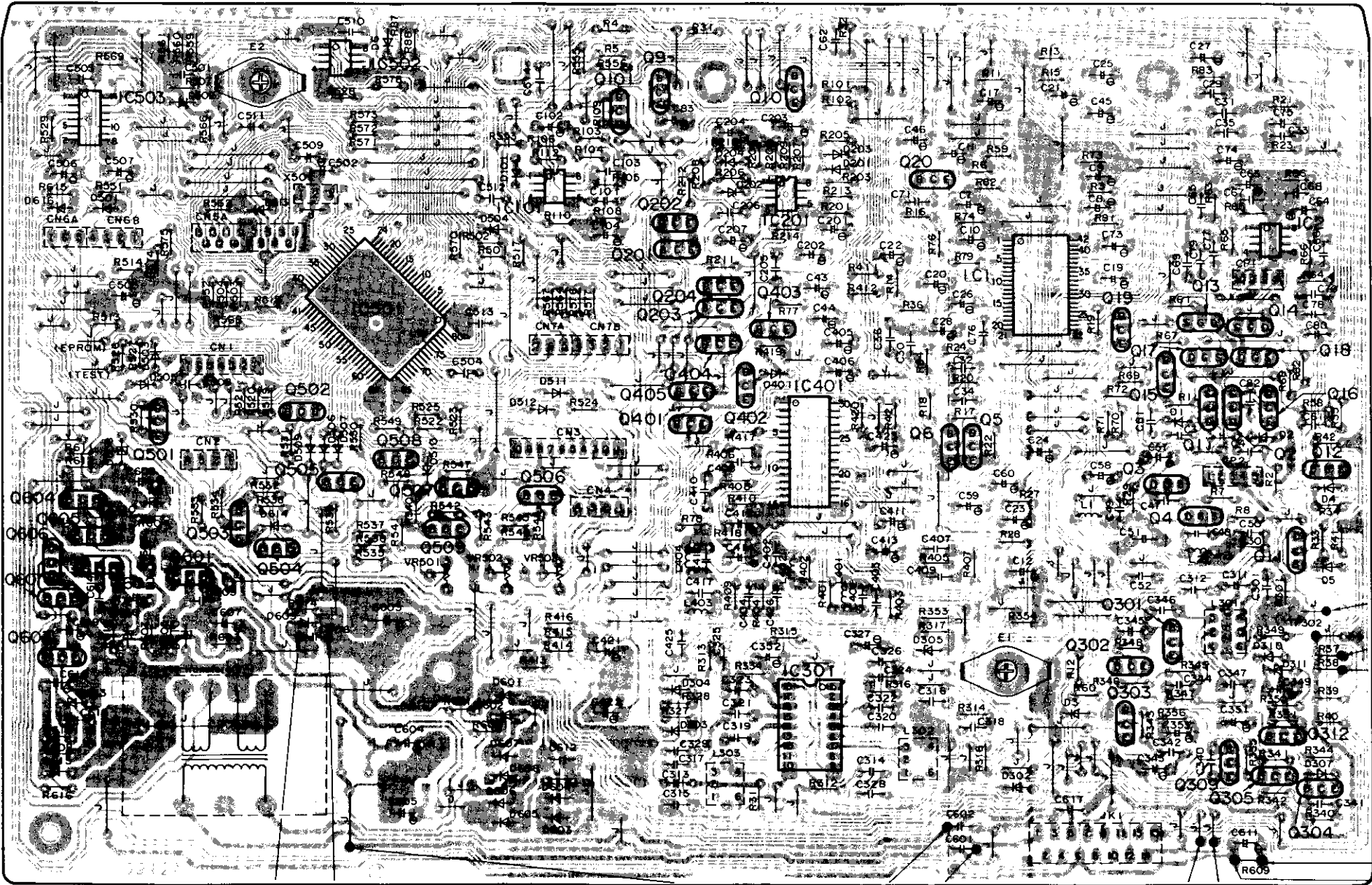
Ref. No.	Production Parts No.	Supply Parts No.
IC101	BA4558FT1	SVIBA4558F
IC201	M5238FPTA	SVIM5238FP
DQ701/701A	GP1S53V	SVDGP1S53

 : Positive Voltage Line
 : Negative Voltage Line
 : Playback Signal Line
 : Recording Signal Line

PRINTED CIRCUIT BOARD DIAGRAM

•This circuit board diagram may be modified at any time with the development of new technology.

A MAIN P.C.B. (REP1487A - M)



TP604 TP603

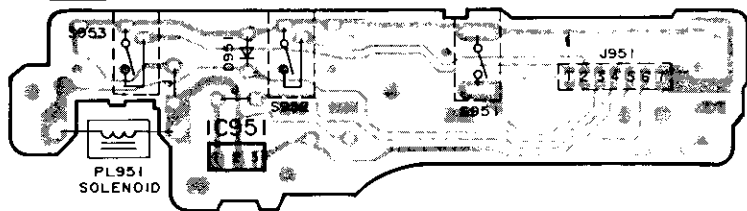
GND TP602 TP601
POWER SUPPLY POINT

SL-CH750 (Lch) TP1 TP2 (Rch)
LINE IN POINT

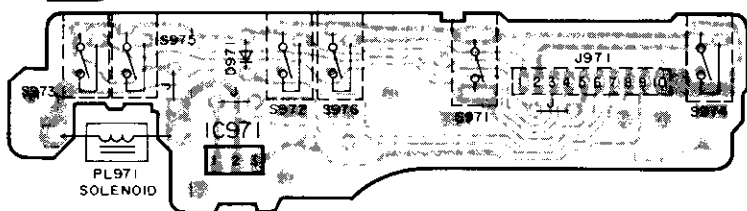
TP601
ERASE CURRENT
CHECK POINT
(Lch)
TP3
LINE
OUT
POINT
(Rch)

TP606
TP605

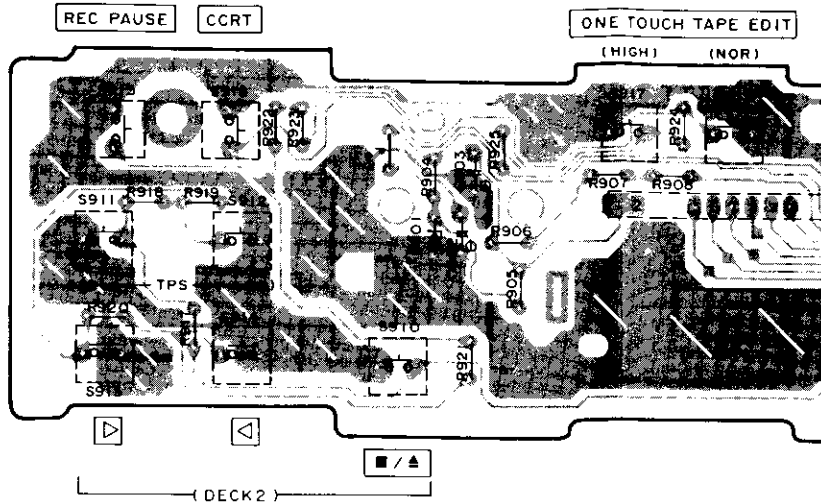
B MECHANISM (DECK1) P.C.B. (REP0531)



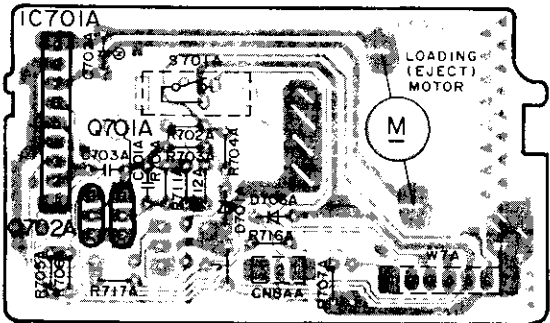
C MECHANISM (DECK2) P.C.B. (REP0532)



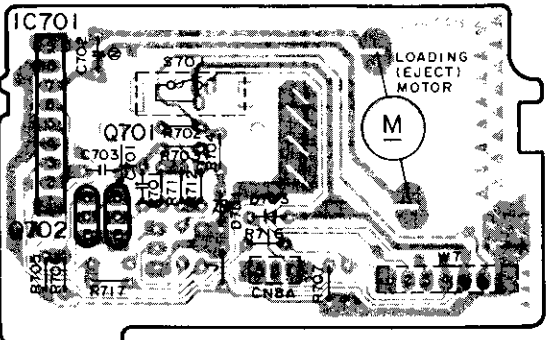
H OPERATION P.C.B. (REP1488A - S)



F LOADING MOTOR (DECK2) P.C.B. (REP1564A - S)



D LOADING MOTOR (DECK1) P.C.B. (REP1564A - S)



•Terminal g

BA455B

BA621

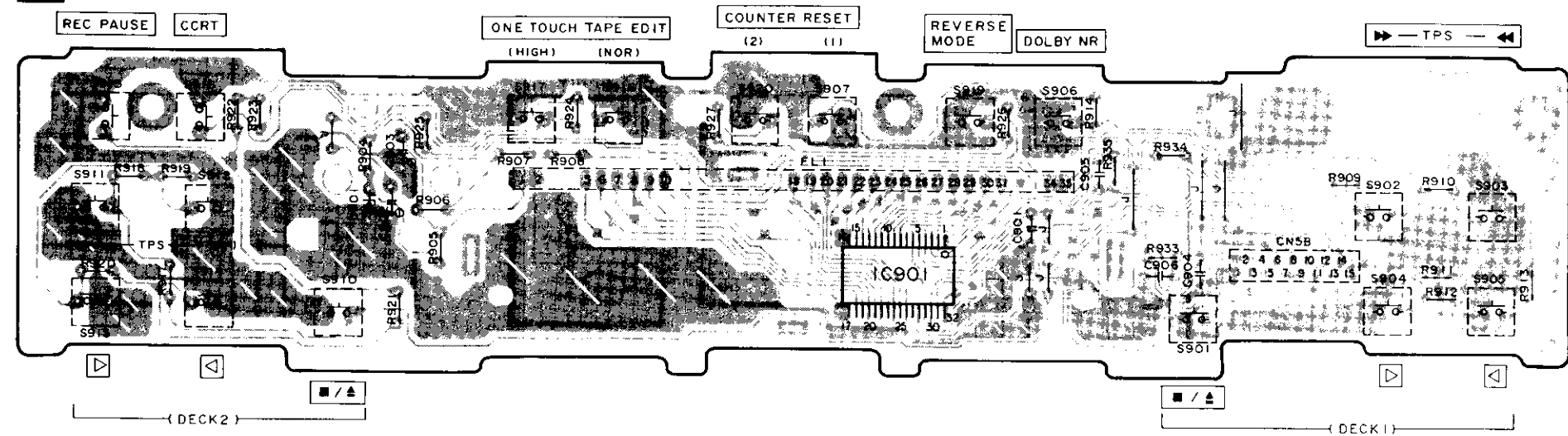
E C

Ca

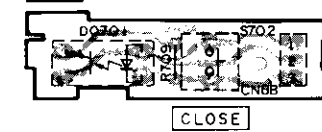
Anode

5 6 7 8 9 10 11 12 13 14

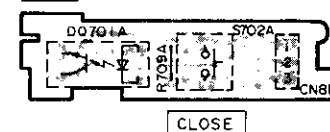
H OPERATION P.C.B. (REP1488A-S)



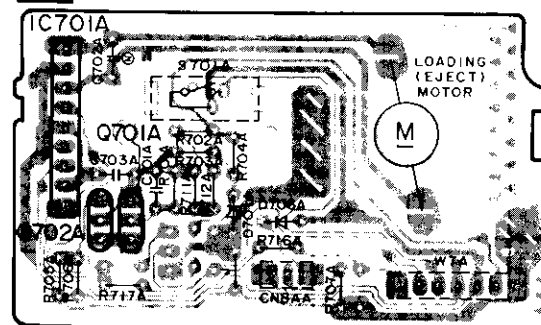
E SWITCH (DECK1) P.C.B. (REP1564A-S)



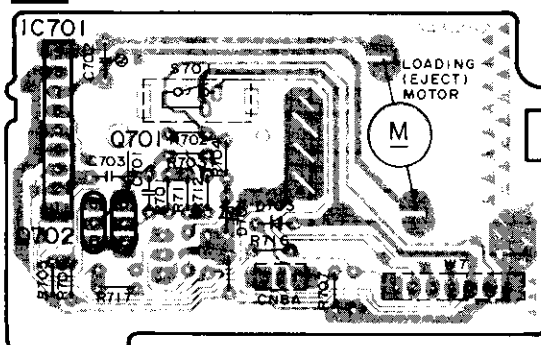
G SWITCH (DECK2) P.C.B. (REP1564A-S)



F LOADING MOTOR (DECK2) P.C.B. (REP1564A-S)

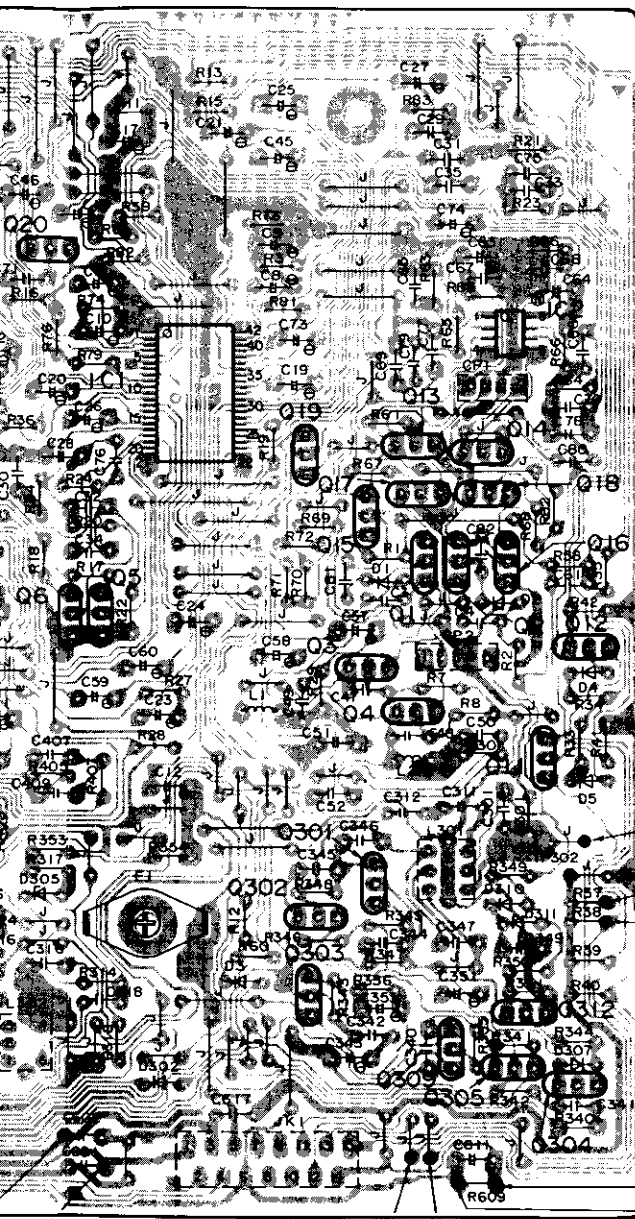


D LOADING MOTOR (DECK1) P.C.B. (REP1564A-S)

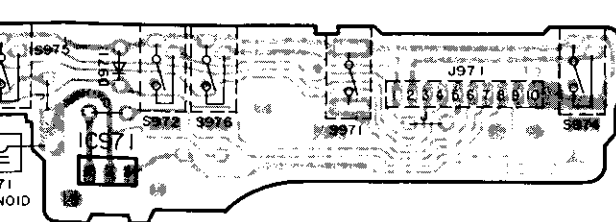


Terminal guide of IC's, transistors and diodes

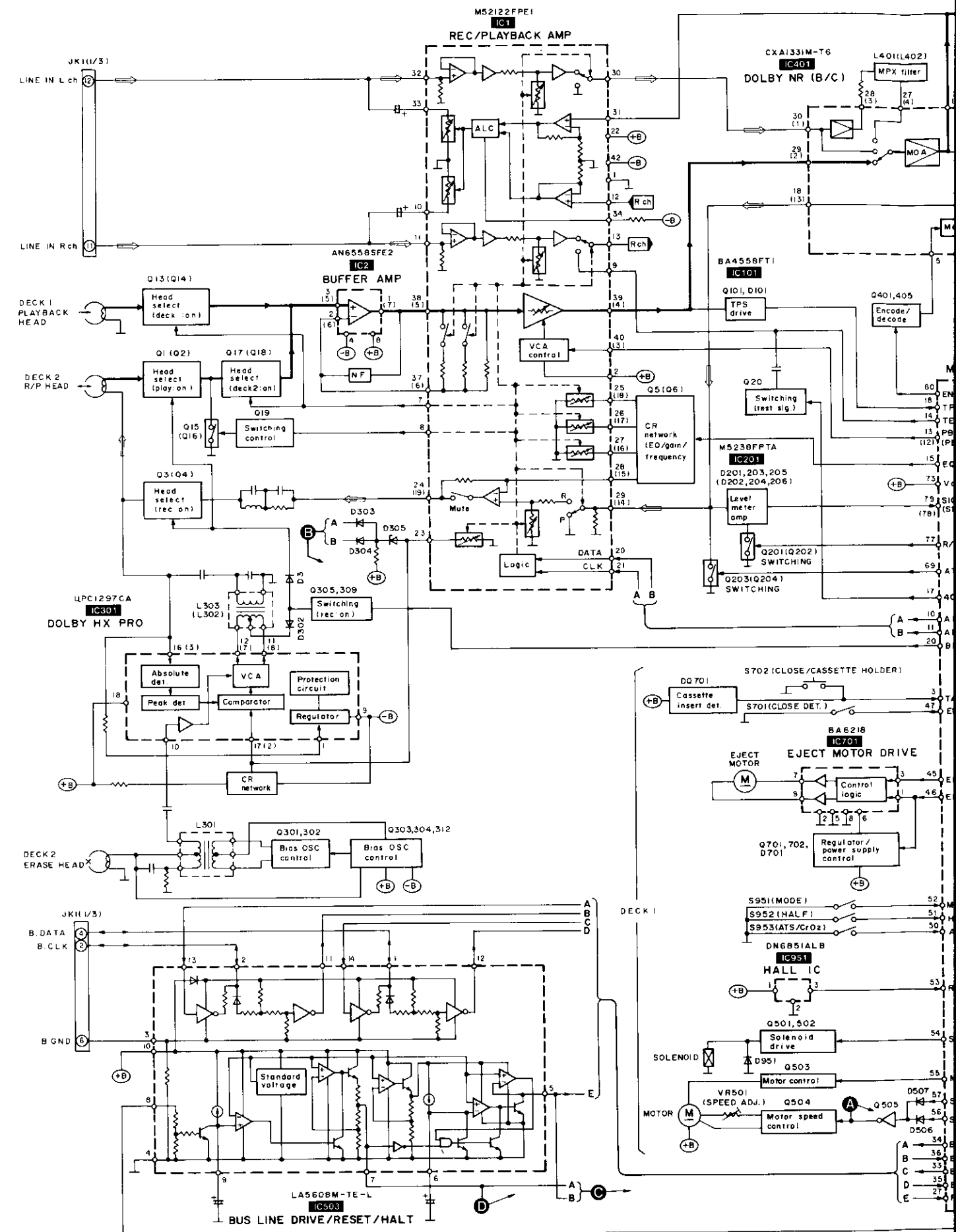
BA4558FT1 	AN6558SFE2 8Pin LE93CS47M6TL 8Pin M5238FPTA 8Pin LA5608M-TE-L 14Pin	CXA1331M-T6 30Pin M52122FPE1 40Pin	MSC1164GS-VK 	UPC1297CA
BA6218 	M38063M6270F 	DN6851ALB 	2SB621AQSTA 2SD1302STTA 	DTA114ESTP DTC114ESTP
	2SA1309AQSTA 2SC3311AQSTA 2SC3311ARSTA 2SD2144STA UN4222TA	2SB1357DEFTA 2SD2037DEFTA 	2SK381CDTA 	2SD1862QRTV6
	MA165TA MA167TA MA700TA MA719TA 1SR35200TB RVD1SS133TA	MTZJ5R1BTA MTZJ5R6BTA MTZJ6R2CTA MTZJ6R8CTA MTZJ8R2CTA MTZJ9R1CTA MTZJ10CTA MTZJ30BTA		



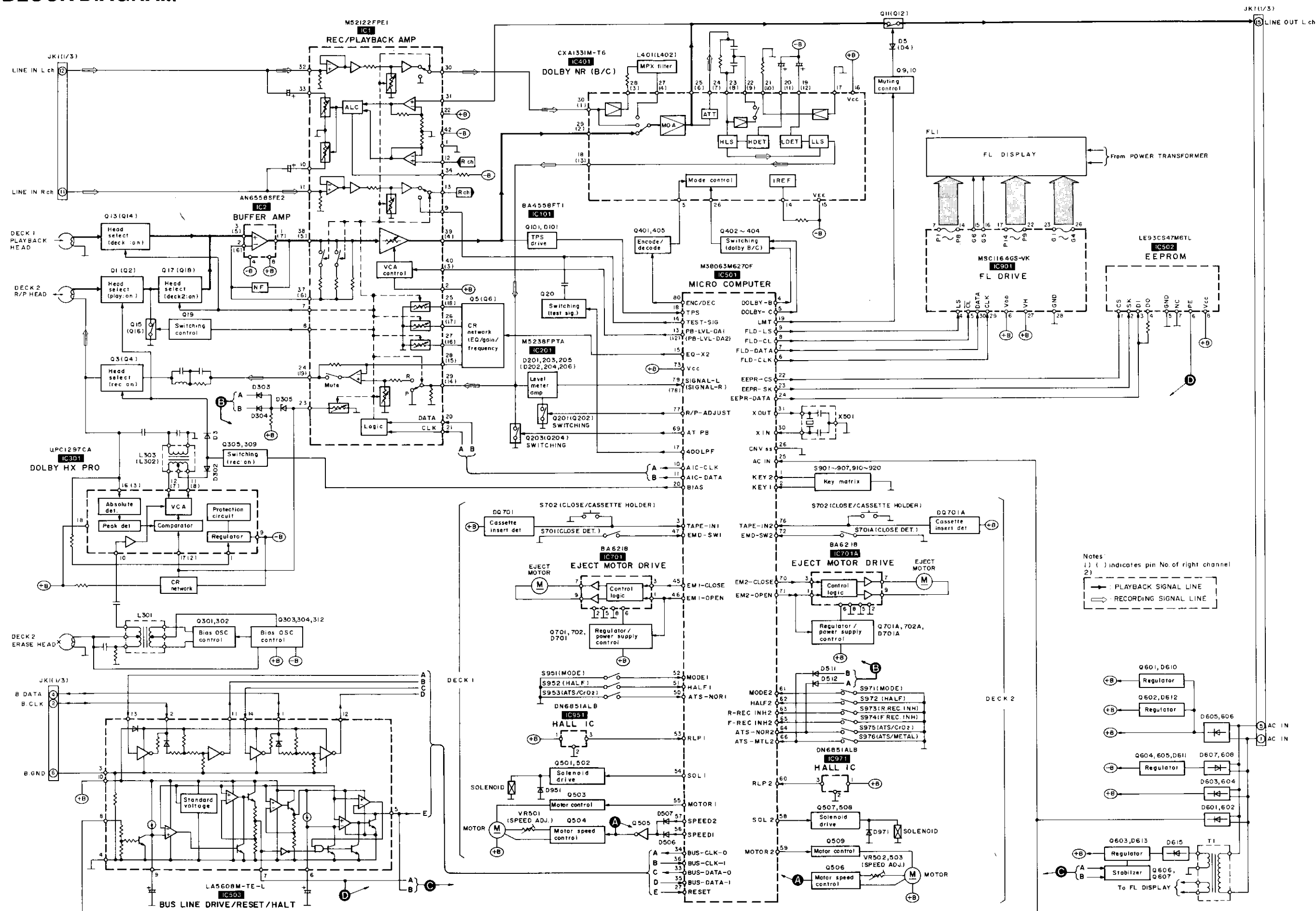
MECHANISM (DECK2) P.C.B. (REP0532)



■ BLOCK DIAGRAM



BLOCK DIAGRAM



FUNCTION OF IC TERMINALS

IC501 (M38063M6270F)

Pin No.	Terminal Name	I/O	Function
1	KEY2	I	DECK2 operation key signal
2	KEY1	I	DECK1 operation key signal
3	TAPE-IN1	I	EJECT key and Tape Sense signal for DECK1
4	DOLBY-B	O	Dolby B on/off signal ("L"=ON)
5	DOLBY-C	O	Dolby C on/off signal ("H"=ON)
6	FLD-CLK	O	FL display driver clock
7	FLD-DATA	O	FL display data to driver
8	FLD-CL	O	FL display driver clear signal
9	FLD-LS	O	FL display driver latch signal
10	AIC-CLK	O	Rec./play audio IC clock
11	AIC-DATA	O	Audio data for rec./play audio IC
12	PB-LVL (DA2)	O	R channel playback level control signal
13	PB-LVL (DA1)	O	L channel playback level control signal
14	TEST-SIG	O	Test tone signal (400 Hz/10 kHz)
15	EQ-×2	O	Rec. amplifier equalization (×1/×2) selection signal ("H"=×2)
16	EQ-NORMAL	O	Rec. equalizer compensation signal for normal bias tapes ("H"=normal)
17	400LPF	O	400-Hz test tone filter in/out control
18	TPS	I	Program exist sense signal used during TPS operation ("L"=present)
19	LMT	O	Line out muting signal (active Low)
20	BIAS	O	Rec. bias on/off control ("H"=ON)
21	PB-×1/×2	O	Normal/double speed selection ("L"=double speed) Not used
22	EEPR-CS	O	EEPROM chip select signal
23	EEPR-SK	O	EEPROM clock
24	EEPR-DATA	I/O	EEPROM data I/O
25	AC IN	I	Power off sense signal
26	CNV _{ss}	GND	Pulled down to V _{ss} .
27	RESET	I	Microprocessor reset signal (active Low)
28	—	—	Not used
29	—	—	Not used

Pin No.	Terminal Name	I/O	Function
30	X IN	I	Microprocessor clock input
31	X OUT	O	Microprocessor clock output
32	V _{ss}	GND	GND
33	BUS-DATA-O	O	Bus signal inputs/outputs
34	BUS-CLK-O	O	
35	BUS-DATA-I	I	
36	BUS-CLK-I	I	
37	PB-35μs	—	Not used
38	PB-70μs	—	Not used
39	LATCH1	—	Not used
40	LATCH2	—	Not used
41	TEST-EPROM	I	EEPROM initialization signal (active Low)
42	PB-1/2	—	Not used
43	—	—	Not used
44	—	—	Not used
45	EM1-CLOSE	O	DECK1 eject motor (close) control (active High)
46	EM1-OPEN	O	DECK1 eject motor (open) control (active High)
47	EMD-SW1	I	DECK1 eject mode switch signal (active Low)
48	—	—	Not used
49	TEST-MODE	I	Test mode on/off control ("L"=ON)
50	ATS-NOR1	I	DECK1 tape position (NORMAL) sense switch signal (active Low)
51	HALF1	I	DECK1 tape sense switch signal (active Low)
52	MODE1	I	DECK1 mechanism mode switch signal (active Low)
53	RLP1	I	DECK1 reel rotation sense pulse
54	SOL1	O	DECK1 plunger on/off signal ("H"=ON)
55	MOTOR1	O	DECK motor on/off control ("H"=ON)
56	SPEED1	O	DECK1 motor speed control ("H"=×1)
57	SPEED2	O	DECK2 motor speed control ("H"=×1)

Pin No.	Terminal Name	I/O	Function
58	SOL2	O	DECK2 plunger on/off signal ("H"=ON)
59	MOTOR2	O	DECK2 motor on/off control ("H"=ON)
60	RLP2	I	DECK2 reel rotation sense pulse
61	MODE2	I	DECK2 mechanism mode switch signal (active Low)
62	HALF2	I	DECK2 tape sense switch signal (active Low)
63	R-RECINH2	I	DECK2 erasure prevention switch signal for reverse side (active Low)
64	ATS-NOR2	I	DECK2 tape position (NORMAL) sense switch signal (active Low)
65	F-RECINH2	I	DECK2 erasure prevention switch signal for forward side (active Low)
66	ATS-MTL2	I	DECK2 tape position (METAL) sense switch signal (active Low)
67	—	—	Not used
68	—	—	Not used
69	ATPB	O	Switching signal for playback level adjustment (active High)
70	EM2-CLOSE	O	DECK2 eject motor (close) control (active High)
71	EM2-OPEN	O	DECK2 eject motor (open) control (active High)
72	EMD-SW2	I	DECK2 eject mode switch signal (active Low)
73	V _{cc}	I	Microprocessor power supply (+5 V)
74	V REF	I	Reference voltage for A/D converter (+5 V)
75	AV _{ss}	—	GND for A/D input
76	TAPE-IN2	I	DECK2 EJECT key and tape sense signal
77	R/P-ADJUST	O	Adjustment mode (including CCRT) selection signal (active High)
78	SIGNAL-R	I	Not used (pulled down to V _{ss} through resistor)
79	SIGNAL-L	I	Not used (pulled down to V _{ss} through resistor)
80	ENC/DEC	O	Dolby IC encoding/decoding select signal ("H"=encoding)

IC901 (MSC1164GS-VK)

Pin No.	Terminal Name	I/O	Function
1	NC	—	—
2	NC	—	—
3	DOUT	—	—
4	LS	I	Latch strobe
5	CL	I	Clear input with internal pull-up resistor
6	V _{DD}	—	Logic power supply
7 14	P1 P8	O	FL display drive lines
15	G6	O	FL display grid drive line
16	G5		
17 22	P14 P9	O	FL display drive lines
23 26	G1 G4	O	FL display grid drive lines
27	VH	—	FL driver power supply
28	GND	—	GND
29	CLK	I	Clock input
30	DATA	I	Data input
31	CHG	I	Test input (not used)
32	NC	—	—

REPL

Notes: *Import
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Parts v

Ref. No.	
IC1	M52
IC2	AN6
IC101	SV1
IC201	SV1
IC301	UPC
IC401	CXA
IC501	M38
IC502	LE9
IC503	LA5
IC701	BA6
IC701A	BA6
IC901	MSC
IC951	DN6
IC971	DN6
Q1, 2	2SJ
Q3, 4	2SK
Q5, 6	2SC
Q9	DTC
Q10	DTA
Q11, 12	2SK
Q13, 14	2SJ
Q15, 16	2SD
Q17, 18	2SK
Q19	2SC
Q20	DTC
Q101	2SC
Q201-204	DTC
Q301, 302	2SC
Q303	2SB
Q304	2SD
Q305	2SB
Q309	DTC
Q312	2SC
Q401-403	DTA
Q404, 405	DTC
Q501	2SB
Q502	UN4
Q503	2SD
Q504	2SA
Q505	UN4
Q506	2SA

REPLACEMENT PARTS LIST

Notes: *Important safety notice:
Components identified by Δ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.

Ref.No.	Part No.	Part Name & Description	Remarks	Ref.No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT (S)		Q507	2SB621AQSTA	TRANSISTOR	
				Q508	UN4222	TRANSISTOR	
				Q509	2SD1302STTA	TRANSISTOR	
IC1	M52122FPE1	I. C, PLAYBACK/REC. AMP.		Q601, 602	2SD2037DEFTA	TRANSISTOR	
IC2	AN6558SFE2	I. C, BUFFER AMP.		Q603	2SC3311A-Q	TRANSISTOR	
IC101	SVIBA4558F	I. C, TPS DRIVE		Q604, 605	2SB1357DEFTA	TRANSISTOR	
IC201	SVIM5238FP	I. C, LEVEL METER AMP.		Q606, 607	2SC3311A-Q	TRANSISTOR	
IC301	UPC1297CA	I. C, DOLBY HX PRO.		Q701	2SD1862QRTV6	TRANSISTOR	
IC401	CXA1331M-T6	I. C, DOLBY NR B/C		Q701A	2CD1862QRTV6	TRANSISTOR	
IC501	M38063M6270F	I. C, MICRO COMPUTER		Q702	2SC3311ARSTA	TRANSISTOR	
IC502	LE93CS47M6TL	I. C, EEPROM		Q702A	2SC3311ARSTA	TRANSISTOR	
IC503	LA5608M-TE-L	I. C, BUS LINE DRIVE/RESET				DIODE (S)	
IC701	BA6218	I. C, E. MOTOR DRIVE (DECK1)		D1, 2	MA167	DIODE	
IC701A	BA6218	I. C, E. MOTOR DRIVE (DECK2)		D3	MA165	DIODE	
IC901	MSC1164GS-VK	I. C, FL DRIVE		D4, 5	MA167	DIODE	
IC951	DN6851ALB	I. C, HALL (DECK1)		D6	MA165	DIODE	
IC971	DN6851ALB	I. C, HALL (DECK2)		D101	MA165	DIODE	
		TRANSISTOR (S)		D201-204	MA165	DIODE	
Q1, 2	2SJ164PQRTA	TRANSISTOR		D302-304	MA165	DIODE	
Q3, 4	2SK381BCDTA	TRANSISTOR		D305	MTZJ6R8CTA	DIODE	
Q5, 6	2SC3311A-Q	TRANSISTOR		D307	MA165	DIODE	
Q9	DTC114ESTP	TRANSISTOR		D310	MA167	DIODE	
Q10	DTA114ESTP	TRANSISTOR		D311	MTZJ10CTA	DIODE	
Q11, 12	2SK381BCDTA	TRANSISTOR		D401	MA165	DIODE	
Q13, 14	2SJ164PQRTA	TRANSISTOR		D501-507	MA165	DIODE	
Q15, 16	2SD2144S	TRANSISTOR		D508	MTZJ5R1BTA	DIODE	
Q17, 18	2SK381BCDTA	TRANSISTOR		D509, 510	MA165	DIODE	
Q19	2SC3311A-Q	TRANSISTOR		D511, 512	MA700TA	DIODE	
Q20	DTC114ESTP	TRANSISTOR		D513	MA165	DIODE	
Q101	2SC3311A-Q	TRANSISTOR		D601, 602	MA165	DIODE	Δ
Q201-204	DTC114ESTP	TRANSISTOR		D603-608	1SR35200TB	DIODE	Δ
Q301, 302	2SC3311ARSTA	TRANSISTOR		D609	MA719TA	DIODE	
Q303	2SB621AQSTA	TRANSISTOR		D610, 611	MTZJ8R2CTA	DIODE	
Q304	2SD1862QRTV6	TRANSISTOR		D612	MTZJ6R2CTA	DIODE	
Q305	2SB621AQSTA	TRANSISTOR		D613	MTZJ30BTA	DIODE	
Q309	DTC114ESTP	TRANSISTOR		D614	MA719TA	DIODE	
Q312	2SC3311A-Q	TRANSISTOR		D615	1SR35200TB	DIODE	Δ
Q401-403	DTA114ESTP	TRANSISTOR		D616	MA700TA	DIODE	
Q404, 405	DTC114ESTP	TRANSISTOR		D701	MTZJ9R1CTA	DIODE	
Q501	2SB621AQSTA	TRANSISTOR		D701A	MTZJ9R1CTA	DIODE	
Q502	UN4222	TRANSISTOR		D703	MA165	DIODE	
Q503	2SD1302STTA	TRANSISTOR		D703A	MA165	DIODE	
Q504	2SA1309A-R	TRANSISTOR		D901	MTZJ5R6BTA	DIODE	Δ
Q505	UN4222	TRANSISTOR		D951	RVD1SS133TA	DIODE	
Q506	2SA1309A-R	TRANSISTOR		D971	RVD1SS133TA	DIODE	

IC901 (MSC1164GS-VK)

Pin No.	Terminal Name	I/O	Function
1	NC	—	—
2	NC	—	—
3	DOUT	—	—
4	LS	I	Latch strobe
5	CL	I	Clear input with internal pull-up resistor
6	V _{DD}	—	Logic power supply
7 ? 14	P1 ? P8	O	FL display drive lines
15	G6	O	FL display grid drive line
16	G5		
17 ? 22	P14 ? P9	O	FL display drive lines
23 ? 26	G1 ? G4	O	FL display grid drive lines
27	VH	—	FL driver power supply
28	GND	—	GND
29	CLK	I	Clock input
30	DATA	I	Data input
31	CHG	I	Test input (not used)
32	NC	—	—

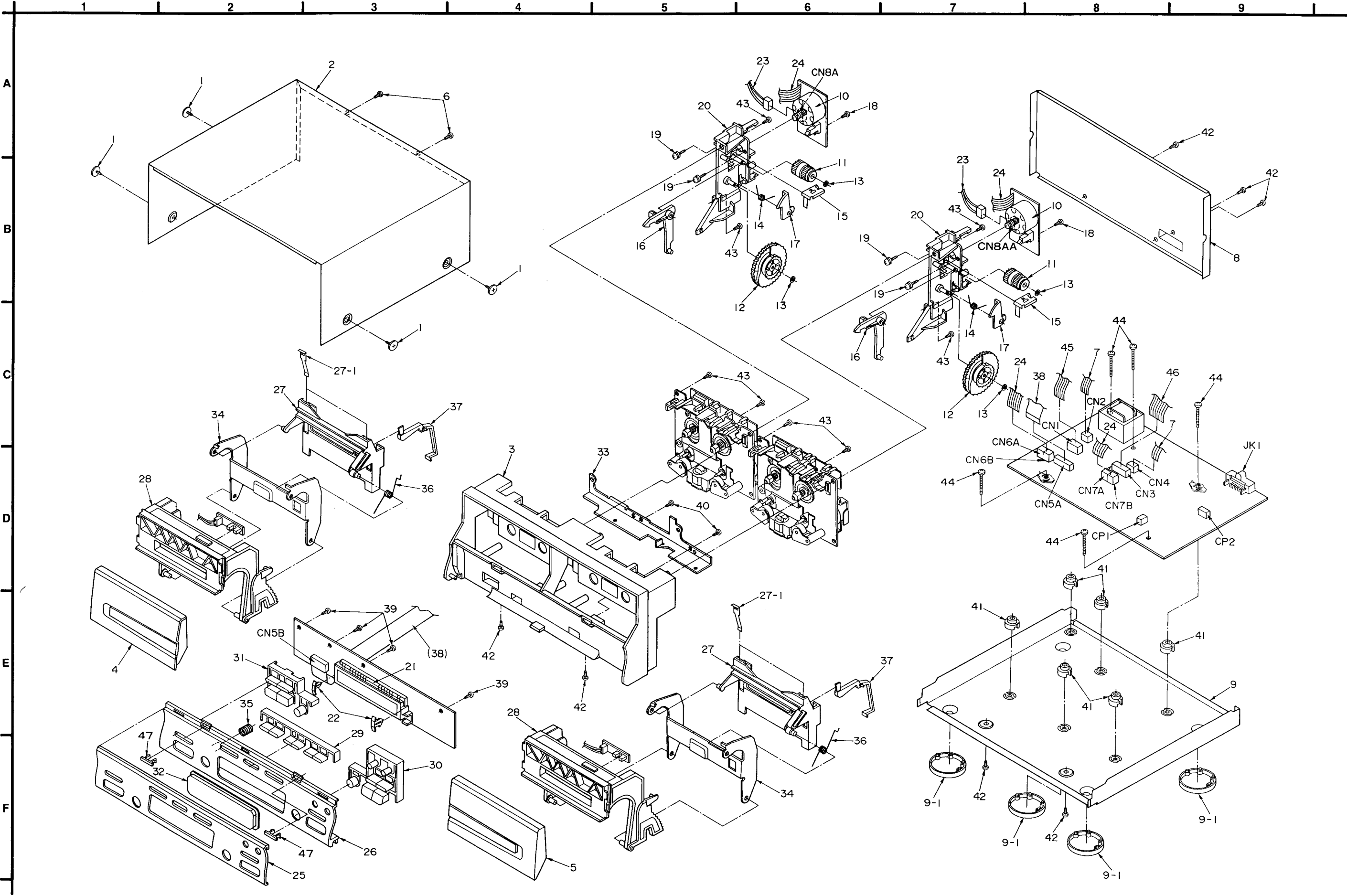
Pin No.	Terminal Name	I/O	Function
58	SOL2	O	DECK2 plunger on/off signal ("H"=ON)
59	MOTOR2	O	DECK2 motor on/off control ("H"=ON)
60	RLP2	I	DECK2 reel rotation sense pulse
61	MODE2	I	DECK2 mechanism mode switch signal (active Low)
62	HALF2	I	DECK2 tape sense switch signal (active Low)
63	R-RECINH2	I	DECK2 erasure prevention switch signal for reverse side (active Low)
64	ATS-NOR2	I	DECK2 tape position (NORMAL) sense switch signal (active Low)
65	F-RECINH2	I	DECK2 erasure prevention switch signal for forward side (active Low)
66	ATS-MTL2	I	DECK2 tape position (METAL) sense switch signal (active Low)
67	—	—	Not used
68	—	—	Not used
69	ATPB	O	Switching signal for playback level adjustment (active High)
70	EM2-CLOSE	O	DECK2 eject motor (close) control (active High)
71	EM2-OPEN	O	DECK2 eject motor (open) control (active High)
72	EMD-SW2	I	DECK2 eject mode switch signal (active Low)
73	V _{CC}	I	Microprocessor power supply (+5 V)
74	V _{REF}	I	Reference voltage for A/D converter (+5 V)
75	AV _{SS}	—	GND for A/D input
76	TAPE-IN2	I	DECK2 EJECT key and tape sense signal
77	R/P-ADJUST	O	Adjustment mode (including CCRT) selection signal (active High)
78	SIGNAL-R	I	Not used (pulled down to V _{SS} through resistor)
79	SIGNAL-L	I	Not used (pulled down to V _{SS} through resistor)
80	ENC/DEC	O	Dolby IC encoding/decoding select signal ("H"=encoding)

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		VARIABLE RESISTOR(S)		S953	RSH1A90YC-U	SW, ATS/CrO2 (DECK1)	
				S971	RSH1A89ZC-U	SW, MODE (DECK2)	
				S972	RSH1A90YC-U	SW, HALF (DECK2)	
VR501	EVNDXAA00B53	V. R. TAPE SPEED ADJ. (DECK1)		S973	RSH1A90YC-U	SW, R. REC. INH (DECK2)	
VR502	EVNDXAA00B53	V. R. TAPE SPEED ADJ. (DECK2)		S974	RSH1A90YC-U	SW, F. REC. INH (DECK2)	
VR503	EVNDXAA00B53	V. R. TAPE SPEED ADJ. (DECK2)		S975	RSH1A90YC-U	SW, ATS/CrO2 (DECK2)	
		COIL (S)		S976	RSH1A90YC-U	SW, ATS/METAL (DECK2)	
						CONNECTOR (S)	
L1, 2	SLQX303-1KT	COIL		J951	RJS7T7ZA	SOCKET (7P)	
L301	SL09B4-K	COIL		J971	RJS10T7ZA	SOCKET (10P)	
L302, 303	SL09B1-Z	COIL		CN1	RJS7T4ZA	SOCKET (7P)	
L401-404	SLQX303-1KT	COIL		CN2	RJS1A6604	SOCKET (4P)	
		TRANSFORMER (S)		CN3	SJSD1005	SOCKET (10P)	
				CN4	RJS1A6604	SOCKET (4P)	
T1	RTP114G003	POWER TRANSFORMER	△	CN5A	RJS15Q8ZA	SOCKET (15P)	
		OSCILLATOR (S)		CN6A	RJS1A6603	SOCKET (3P)	
				CN7A	RJS1A6603	SOCKET (3P)	
X501	RSXY5M00M01T	OSCILLATOR (5MHz)		CN8A	RJP3G17ZA	CONNECTOR (3P)	
		DISPLAY (S)		CN8AA	RJP3G17ZA	CONNECTOR (3P)	
				CN5B	RJS1A6715-Q	SOCKET (15P)	
FL1	RSLO136-F	FL DISPLAY	△	CN6B	RJS1A6604	SOCKET (4P)	
		SWITCH (ES)		CN7B	RJS1A6604	SOCKET (4P)	
				CN8B	REX0466-2	LEAD CABLE (3P)	
				CN8BA	REX0466-2	LEAD CABLE (3P)	
				CP1	SJTD413	CONNECTOR (4P)	
				CP2	RJP5G18ZA	CONNECTOR (5P)	
						PHOTO SENSOR	
S701	RSH1A005	SW, OPEN/CLOSE DET. (DECK1)		DQ701	SVDP1S53	CASSETTE IN DET. (DECK1)	
S701A	RSH1A005	SW, OPEN/CLOSE DET. (DECK2)		DQ701A	SVDP1S53	CASSETTE IN DET. (DECK2)	
S702	EVQ21405R	SW, CLOSE (C. HOLDER DECK1)				EARTH TERMINAL (S)	
S702A	EVQ21405R	SW, CLOSE (C. HOLDER DECK2)					
S901	EVQ21405R	SW, STOP/OPEN (DECK1)		E1, 2	SNE1004-1	GND PLATE	
S902	EVQ21405R	SW, F. F. TPS (DECK1)				JACK (S)	
S903	EVQ21405R	SW, REV. TPS (DECK1)					
S904	EVQ21405R	SW, PLAY (FWD) (DECK1)					
S905	EVQ21405R	SW, PLAY (REV) (DECK1)					
S906	EVQ21405R	SW, DOLBY NR					
S907	EVQ21405R	SW, COUNTER RESET (DECK1)					
S910	EVQ21405R	SW, STOP/OPEN (DECK2)					
S911	EVQ21405R	SW, F. F. TPS (DECK2)					
S912	EVQ21405R	SW, REV. TPS (DECK2)					
S913	EVQ21405R	SW, PLAY (FWD) (DECK2)					
S914	EVQ21405R	SW, PLAY (REV) (DECK2)					
S915	EVQ21405R	SW, REC PAUSE (DECK2)					
S916	EVQ21405R	SW, NORMAL					
S917	EVQ21405R	SW, HIGH					
S918	EVQ21405R	SW, CCRT					
S919	EVQ21405R	SW, REV MODE					
S920	EVQ21405R	SW, COUNTER RESET (DECK2)					
S951	RSH1A89ZC-U	SW, MODE (DECK1)					
S952	RSH1A90YC-U	SW, HALF (DECK1)					

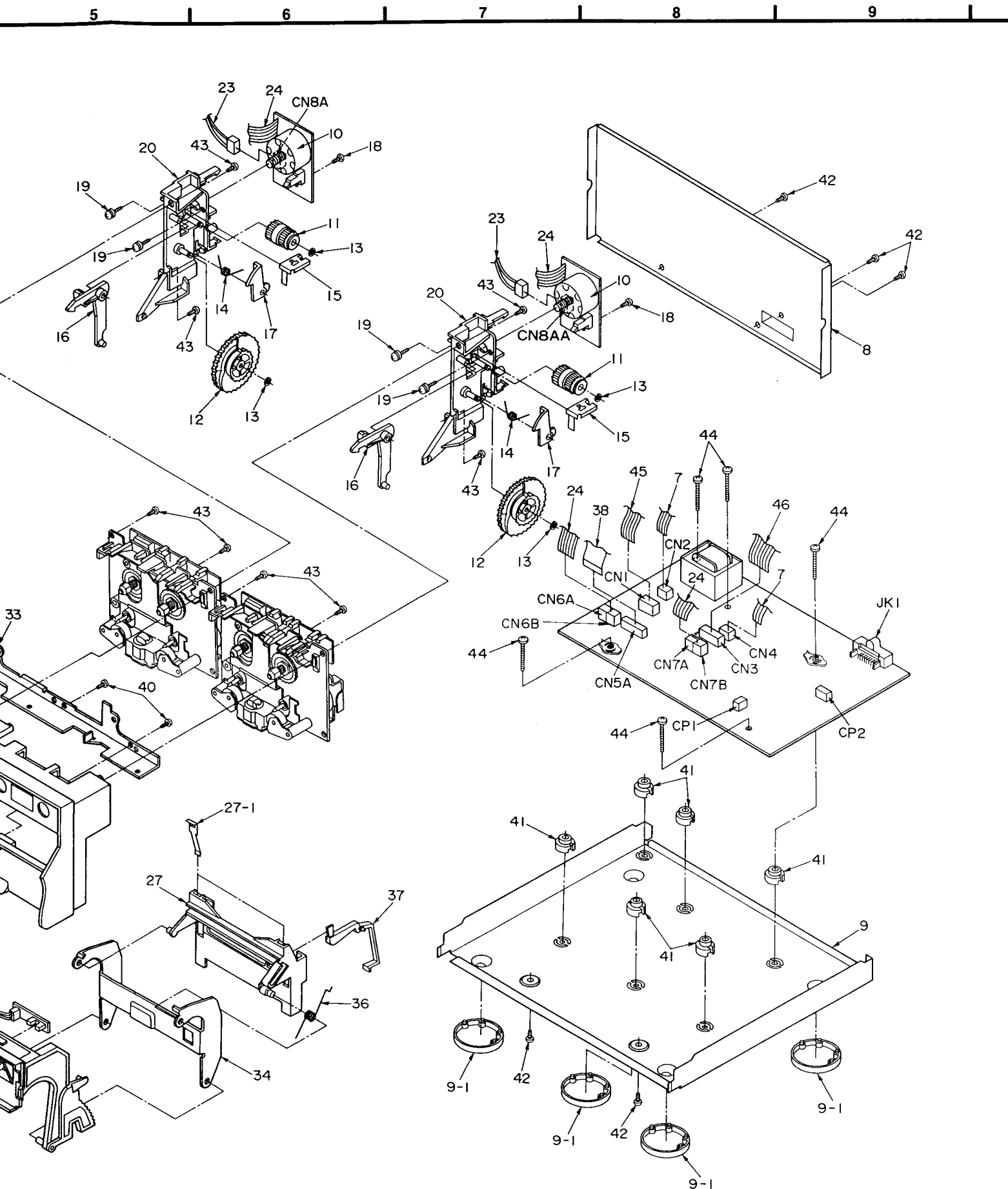
Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM) , 1M=1,000k (OHM)

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
		RESISTORS	R205, 206	ERDS2TJ474	1/4W 470K	R529	ERDS2TJ100	1/4W 10
			R207, 208	ERDS2TJ220T	1/4W 22	R530	ERDS2TJ223	1/4W 22K
R1, 2	ERDS2TJ225	1/4W 2.2M	R209, 210	ERDS2TJ822	1/4W 8.2K	R531, 532	ERDS2TJ821	1/4W 820
R3, 4	ERDS2TJ104	1/4W 100K	R211, 212	ERDS2TJ223	1/4W 22K	R533	ERDS2TJ222	1/4W 2.2K
R5	ERDS2TJ471	1/4W 470	R213, 214	ERDS2TJ273	1/4W 27K	R534	ERDS2TJ2R7T	1/4W 2.7
R6	ERDS2TJ220T	1/4W 22	R301	ERDS2TJ1R0	1/4W 1.0	R535	ERDS2TJ153	1/4W 15K
R7, 8	ERDS2TJ684	1/4W 680K	R311, 312	ERDS2TJ101	1/4W 100	R536	ERDS2TJ103	1/4W 10K
R11	ERDS2TJ475T	1/4W 4.7M	R313, 314	ERDS2TJ154	1/4W 150K	R537	ERDS2TJ392T	1/4W 3.9K
R12	ERDS2TJ220T	1/4W 22	R315, 316	ERDS2TJ153	1/4W 15K	R538	ERDS2TJ184T	1/4W 180K
R13, 14	ERDS2TJ473	1/4W 47K	R317	ERDS2TJ472	1/4W 4.7K	R539	ERDS2TJ103	1/4W 10K
R15, 16	ERDS2TJ223	1/4W 22K	R318	ERDS2TJ102	1/4W 1K	R540	ERDS2TJ821	1/4W 820
R17, 18	ERDS2TJ222	1/4W 2.2K	R327	ERDS2TJ151	1/4W 150	R541	ERDS2TJ222	1/4W 2.2K
R19-22	ERDS2TJ271	1/4W 270	R328	ERDS2TJ391	1/4W 390	R542	ERDS2TJ2R7T	1/4W 2.7
R23, 24	ERDS2TJ123	1/4W 12K	R334	ERDS2TJ122	1/4W 1.2K	R543	ERDS2TJ184T	1/4W 180K
R27, 28	ERDS2TJ472	1/4W 4.7K	R340	ERD2FCVG270T	1/4W 27 △	R544	ERDS2TJ123	1/4W 12K
R29, 30	ERDS2TJ123	1/4W 12K	R341	ERDS2TJ473	1/4W 47K	R545	ERDS2TJ103	1/4W 10K
R31	ERDS2TJ104	1/4W 100K	R342	ERDS2TJ102	1/4W 1K	R546	ERDS2TJ392T	1/4W 3.9K
R32	ERDS2TJ473	1/4W 47K	R343	ERDS2TJ471	1/4W 470	R547	ERDS2TJ223	1/4W 22K
R33, 34	ERDS2TJ104	1/4W 100K	R344	ERDS2TJ222	1/4W 2.2K	R548	ERDS2TJ821	1/4W 820
R35, 36	ERDS2TJ473	1/4W 47K	R345, 346	ERDS2TJ100	1/4W 10	R549, 550	ERDS2TJ472	1/4W 4.7K
R37, 38	ERDS2TJ104	1/4W 100K	R347, 348	ERDS2TJ183T	1/4W 18K	R551	ERDS2TJ104	1/4W 100K
R39, 40	ERDS2TJ394	1/4W 390K	R349	ERDS2TJ103	1/4W 10K	R552	ERDS2TJ473	1/4W 47K
R41, 42	ERDS2TJ224T	1/4W 220K	R350	ERDS2TJ683	1/4W 68K	R553	ERDS2TJ103	1/4W 10K
R58	ERDS2TJ473	1/4W 47K	R351	ERDS2TJ562	1/4W 5.6K	R555, 556	ERDS2TJ103	1/4W 10K
R59, 60	ERDS2TJ100	1/4W 10	R353	ERDS2TJ332	1/4W 3.3K	R559-561	ERDS2TJ104	1/4W 100K
R61, 62	ERDS2TJ225	1/4W 2.2M	R354	ERDS2TJ333	1/4W 33K	R562, 564	ERDS2TJ103	1/4W 10K
R63, 64	ERDS2TJ224T	1/4W 220K	R355	ERDS2TJ272T	1/4W 2.7K	R566, 567	ERDS2TJ103	1/4W 10K
R65, 66	ERDS2TJ820	1/4W 82	R356	ERDS2TJ103	1/4W 10K	R568	ERDS2TJ473	1/4W 47K
R67, 68	ERDS2TJ225	1/4W 2.2M	R401, 402	ERDS2TJ272T	1/4W 2.7K	R569	ERDS2TJ470	1/4W 47
R69, 71	ERDS2TJ183T	1/4W 18K	R403, 404	ERDS2TJ562	1/4W 5.6K	R570	ERDS2TJ331	1/4W 330
R70	ERDS2TJ472	1/4W 4.7K	R405, 406	ERDS2TJ243T	1/4W 24K	R571	ERDS2TJ102	1/4W 1K
R72, 79	ERDS2TJ472	1/4W 4.7K	R407, 408	ERDS2TJ561	1/4W 560	R572, 573	ERDS2TJ331	1/4W 330
R73, 74	ERDS2TJ104	1/4W 100K	R409	ERDS2TJ151	1/4W 150	R574-577	ERDS2TJ472	1/4W 4.7K
R76	ERDS2TJ331	1/4W 330	R410	ERDS2TJ273	1/4W 27K	R578	ERDS2TJ332	1/4W 3.3K
R77, 78	ERDS2TJ682T	1/4W 6.8K	R411, 412	ERDS2TJ221	1/4W 220	R601, 602	ERDS2TJ472	1/4W 4.7K
R81, 82	ERDS2TJ471	1/4W 470	R413-416	ERDS2TJ560T	1/4W 56	R603	ERDS2TJ102	1/4W 1K
R83, 84	ERDS2TJ151	1/4W 150	R417, 418	ERDS2TJ103	1/4W 10K	R604	ERDS2TJ561	1/4W 560
R85, 86	ERDS2TJ104	1/4W 100K	R419	ERDS2TJ822	1/4W 8.2K	R605, 606	ERD2FCVG14R7T	1/4W 4.7 △
R87	ERDS2TJ331	1/4W 330	R420, 421	ERDS2TJ103	1/4W 10K	R607	ERD2FCVG150T	1/4W 15 △
R88	ERDS2TJ223	1/4W 22K	R501, 502	ERDS2TJ103	1/4W 10K	R608	ERDS1FVJ100T	1/2W 10 △
R101, 102	ERDS2TJ104	1/4W 100K	R503, 504	ERDS2TJ473	1/4W 47K	R609	ERDS2TJ100	1/4W 10
R103	ERDS2TJ331	1/4W 330	R507	ERDS2TJ103	1/4W 10K	R610	ERDS2TJ102	1/4W 1K
R104, 105	ERDS2TJ823T	1/4W 82K	R513, 514	ERDS2TJ103	1/4W 10K	R611, 612	ERDS2TJ4R7T	1/4W 4.7
R106	ERDS2TJ562	1/4W 5.6K	R515	ERDS2TJ473	1/4W 47K	R613, 614	ERDS2TJ222	1/4W 2.2K
R108	ERDS2TJ473	1/4W 47K	R517	ERDS2TJ103	1/4W 10K	R615	ERDS2TJ333	1/4W 33K
R109	ERDS2TJ123	1/4W 12K	R519-525	ERDS2TJ472	1/4W 4.7K	R616	ERDS2TJ104	1/4W 100K
R110	ERDS2TJ102	1/4W 1K	R526	ERDS2TJ103	1/4W 10K	R701	ERDS2TJ1R5T	1/4W 1.5
R112	ERDS2TJ393	1/4W 39K	R527	ERDS2TJ473	1/4W 47K	R701A	ERDS2TJ1R5T	1/4W 1.5
R201-204	ERDS2TJ124T	1/4W 120K	R528	ERDS2TJ472	1/4W 4.7K	R702	ERDS2TJ1R5T	1/4W 1.5

CABINET PARTS LOCATION



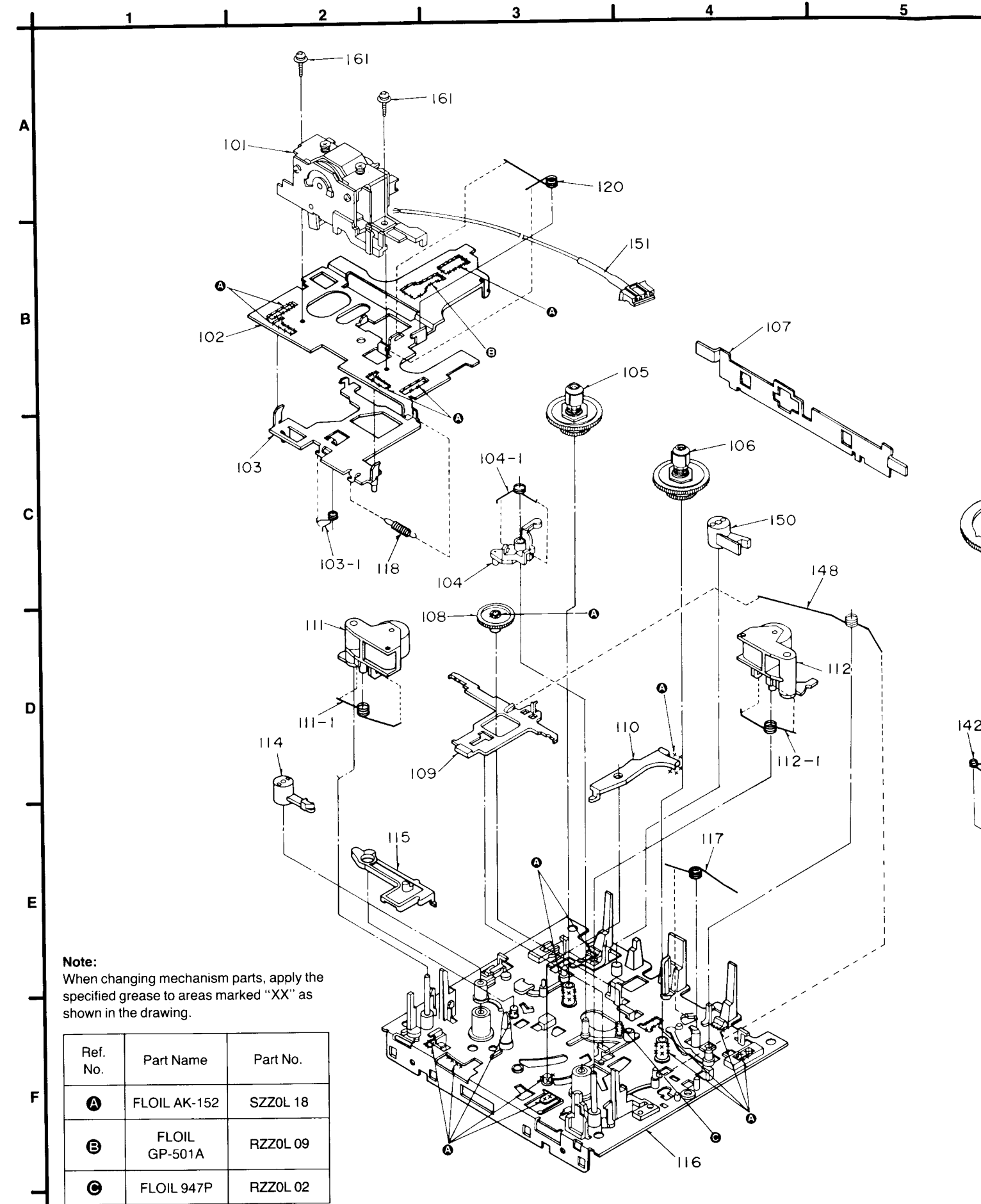
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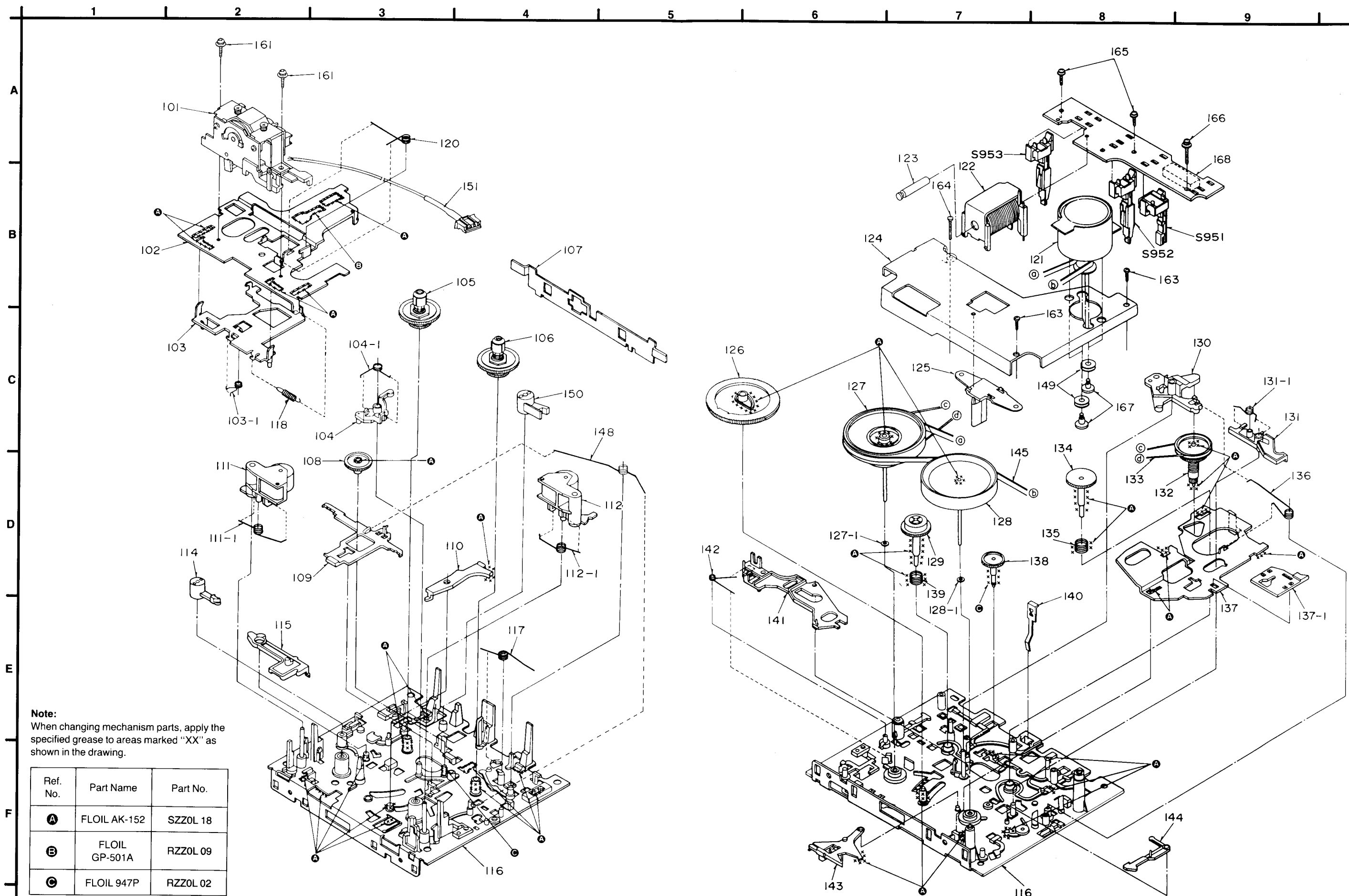
Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS				MECHANISM PARTS	
						DECK1 (PLAYBACK)	
1	RHD30007	SCREW		101	RXQ0051-1	HEAD ASS'Y (P. B)	
2	RKMD202-1K	CABINET		102	RUA793ZF	CHASSIS	
3	RFKGSCH950NK	FRONT GRILL ASS'Y		103	RZLAR300	ROD ASS'Y	
4	RYF0193B-K	CASSETTE LID (DECK1)		103-1	RUW143ZA	SPRING	
5	RYF0194-K	CASSETTE LID (DECK2)		104	IUB0089ZA	ARM ASS'Y	
6	XTBS3+8JFZ1	SCREW		104-1	RUW148ZA	SPRING	
7	RWJ1804200DX	FLAT CABLE (4P)		105	1DM0018ZA	REEL TABLE (R) ASS'Y	
8	RGR0147A-F	REAR PANEL		106	1DM0017ZA	REEL TABLE (F) ASS'Y	
9	RFKJHCH550PP	BOTTOM BOARD ASS'Y		107	RML0069-1	LEVER	
9-1	RKA0055-N	FOOT		108	RDG5772ZC	GEAR	
10	RFKPSCH950NK	LOADING MOTOR ASS'Y		109	RUB508ZB	LEVER	
11	RFKNSCH950CK	CLUTCH GEAR ASS'Y		110	RUB506ZB	LEVER	
12	RDG0219	DRIVE GEAR		111	IUB0088ZA	PINCH ROLLER (R) ASS'Y	
13	RHW21018	WASHER		111-1	RUW141ZA	SPRING	
14	RMB0286	SPRING		112	IUB0087ZA	PINCH ROLLER (F) ASS'Y	
15	RMC0194	SPRING PLATE		112-1	RUW140ZC	SPRING	
16	RML0279	EJECT LEVER		114	RNL1ZD	ARM	
17	RML0280	SWITCH LEVER		115	RUB503ZD	LEVER	
18	XTB3+8JFZ	SCREW		116	RFKRRSCH9N	CHASSIS ASS'Y	
19	XYN26+C5	SCREW		117	RUW142ZA	SPRING	
20	RFKJHCH950AK	LOADING CHASSIS ASS'Y		118	RUD105ZA	SPRING	
21	RMN0193	FL HOLDER		120	RUW139ZA	SPRING	
22	RMN0195	FL SPACER		121	RFM133ZA	MOTOR ASS'Y	
23	REX0466-2	LEAD CABLE (3P)		122	IUE0015ZA	PLUNGER	
24	REZ0530-1	FLAT CABLE (7P)		123	RUB428ZE	SHAFT	
25	RGG0090-K	FRONT PANEL		124	RMA0101-1	PLATE	
26	RKG0488-K	FRONT SUB PANEL		125	RMD5014ZC	SPACER	
27	RFKNSCH950AK	CASSETTE HOLDER (A) ASS'Y		126	RDG5927ZG	GEAR	
27-1	RUS757ZA	SPRING		127	1DWD037ZA	FLY WHEEL (F) ASS'Y	
28	RFKNSCH950BK	CASSETTE HOLDER (B) ASS'Y		127-1	RNW139ZA	WASHER	
29	RGU0792-K	BUTTON, DOLBY NR etc.		128	1DWD038ZA	FLY WHEEL (R) ASS'Y	
30	RGU0793-K	BUTTON, PLAY (DECK2) etc.		128-1	RNW138ZA	WASHER	
31	RGU0794-K	BUTTON, PLAY (DECK1) etc.		129	1DG0006ZA	GEAR ASS'Y	
32	RKWD237-V	FL PANEL		130	RUB513ZD	LEVER	
33	RFKNSCH950DK	MECHANISM ANGLE ASS'Y		131	IUB0091ZA	LEVER ASS'Y	
34	RMA0609	ANGLE		131-1	RUW146ZA	SPRING	
35	RMB0276	EARTH SPRING		132	1DR0011ZA	PULLEY ASS'Y	
36	RMB0285	SPRING		133	RDV90ZB	BELT	
37	RML0281	LEVER		134	RDG5769ZA	GEAR	
38	RWJ5415220EE	FLEXIBLE CABLE (15P)		135	RUQ111ZB	SPRING	
39	XTBS26+8J	SCREW		136	RUW145ZA	SPRING	
40	XTB3+10JFZ	SCREW		137	IUB0090ZA	ROD ASS'Y	
41	SHE185-2	P. C. B SPACER		137-1	RUB512ZB	ROD	
42	XTBS3+8JFZ1	SCREW		138	RDG5773ZB	GEAR	
43	XTB3+10JFZ	SCREW		139	RUQ112ZA	SPRING	
44	XTB3+16JFZ	SCREW		140	RUS609ZC	SPRING	
45	RWJ5707210XX	FLAT CABLE (7P)		141	RUB514ZC	LEVER	
46	RWJ5710200XX	FLAT CABLE (10P)		142	RUW147ZA	SPRING	
47	RMR0621-K	FIXTURE					

MECHANISM PARTS LOCATION • DECK 1

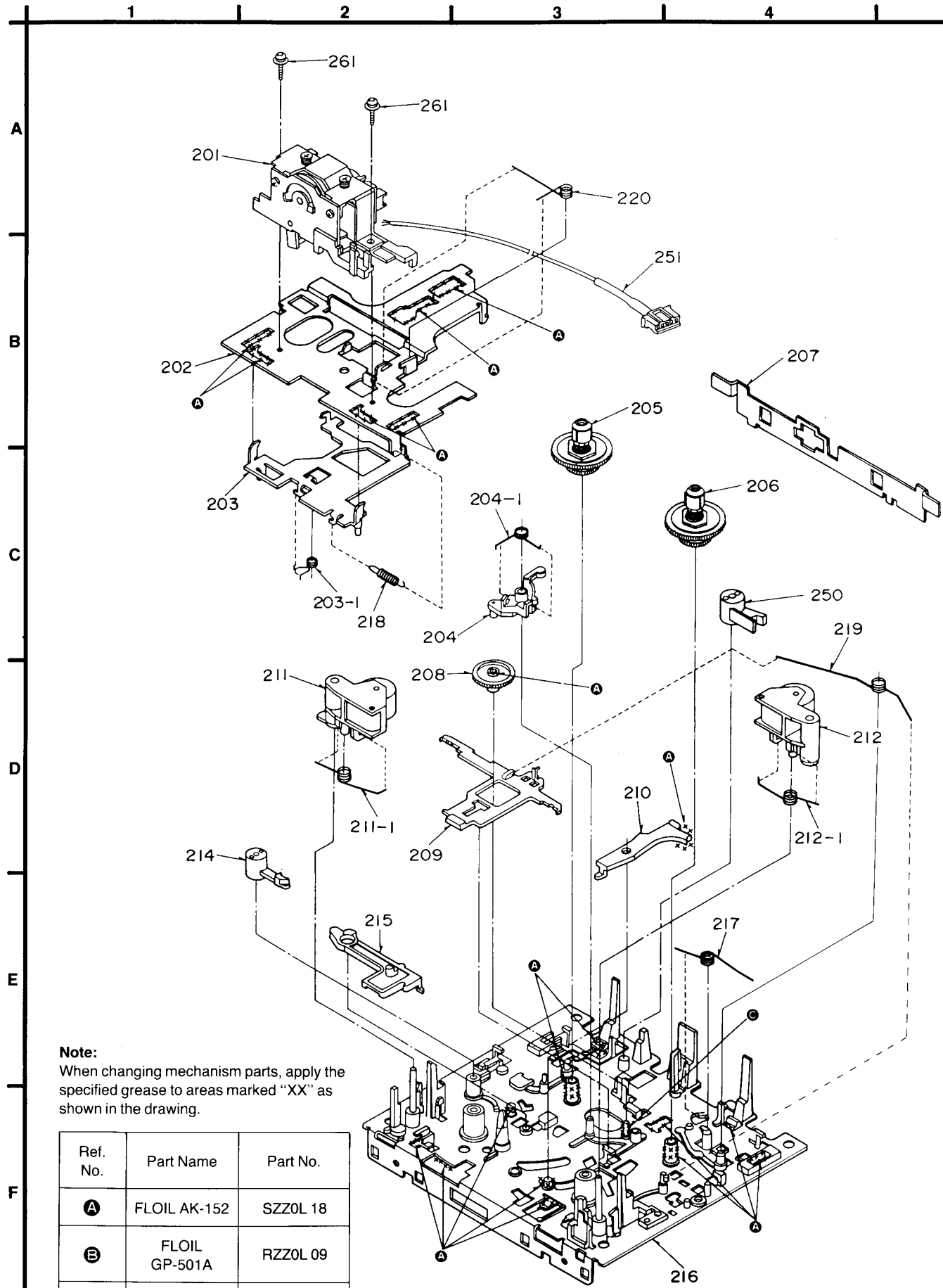
Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
143	RUB515ZA	LEVER		230	RUB513ZD	LEVER	
144	RUB509ZA	LEVER		231	1UB0091ZA	LEVER ASS'Y	
145	RDV108ZA	BELT		231-1	RJW146ZA	SPRING	
148	RJW144ZA	SPRING		232	1DR0011ZA	PULLEY ASS'Y	
149	RMG0102-1	RUBBER		233	RDV90ZB	BELT	
150	RNL180ZB	LEVER		234	RDG5769ZA	GEAR	
151	REX0132	CABLE ASS'Y		235	RJQ111ZB	SPRING	
161	XTW2+6L	SCREW		236	RJW145ZA	SPRING	
163	XTN26+7J	SCREW		237	1UB0090ZA	ROD ASS'Y	
164	RHE5203ZA	SCREW		237-1	RUB512ZB	ROD	
165	XTW2+8S	SCREW		238	RDG5773ZB	GEAR	
166	XYC2+JF16	SCREW		239	RJQ112ZA	SPRING	
167	RHD26002	SCREW		240	RUS609ZC	SPRING	
168	RJS777ZA	CONNECTOR (7P)		241	RUB514ZC	LEVER	
		MECHANISM PARTS		242	RJW147ZA	SPRING	
		DECK2 (REC./PLAYBACK)		243	RUB515ZA	LEVER	
				244	RUB509ZA	LEVER	
				245	RDV108ZA	BELT	
201	RXQ0007-2	HEAD ASS'Y (P. B)		249	RMG0102-1	RUBBER	
202	RUA793ZF	CHASSIS		250	RNL180ZB	LEVER	
203	RZLAR300	ROD ASS'Y		251	REX0172	CABLE ASS'Y	
203-1	RJW143ZA	SPRING		261	XTW2+6L	SCREW	
204	1UB0089ZA	ARM ASS'Y		263	XTN26+7J	SCREW	
204-1	RJW148ZA	SPRING		264	RHE5203ZA	SCREW	
205	1DM0018ZA	REEL TABLE (R) ASS'Y		265	XTW2+8S	SCREW	
206	1DM0017ZA	REEL TABLE (F) ASS'Y		266	XYC2+JF16	SCREW	
207	RML0069-1	LEVER		267	RHD26002	SCREW	
208	RDG5772ZC	GEAR		268	RJS1077ZA	CONNECTOR (7P)	
209	RUB508ZB	LEVER					
210	RUB506ZB	LEVER					
211	1UB0088ZA	PINCH ROLLER (R) ASS'Y					
211-1	RJW141ZA	SPRING					
212	1UB0087ZA	PINCH ROLLER (F) ASS'Y					
212-1	RJW140ZC	SPRING					
214	RNL1ZD	ARM					
215	RUB503ZD	LEVER					
216	RFRKRSCH9N	CHASSIS ASS'Y					
217	RJW142ZA	SPRING					
218	RJD105ZA	SPRING					
219	RJW144ZA	SPRING					
220	RJW139ZA	SPRING					
221	RFM133ZA	MOTOR ASS'Y					
222	1UE0015ZA	PLUNGER ASS'Y					
223	RUB428ZE	SHAFT					
224	RMA0101-1	PLATE					
225	RMD5014ZC	SPACER					
226	RDG5927ZG	GEAR					
227	1DW0037ZA	FLY WHEEL (F) ASS'Y					
227-1	RNW139ZA	WASHER					
228	1DW0038ZA	FLY WHEEL (R) ASS'Y					
228-1	RNW138ZA	WASHER					
229	1DG0006ZA	GEAR ASS'Y					



MECHANISM PARTS LOCATION •DECK 1

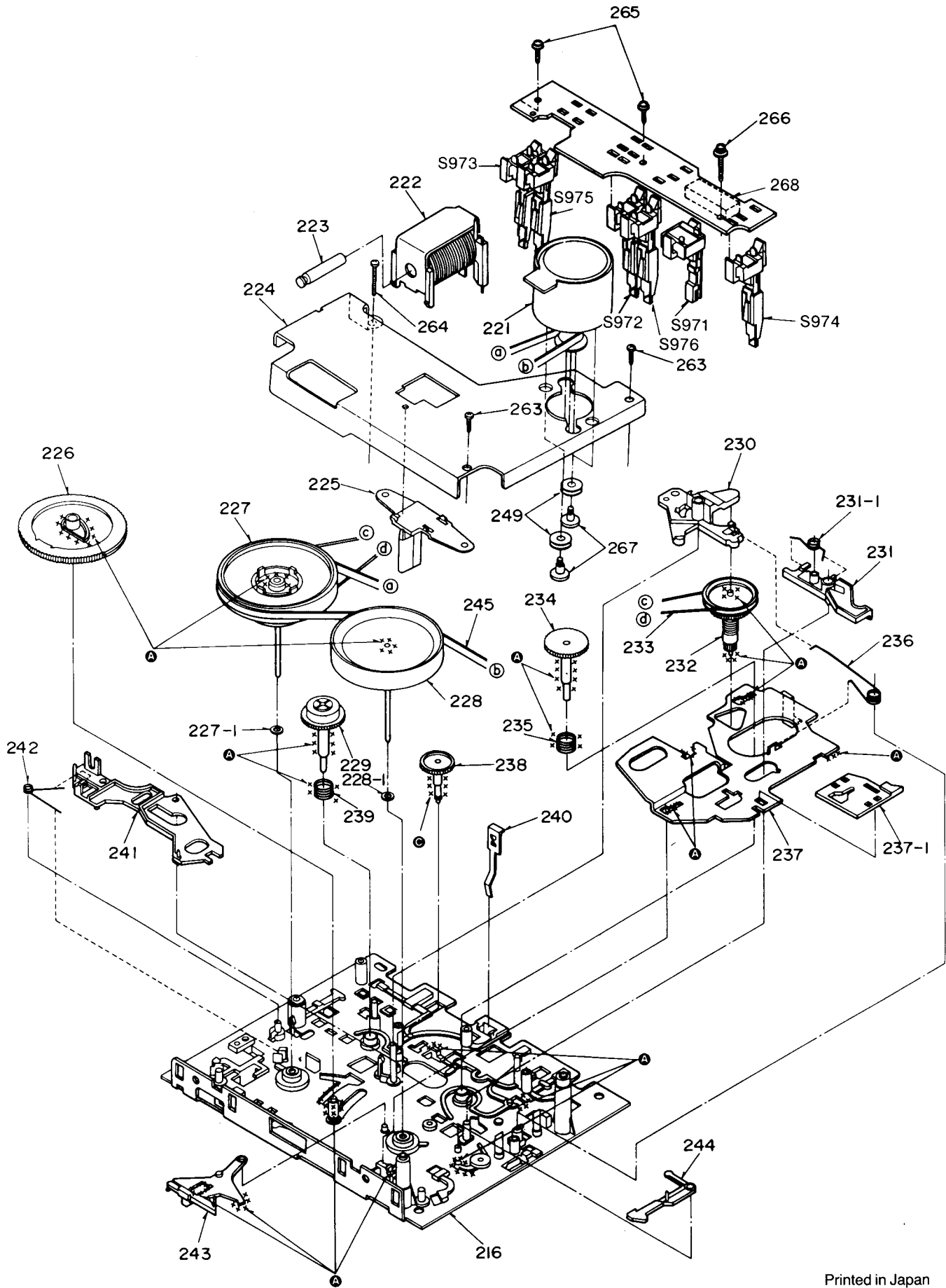


MECHANISM PARTS LOCATION •DECK 2

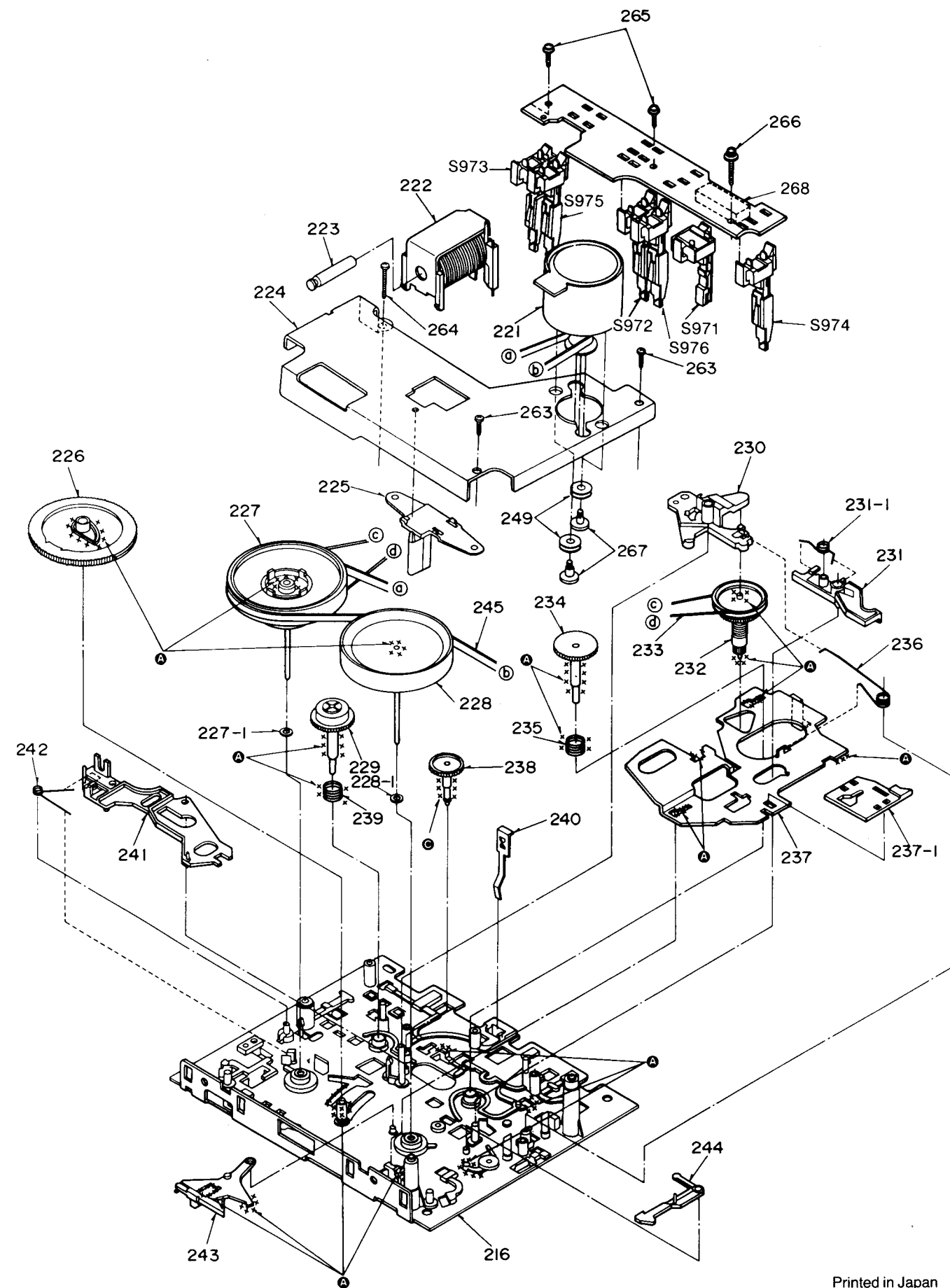


Note:
When changing mechanism parts, apply the specified grease to areas marked "XX" as shown in the drawing.

Ref. No.	Part Name	Part No.
A	FLOIL AK-152	SZZ0L 18
B	FLOIL GP-501A	RZZ0L 09
C	FLOIL 947P	RZZ0L 02



5 6 7 8 9



Service Manual

Sound Processor

Sound Processor

•For (E), (EB), (EG) areas

SH-CH750

Colour

(K) Black Type

Areas

Suffix for Model No.	Area	Colour
(E)	Europe and Oceania	(K)
(GC)	Asia, Latin America, Middle Near East and Africa	

System: SC-CH750

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

SPECIFICATIONS

(DIN 45 500)

■ Pre Amp. Sections

Input sensitivity and impedance

PHONO	2.5 mV/47 k Ω
CD, TUNER, TAPE	150 mV/10 k Ω
VCR, VDP, DAT (input with RCA PIN)	250 mV/17 k Ω
MIC	0.7 mV/10 k Ω

Output level

VCR, DAT REC OUT	150 mV/1.5 k Ω
------------------	-----------------------

Equalizer

Center frequency	
LOW	63, 80, 100, 125, 160, 220 (Hz)
HIGH 1, 2	315, 450, 630, 800, 1 k, 1.25 k, 1.6 k, 2.2 k, 3.15 k, 4.5 k, 6.3 k, 8 k, 10 k, 16 k(Hz)

Level control	
LOW, HIGH 1, 2	± 12 dB

(Q) Control	
NARROW	1.8
WIDE	0.7

Fixed mode

SFP	HALL, LIVE, DISCO, CHRCH (CHURCH), THTER (THEATER)
-----	--

EQ (5 modes)	HEAVY, CLEAR, SOFT, HP ST, CAR
--------------	--------------------------------

Frequency response

PHONO	
(RIAA STANDARD CURVE)	30 Hz–15 kHz/ ± 1.0 , -1.5 dB

CD, TUNER, TAPE
VCR, VDP, DAT20 Hz–20 kHz/ -2 dB
20 Hz–20 kHz/ -2 dB

S/N

PHONO 64 dB (DIN)

TUNER, TAPE

85 dB (IHF, at full scale input, IHF A)

71 dB (DIN)

CD, VCR, VDP, DAT

88 dB (IHF, at full scale input, IHF A)

75 dB (DIN)

95 dB (IHF, at full scale input, IHF A)

For (GC) area

MIC ECHO 0.2–1.6 sec.

For (E) area

Key control -300 to $+300$ cent.

Video output

MONITOR 1 V/75 Ω VCR REC OUT 1 V/75 Ω

■ General

Dimensions (W×H×D)

270×895×270 mm

Weight

1.9 kg

Notes:

1. Specifications are subject to change without notice.
2. Weight and dimensions are approximate.

System	Sound processor	Tuner amplifier	Compact disc player	Cassette deck	Speakers
SC-CH750	SH-CH750	SA-CH750	SL-CH750	RS-CH750	*SB-CH750A (E), (EB), (EG) areas *SB-CH755 Switzerland only SB-CH750 (GC), (GN) areas

*la de in PAES

Technics

CONTENTS

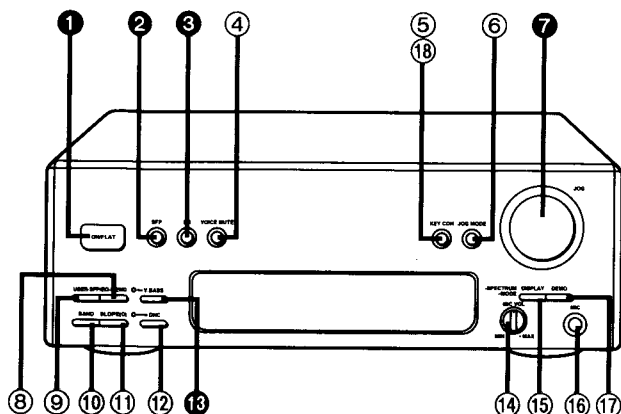
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•LOCATION OF CONTROLS	2, 3
•DISASSEMBLY INSTRUCTIONS	3, 4
•MEASUREMENT	5
•SCHEMATIC DIAGRAM	6~20
•PRINTED CIRCUIT BOARD DIAGRAM	21~23

	Page
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•FUNCTION OF IC TERMINALS	28~30
•REPLACEMENT PARTS LIST	31~35
•CABINET PARTS LOCATION	36

NOTES:

Refer to the service manual for Model No. SA-CH750 (Order No. AD9211379C8) for information on "ACCESSORIES", "STACKING THE COMPONENTS", "CONNECTIONS" and "PACKAGING".

LOCATION OF CONTROLS



The functions indicated by the numbers with black background (for example ❶) can also be activated from the remote control.

❶ ON/FLAT button (ON/FLAT)

Press to switch the EQ (equalizer curve) or SFP (simulated listening environment).

❷ SFP mode button (SFP)

Press to select the desired simulated listening environment.

❸ EQ mode button (EQ)

Press to select the desired equalizer mode.

❹ Voice mute button (VOICE MUTE)

Press to perform "KARAOKE" (microphone mixing with an accompaniment).

❺ Key control button (KEY CON)

For (E) area

Use to adjust key level when performing "Karaoke".

❻ Jog mode button (JOG MODE)

Press this button to select the desired adjustment mode.

❼ Jog control (JOG)

Turn to adjust the level of equalizer curve, simulated listening environment, and specific frequency shift, and so on.

❽ Memory button (MEMO)

Press to store the desired equalizer curve or simulated listening environment.

❾ User button (USER)

Press to select the desired "USER" number.

❿ Frequency band select button (BAND)

Press to select the desired equalizer frequency band.

⓫ Slope (Q) select button [SLOPE (Q)]

Press to select "narrow" or "wide" mode of the curve slope.

⓬ Digital noise cleaner button and indicator (DNC)

Press to reduce the noise on a tape or FM broadcast.

⓭ V. Bass button and indicator (V. BASS)

Press to boost the dynamic low-frequency ranges.

⓮ Microphone volume control (MIC VOL)

Use to adjust the microphone volume level.

⓯ Display mode select button (DISPLAY, -SPECTRUM, -MODE)

Use to select one of 5 spectrum modes.

Press and hold to extinguish the equalization curve.

⓰ Microphone jack (MIC) (Ø6, 10 kΩ)

Plug microphone cord into this jack.

⓱ Demonstration button (DEMO)

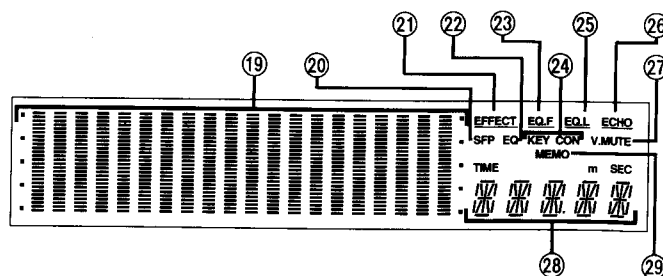
Use for reference of the adjustments of equalization curves and SFP mode sounds. The pre-programmed equalization curves and SFP mode sounds will be heard sequentially for adjustment example.

⓲ Echo button (ECHO)

For (GC) area

Press to adjust the reverberation sound when in performing "Karaoke".

•Display section



⓲ Multi level display

Shows the equalization/spectrum analysis level.

⓳ SFP mode indicator (SFP)

Lights when you select the SFP mode (HALL, LIVE, DISCO, CHURCH, THEATER).

21 Effect indicator (EFFECT)

Lights when you select EFFECT mode by pressing JOG MODE.

22 Equalizer mode indicator (EQ)

Lights when you select the equalizer mode (HEAVY, CLEAR, SOFT, HP ST, CAR).

23 Equalizer frequency indicator (EQ. F)

Lights when you select EQ. F mode by pressing JOG MODE.

24 Key control indicator (KEY CON)

For (E) area

Lights when you press KEY CON to adjust the key level while in the "Karaoke" mode.

25 Equalizer level indicator (EQ. L)

Lights when you select EQ. L mode by pressing JOG MODE.

26 Echo indicator (ECHO)

For (GC) area

Lights when you press ECHO to adjust the reverberation sound while in the "Karaoke" function.

27 Voice mute indicator (V. MUTE)

Lights when you activate the "Karaoke" function.

28 Sound mode display

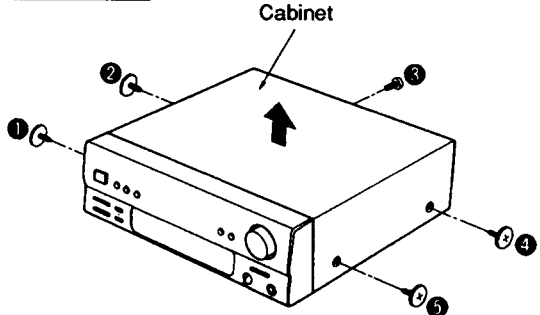
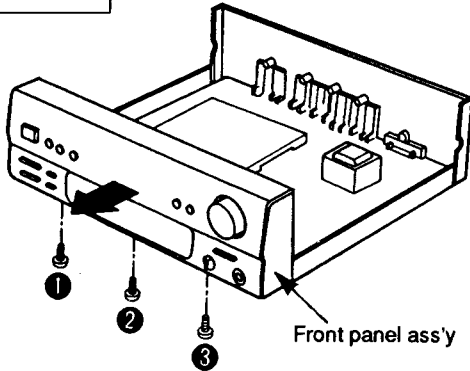
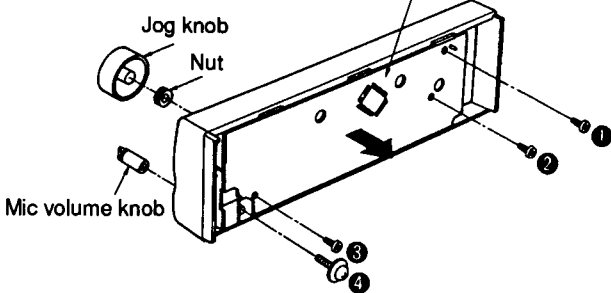
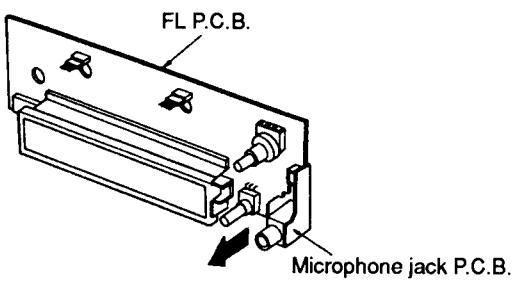
Shows the sound mode you select.

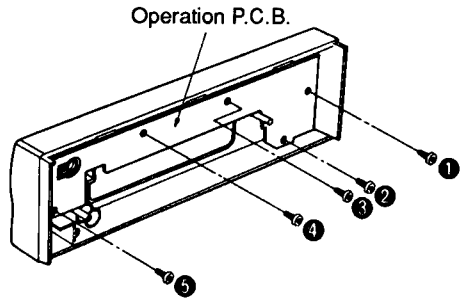
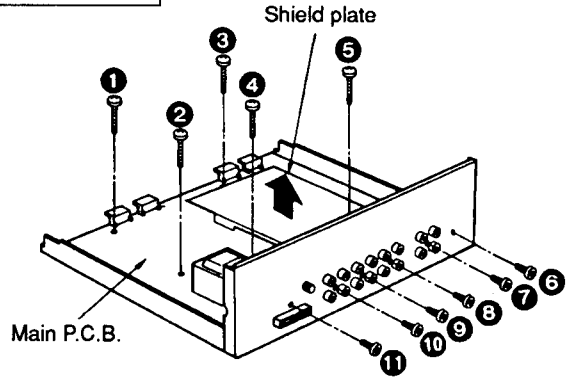
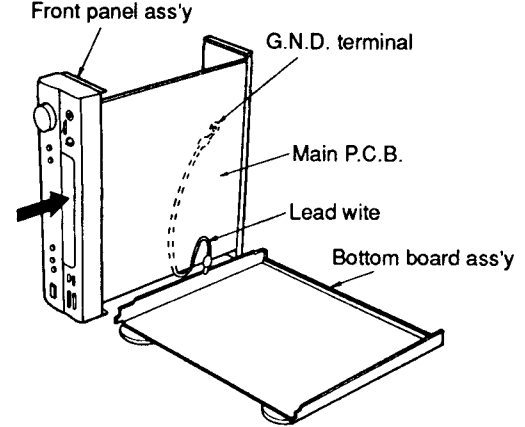
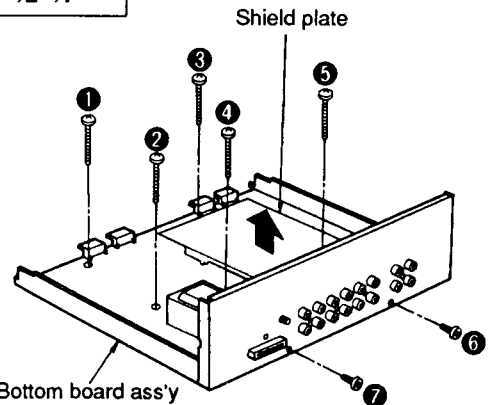
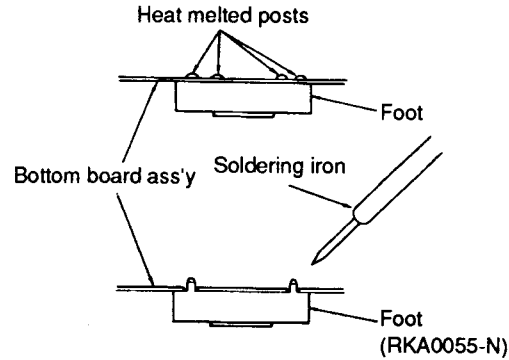
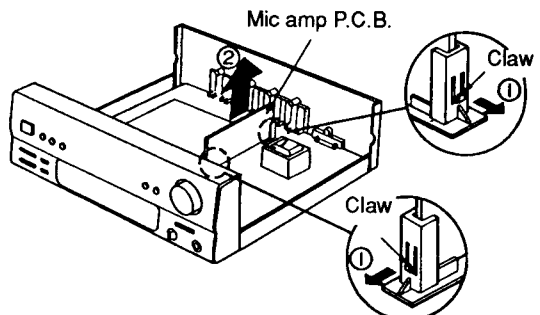
29 Memory indicator (MEMO)

Lights when you store the desired curve or simulated listening environment.

DISASSEMBLY INSTRUCTIONS**"ATTENTION SERVICER"**

Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1	Removal of the Cabinet	Ref. No. 2	Removal of the Front Panel Ass'y
Procedure 1	 - Remove the 5 screws (1~5). - Remove the cabinet in the direction of arrow.	Procedure 1→2	 - Remove the 3 screws (1~3). - Remove the front panel ass'y in the direction of arrow.
Ref. No. 3	Removal of the FL P.C.B.	Ref. No. 4	Removal of the Microphone Jack P.C.B.
Procedure 1→2→3	 - Pull out the jog knob and mic volume knob. - Remove the nut. - Remove the 4 screws (1~4). - Remove the FL P.C.B. in the direction of arrow.	Procedure 1→2→3→4	 • Remove the microphone jack P.C.B. in the direction of arrow.

Ref. No. 5	Removal of the Operation P.C.B.	Ref. No. 6	Removal of the Main P.C.B.
Procedure 1→2→3→5	 • Remove the 5 screws (1~5).	Procedure 1→2→6	 - Remove the 11 screws (1~11). - Remove the shield plate in the direction of arrow.
Ref. No. 7	How to check the Main P.C.B.	• When checking the soldered surfaces of main P.C.B. and replacing the parts, do as shown below.  - Reinstall the front panel ass'y to the main P.C.B. - Connect the G.N.D. terminal to the bottom board ass'y by the lead wire.	
Procedure 1→2→7	 - Remove the 7 screws (1~7). - Remove the bottom board ass'y. - Remove the shield plate in the direction of arrow.	Replacement of the Foot - Remove the 4 heat melted posts on the bottom board ass'y with a pair of nippers or similar tool. - To replace the foot (RKA0055-N) on the bottom board ass'y, melt the 4 posts with a soldering iron. 	
Ref. No. 8	Removal of the Mic amp P.C.B. (For GC area)	• Pull the 2 claws in the direction of arrow ①, and remove the mic amp P.C.B. in the direction of arrow ②. 	

JOG MODE.

beration sound

ulated listening

l Ass'y

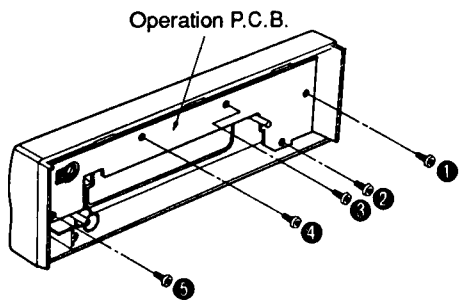
e Jack

P.C.B.

Ref. No.
5

Removal of the Operation P.C.B.

Procedure
1→2→3→5

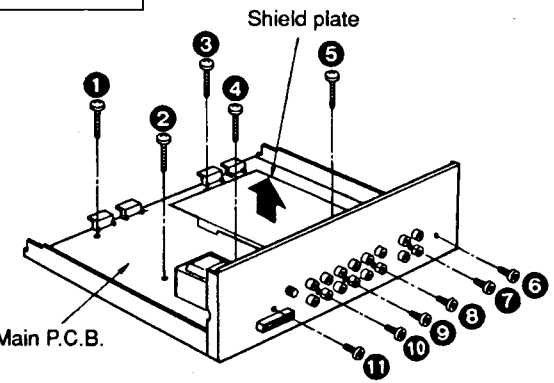


•Remove the 5 screws (1~5).

Ref. No.
6

Removal of the Main P.C.B.

Procedure
1→2→6

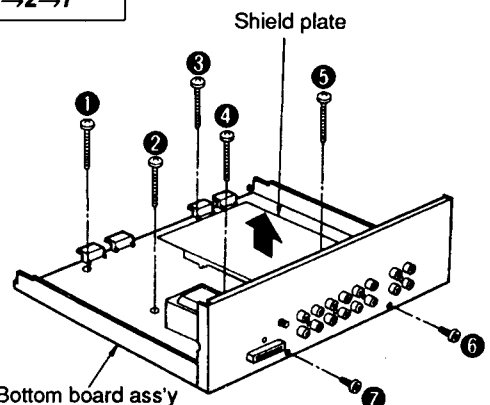


1. Remove the 11 screws (1~11).
2. Remove the shield plate in the direction of arrow.

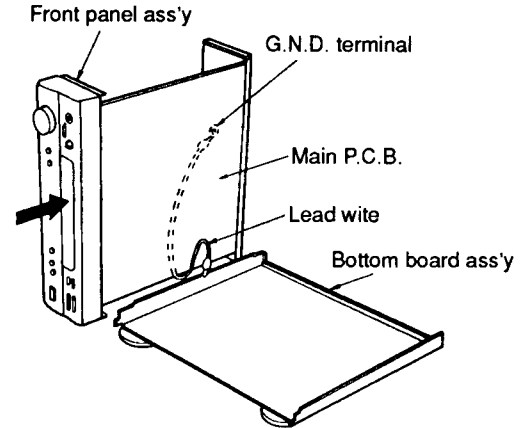
Ref. No.
7

How to check the Main P.C.B.

Procedure
1→2→7



1. Remove the 7 screws (1~7).
2. Remove the bottom board ass'y.
3. Remove the shield plate in the direction of arrow.

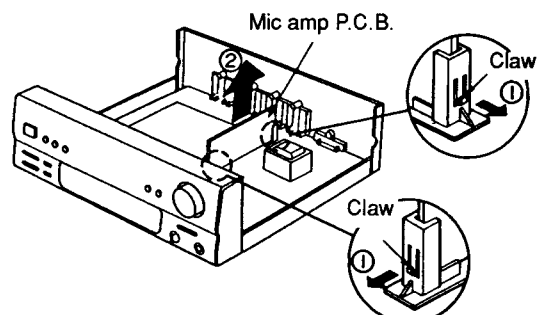


4. Reinstall the front panel ass'y to the main P.C.B.
5. Connect the G.N.D. terminal to the bottom board ass'y by the lead wire.

Ref. No.
8

Removal of the Mic amp P.C.B.
(For GC area)

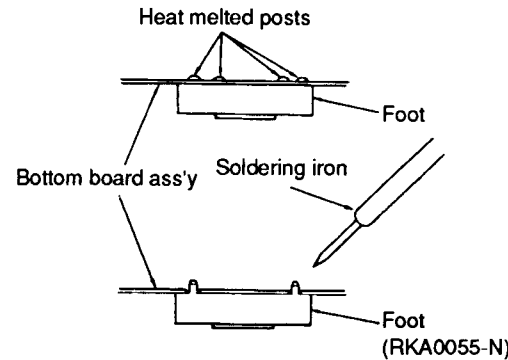
Procedure
1→8



•Pull the 2 claws in the direction of arrow ①, and remove the mic amp P.C.B. in the direction of arrow ②.

■ Replacement of the Foot

1. Remove the 4 heat melted posts on the bottom board ass'y with a pair of nippers or similar tool.
2. To replace the foot (RKA0055-N) on the bottom board ass'y, melt the 4 posts with a soldering iron.



MEASUREMENT

■ This unit (SH-CH750) is actuated by power supply from the tuner amplifier SA-CH750.
If you wish to actuate this unit without using the tuner amplifier SA-CH750 for checking or repairing, follow below procedure.
•Apply AC 10 V between AC (J704)– GND (J705)– AC (J706). (Shown in Fig. 1)

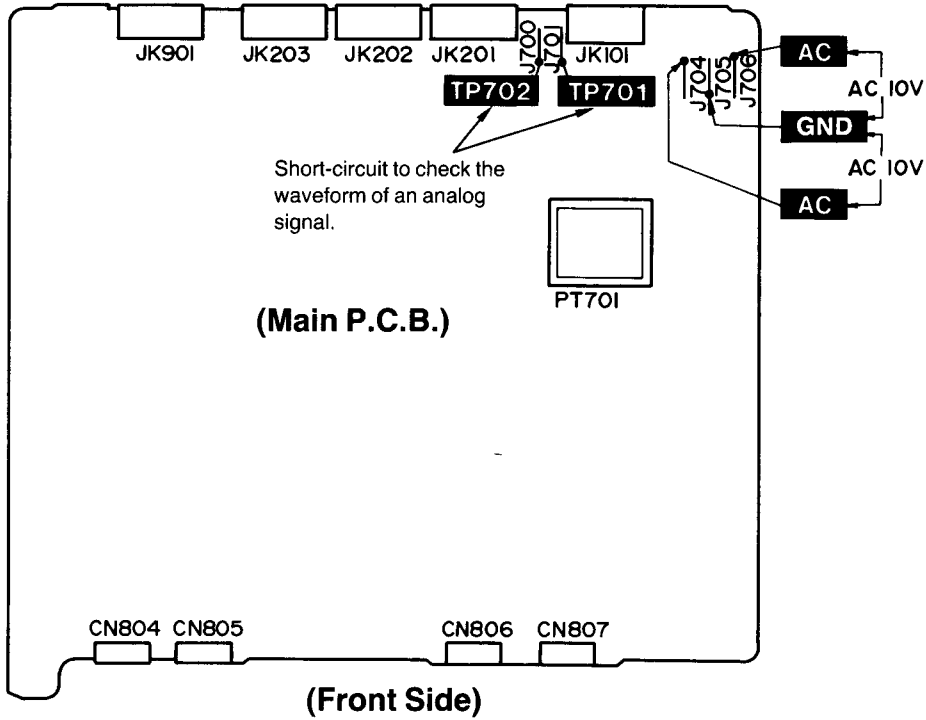


Fig. 1

■How to Select Input Signal
The SH-CH750 is not equipped with the Input Signal Selector since the input signal is selected on the Tuner amplifier SA-CH750. However, you can select signal source on SH-CH750 by following the operating procedures mentioned in Fig. 2.

- 1. Press the ON/FLAT (S801), SFP (S802) and EQ (S803) buttons simultaneously and hold for 4 seconds.
- 2. Afterwards, the following buttons allow you to select the desired source.
- 3. After finishing the measurement of voltage, press the DISPLAY (S811) button.

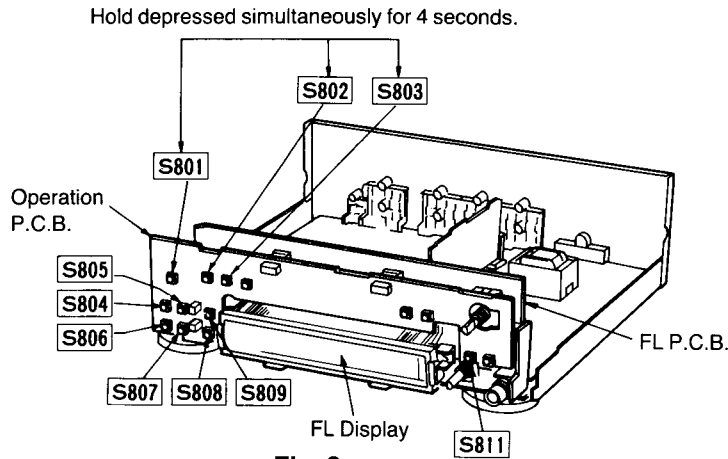
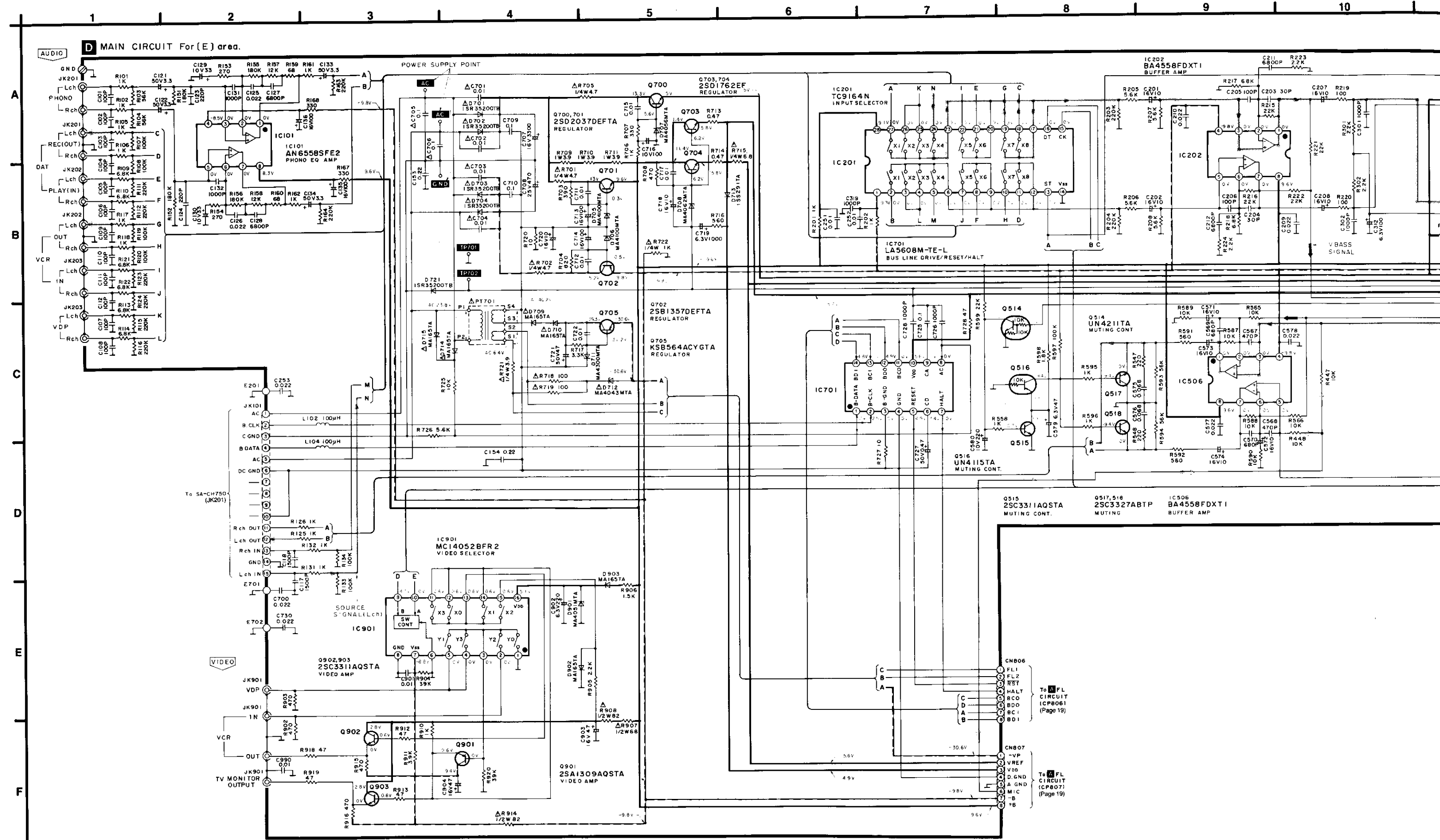
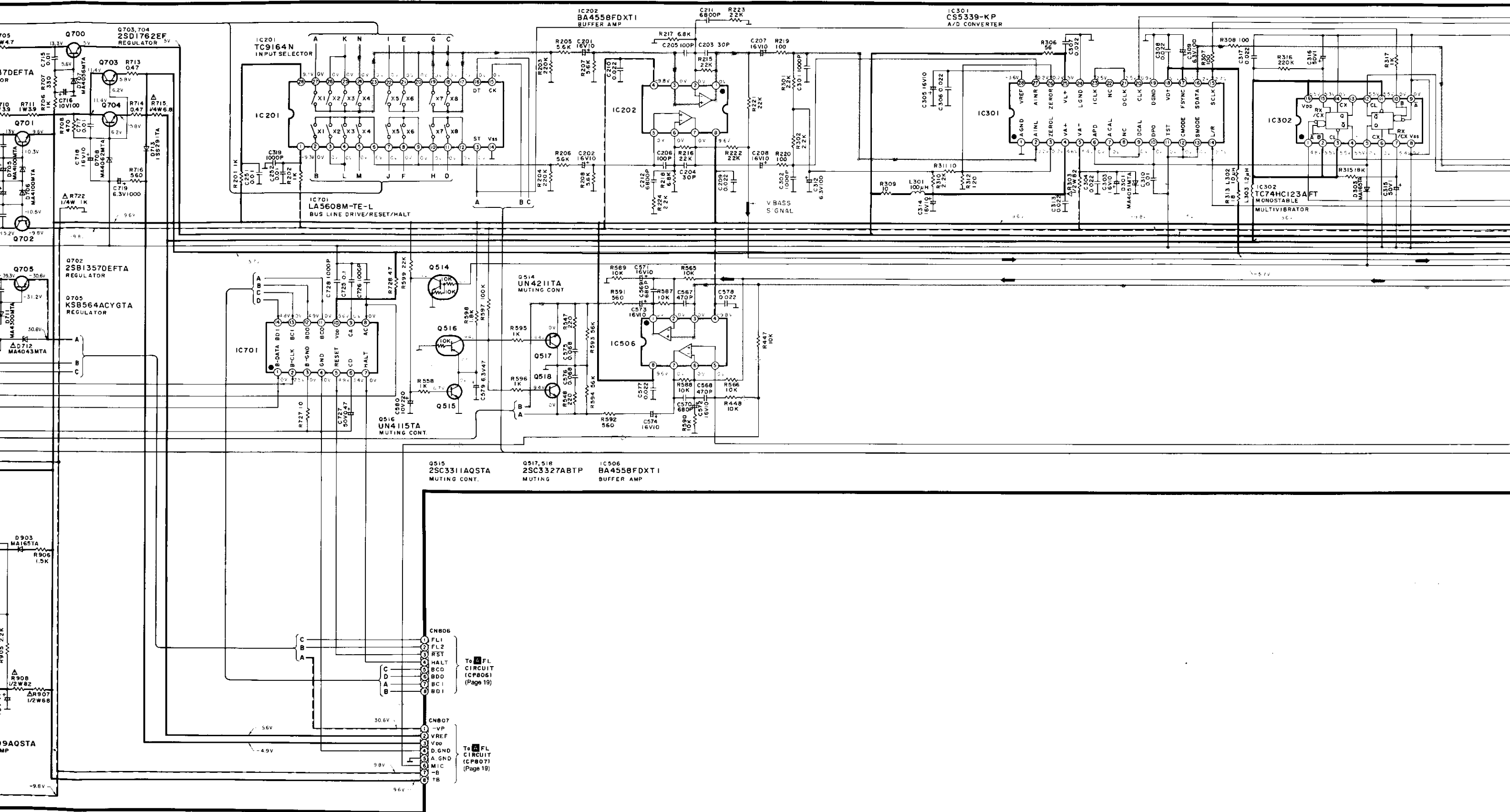


Fig. 2

Switch	Switch S808 DNC button	Switch S807 SLOPE (Q) button	Switch S809 V. BASS button	Switch S804 USER button
Mode indicator on FL display	DAT (DAT mode)	BS (BS mode)	PHONO (PHONO mode)	TAPE (TAPE mode)
Switch	Switch S805 MEMO button	Switch S806 BAND button	Switch S802 SFP button	Switch S803 EQ button
Mode indicator on FL display	TUNER (Tuner mode)	CD (CD mode)	VDP (VDP mode)	VCR (VCR mode)

■ SCHEMATIC DIAGRAM • MAIN CIRCUIT for (E) area (Parts list on pages 31~35.)





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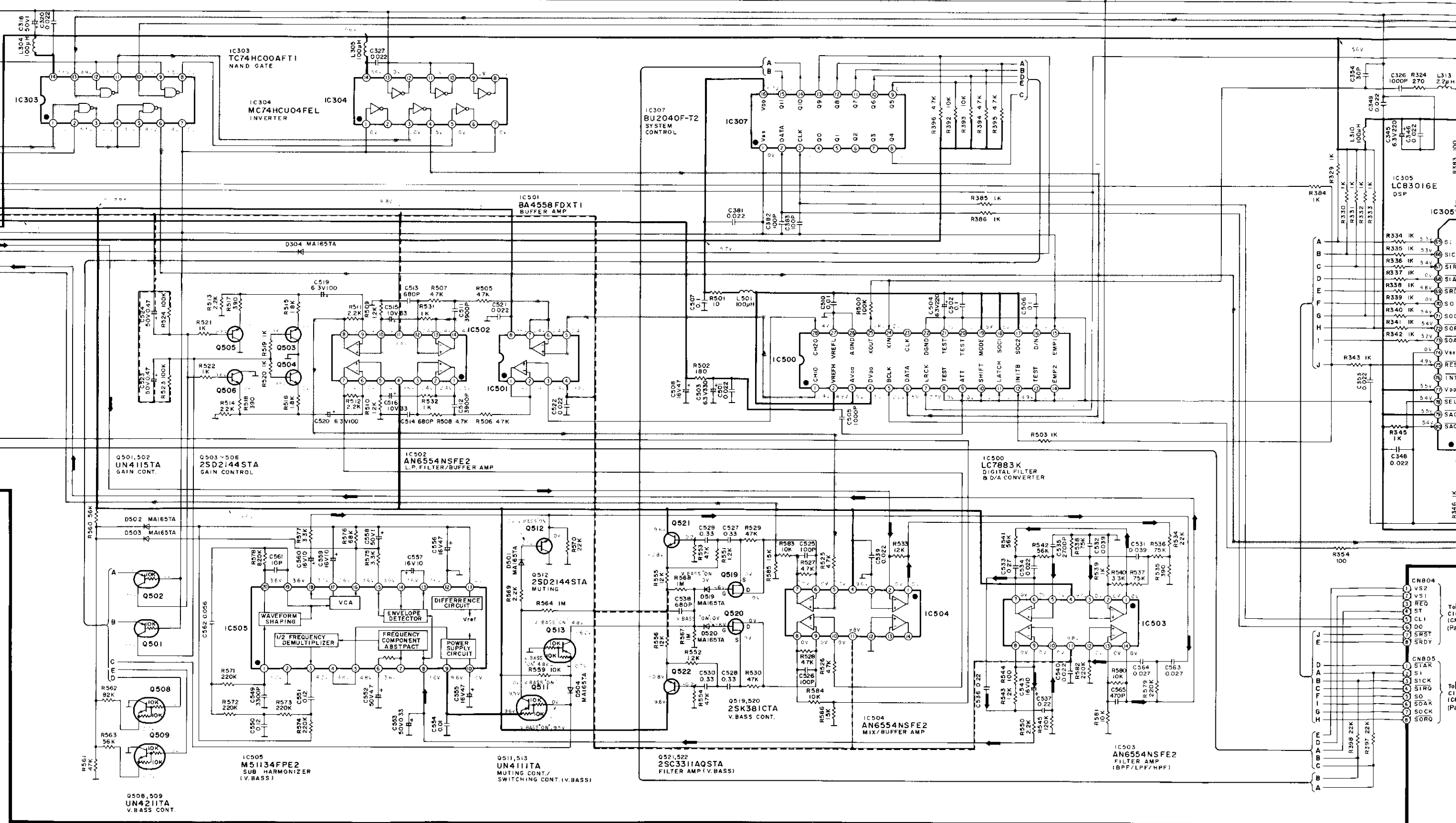
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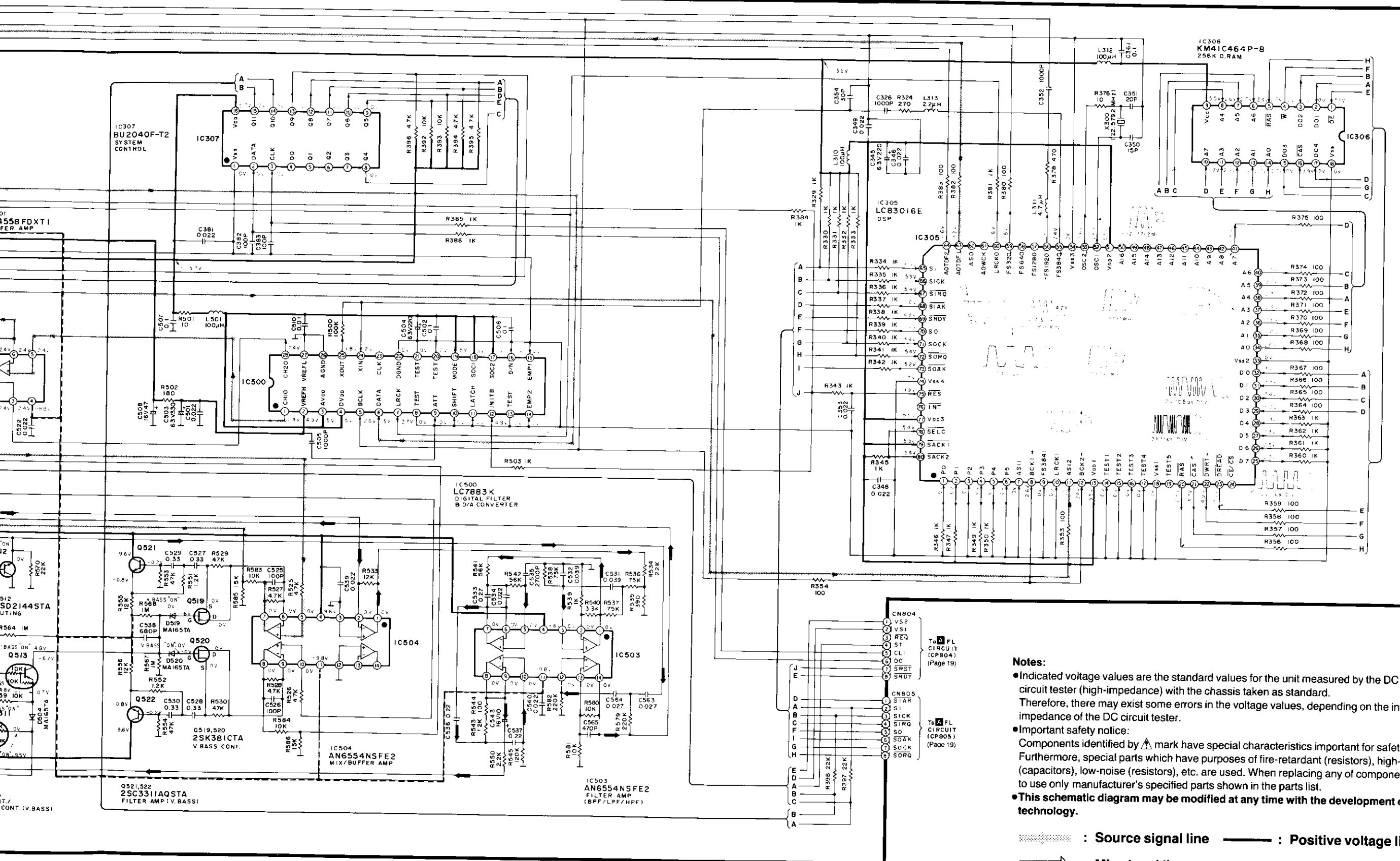
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25



9 20 21 22 23 24 25 26 27 28

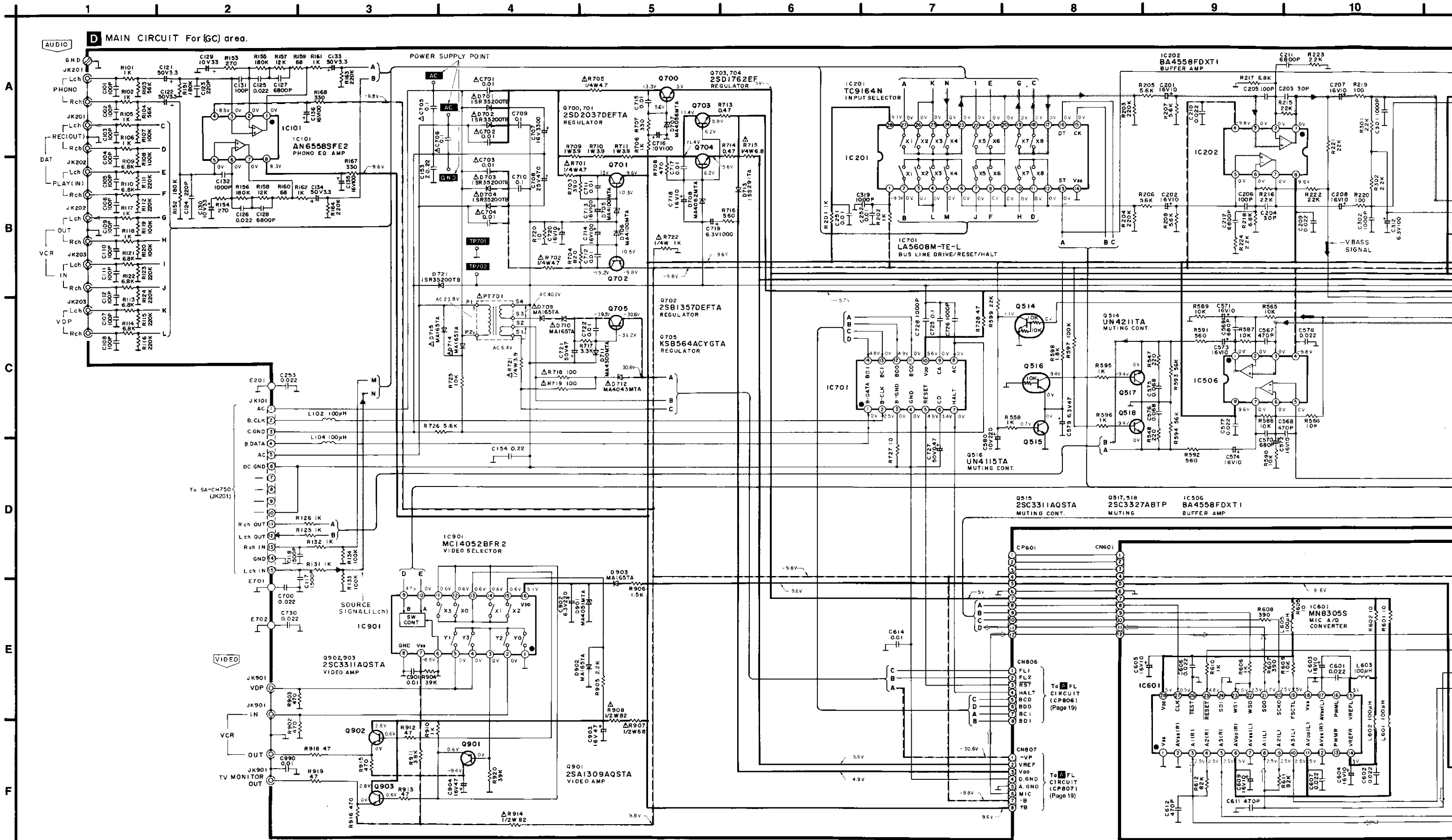


Notes:

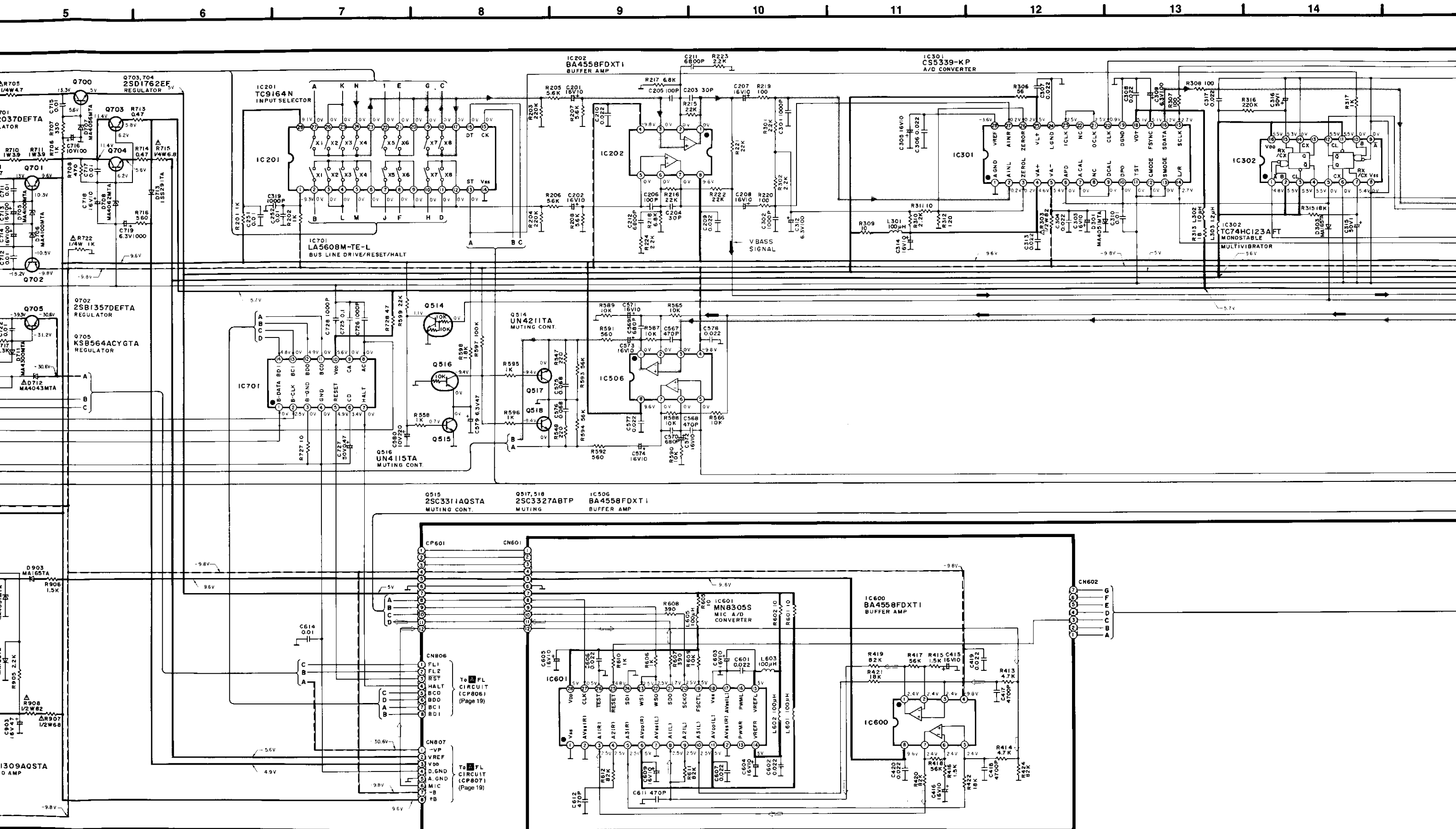
- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
- Important safety notice:
Components identified by Δ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.
- This schematic diagram may be modified at any time with the development of new technology.

: Source signal line : Positive voltage line
 : Mic signal line : Negative voltage line
 : V. Bass signal line

■ SCHEMATIC DIAGRAM •MAIN CIRCUIT for (GC) area (Parts list on pages 31~35.)



E MIC AMP CIRCUIT For (GC) area.



E MIC AMP CIRCUIT For [GC] area.

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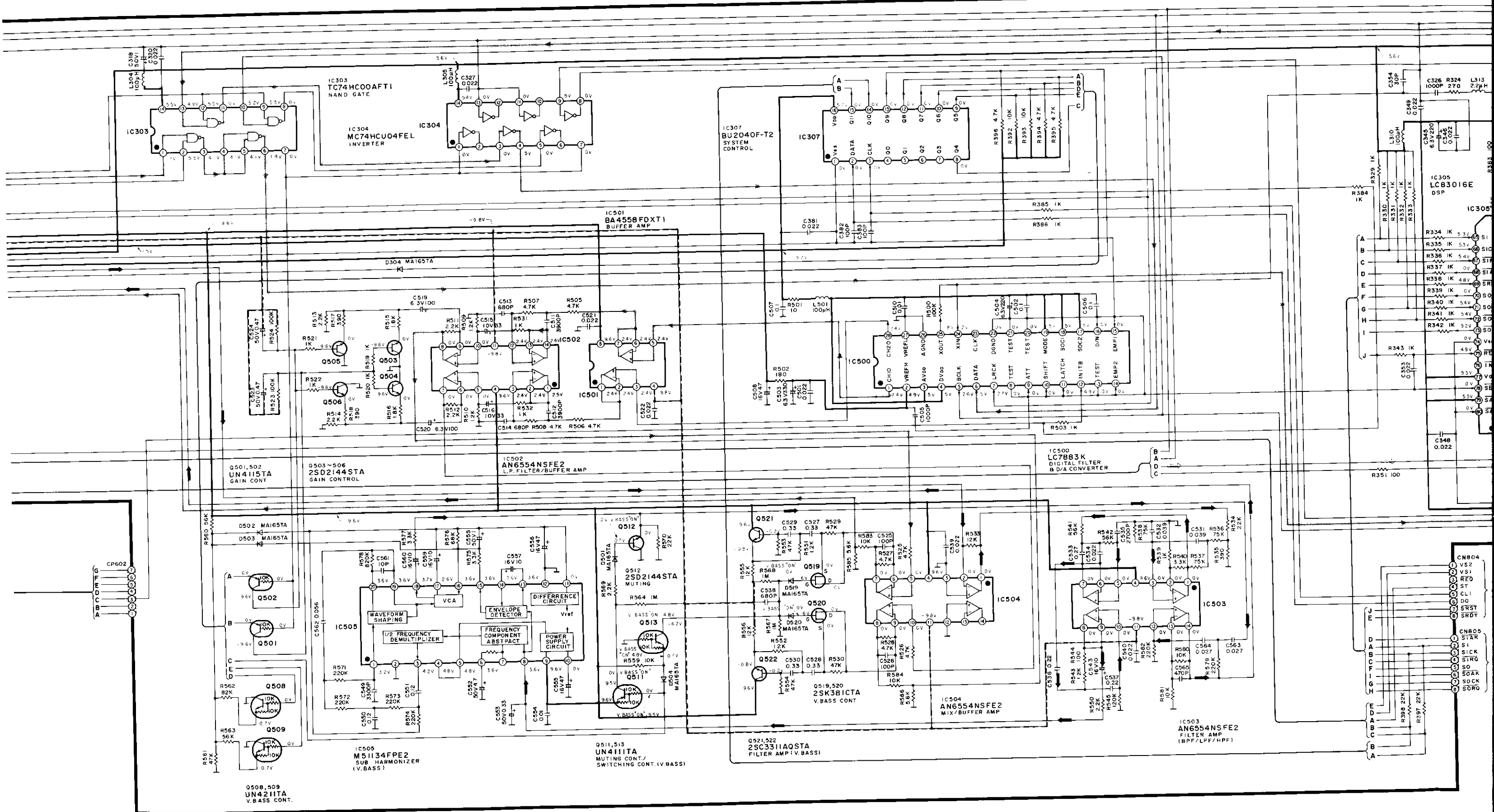
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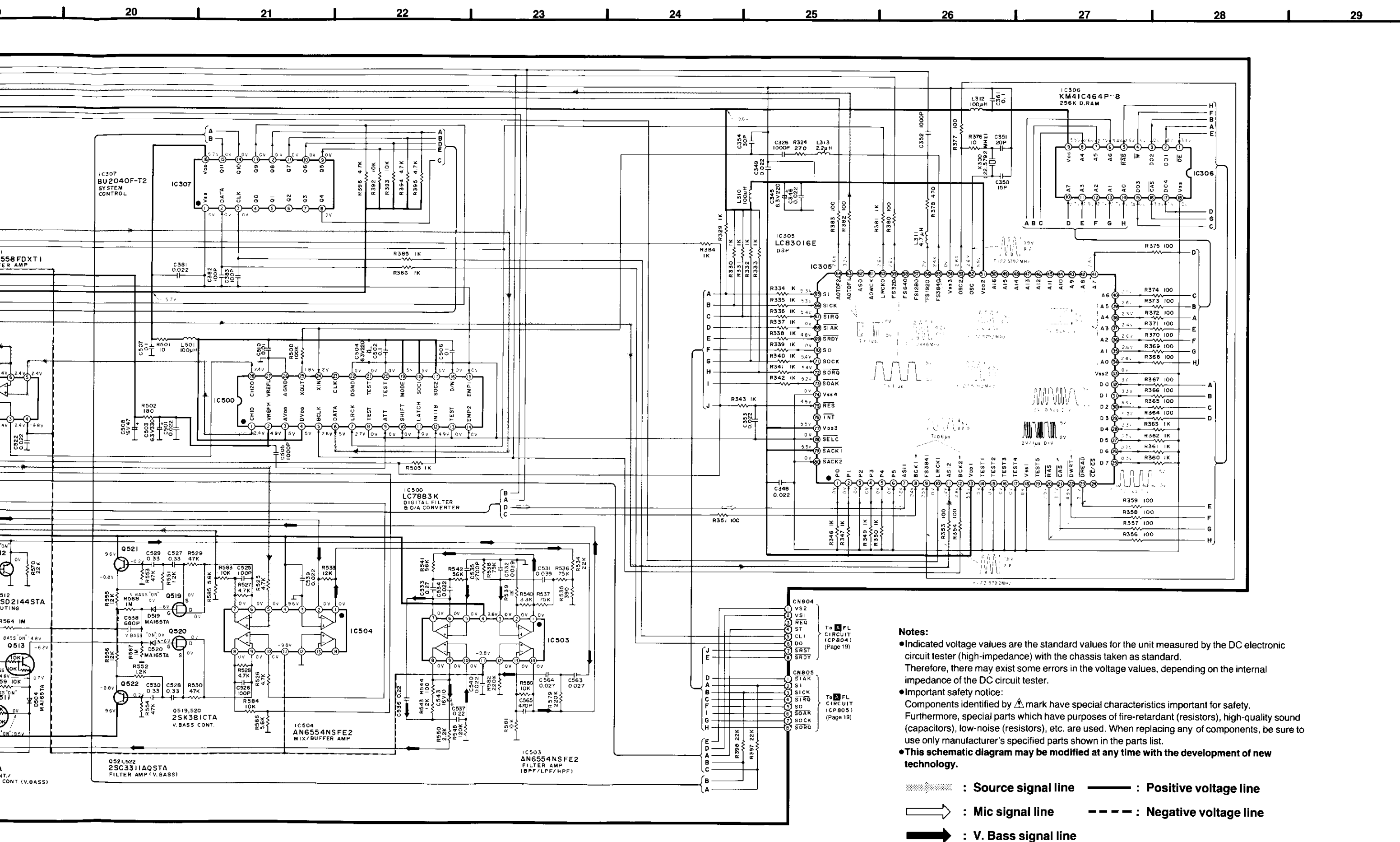
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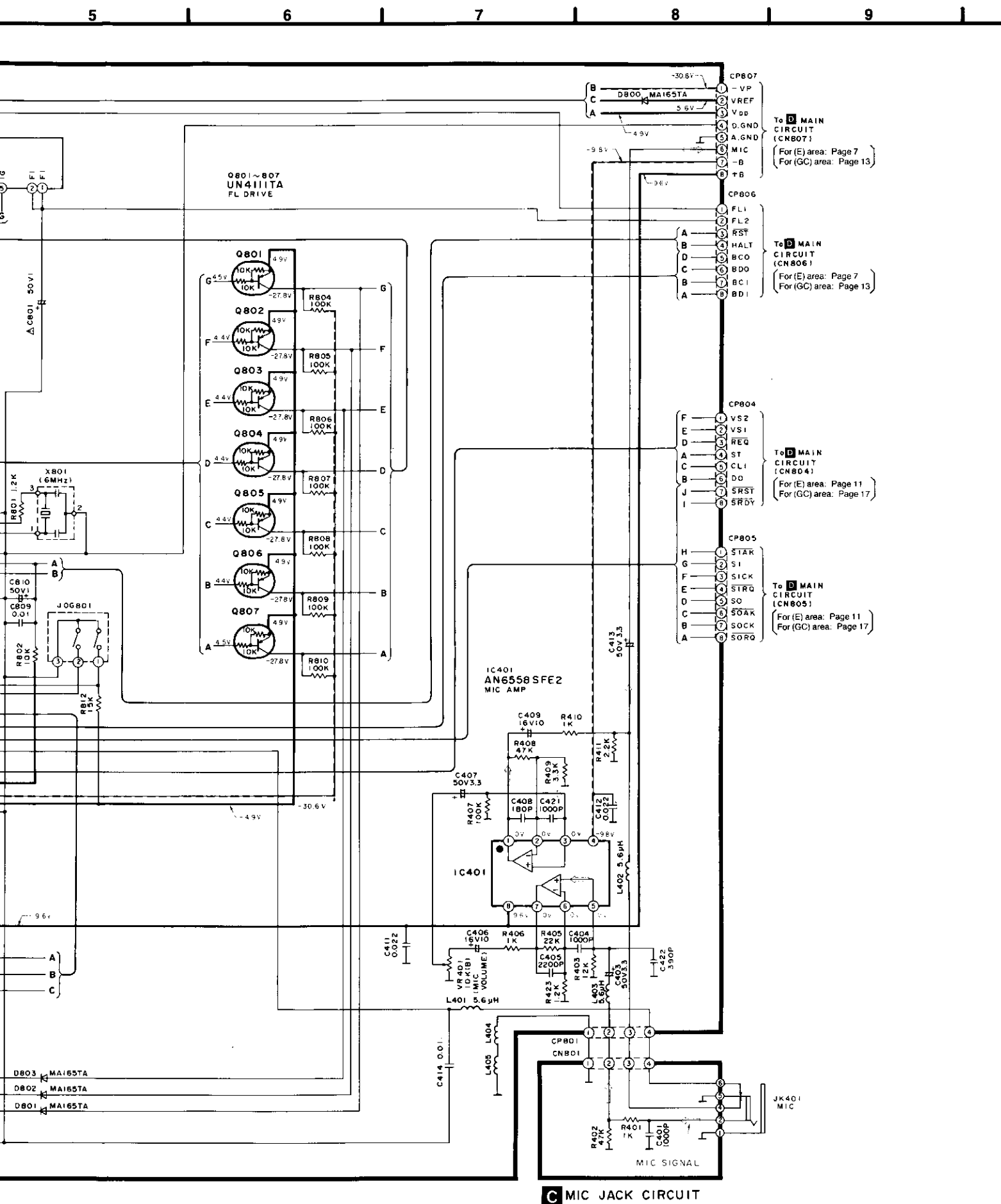


F



 : P
 : M
 : H

on pages 31~35.)



C MIC JACK CIRCUIT

Notes:

- S801 : ON/FLAT switch (ON/FLAT)
- S802 : SFP mode switch (SFP)
- S803 : EQ mode switch (EQ)
- S804 : User switch (USER)
- S805 : Memory switch (MEMO)
- S806 : Frequency band select switch (BAND)
- S807 : Slope (Q) select switch [SLOPE (Q)]
- S808 : Digital noise cleaner switch (DNC)
- S809 : V. Bass switch (V. BASS)
- S810 : Jog mode switch (JOG MODE)
- S811 : Display mode select switch (DISPLAY, -SPECTRUM, -MODE)
- S812 : Demonstration switch (DEMO)
- S816 : Echo switch (ECHO) <For (GC) area>
- S817 : Key control switch (KEY CON) <For (E) area>
- S818 : Voice mute switch (VOICE MUTE)

●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.

●Important safety notice:

Components identified by Δ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

●Caution!

IC and LSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

Cover the parts boxes made of plastics with aluminum foil.

Ground the soldering iron.

Put a conductive mat on the work table.

Do not touch the legs of IC or LSI with the fingers directly.

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

— : Positive voltage line

- - - : Negative voltage line

→ : Mic signal line

PRINTED CIRCUIT BOARD DIAGRAM

D MAIN P.C.B.
(REPI474B-M... (E))
(REPI474C-M... (GC))

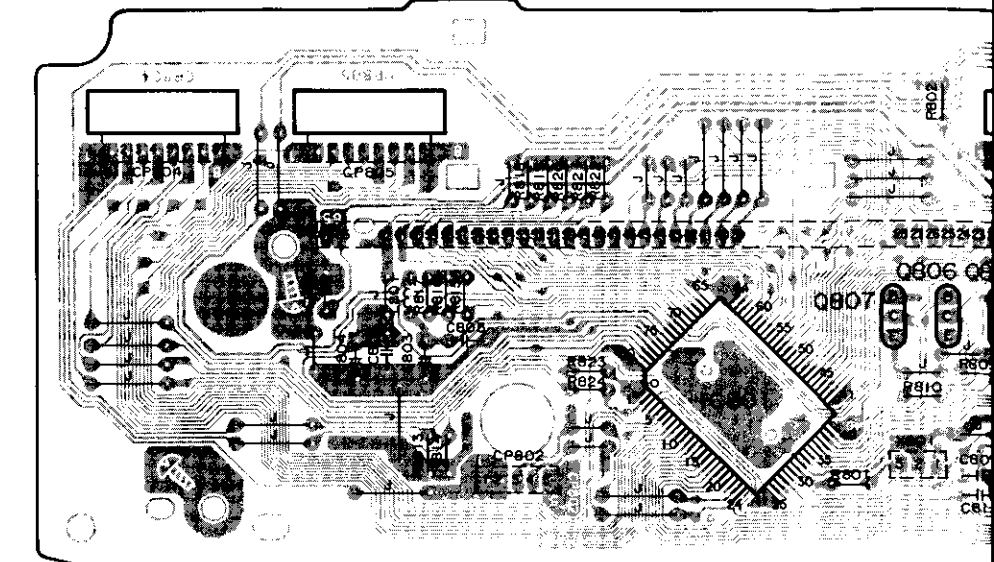
SA-CH750

TP701 TP702

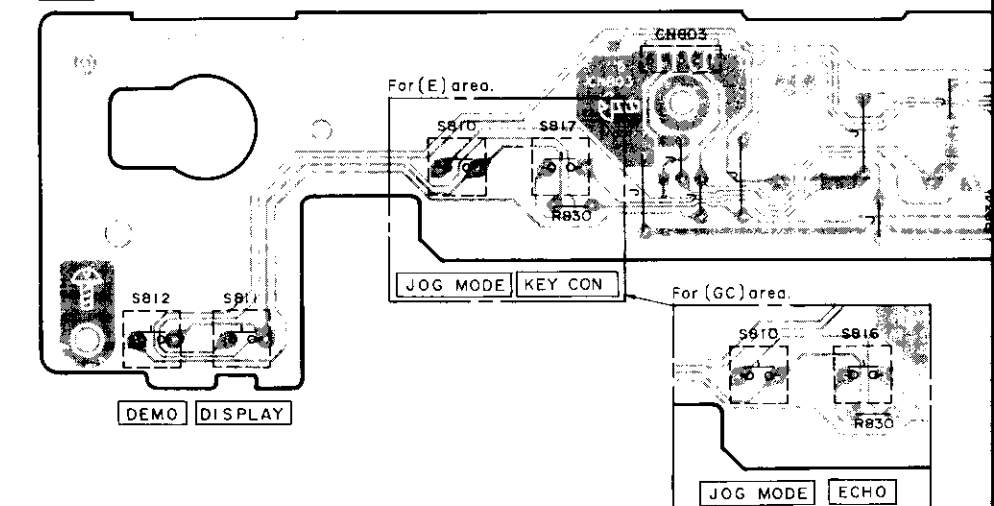
PHONO (REC(OUT)) (PLAY(IN)) (OUT) VCR (IN) VDP
GND VIDEO
VCR TV VCR VDP
(MONITOR) (OUT) OUT (IN)

POWER
SUPPLY
POINT
AC
AC
GND

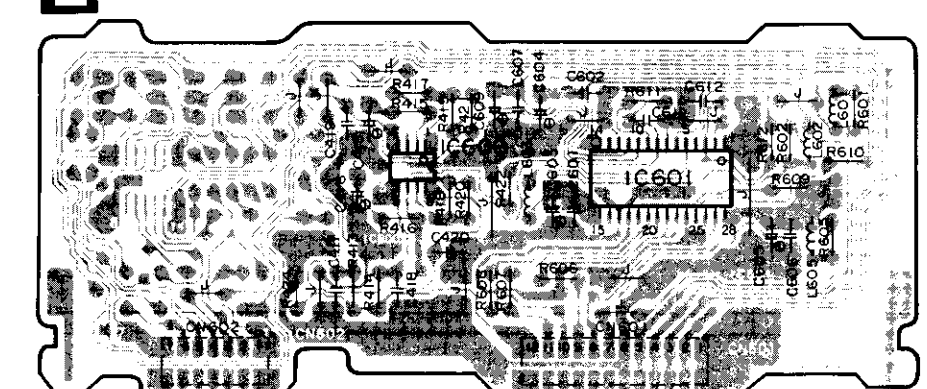
A FL P.C.B. (REPI476B-S... (E))
(REPI476C-S... (GC))



B OPERATION P.C.B. (REPI476B-S... (E))
(REPI476C-S... (GC))

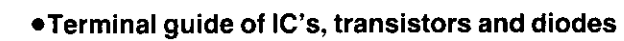
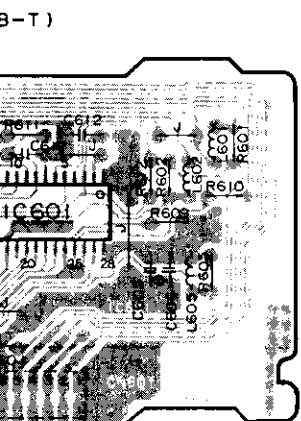


E MIC AMP P.C.B. For (GC) area. (REPI512B-T)



• This circuit board diagram may be modified at any time with the development of new technology.

A horizontal number line with tick marks at every integer from 10 to 14. The numbers 10, 11, 12, 13, and 14 are labeled below the line.



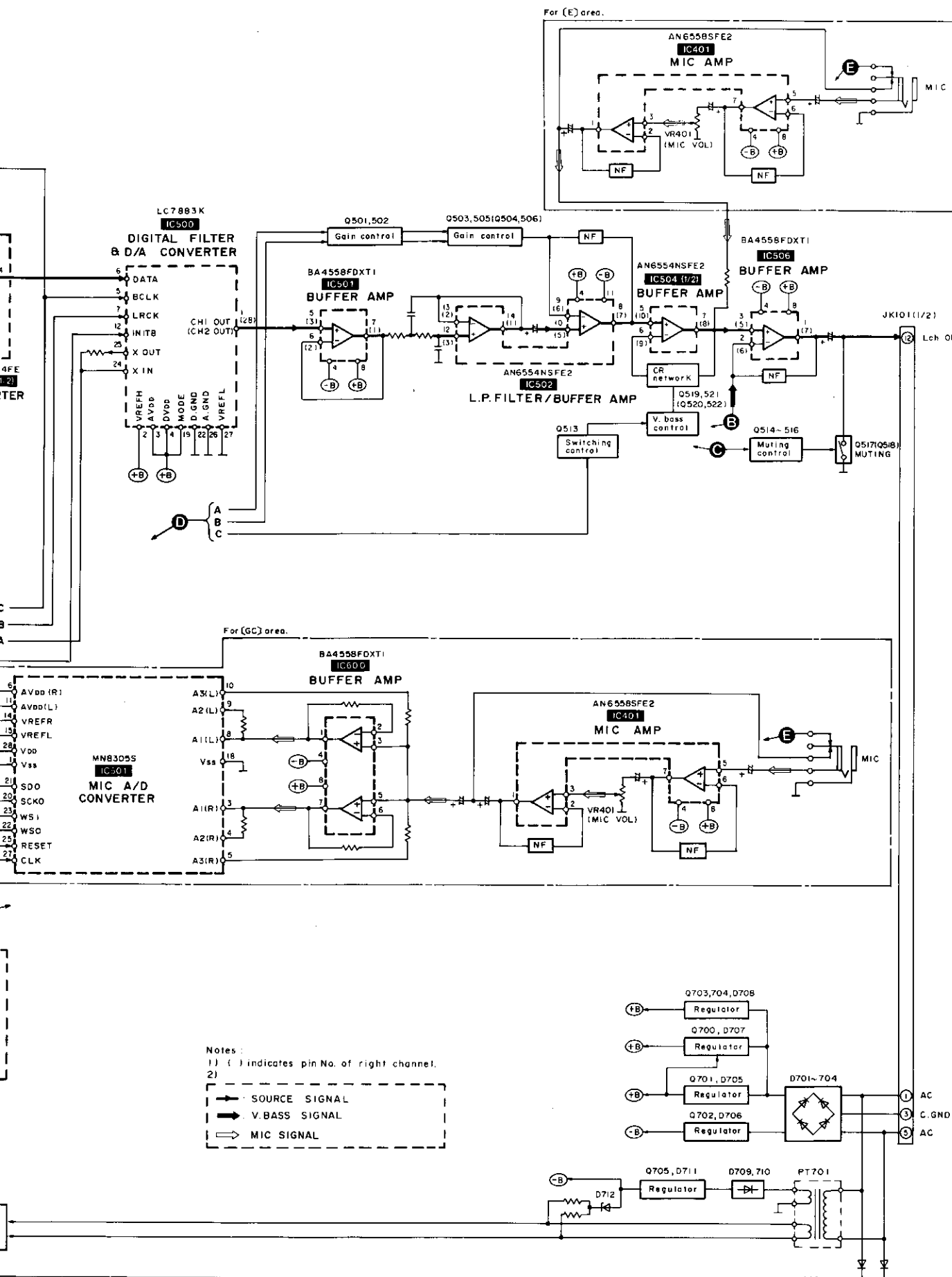
- 24 -

FUNCTION OF IC TERMINALS

•IC305 (LC83016E)

Pin No.	Terminal Name	I/O	Function
1 }	P0 P5	I/O	General-purpose I/O port
7	ASI1	I	Serial audio data input 1
8	BCK1	I	Bit clock signal input for ASI1 input
9	FS384I	I	384fs or 512fs input
10	LRCKI	I	L/R channel discrimination signal input ("H": L channel, "L": R channel)
11	ASI2	I	Serial audio data input 2
12	BCK2	I	Bit clock signal input for ASI2
13	V _{DD1}	—	Power supply terminal (+5 V)
14 }	TEST1 TEST4	I	Test terminal, Normally grounded
18	V _{SS1}	—	GND
19	TEST5	O	Test terminal, Normally open
20	RAS	O	RAS signal output on DRAM access
21	CAS	O	CAS signal output on DRAM access
22	DWRT	O	Data Write signal output on memory access
23	DREAD	O	Data Read signal output on memory access
24	CE/CS	—	—
25 }	D7 D0	I/O	Data input/output to DRAM
33	V _{SS2}	—	GND
34 }	A0 A7	I/O	Data input/output to DRAM
42 }	A8 A16	—	—
51	V _{DD2}	—	Power supply terminal (+5 V)
52	OSC1	I	Crystal oscillator connection
53	OSC2	O	

Pin No.	Terminal Name	I/O	Function
54	V _{SS3}	—	GND
55	FS384O	O	384fs or 512fs output
56	FS192O	O	192fs or 256fs output
57	FS128O	—	—
58	FS64O	—	—
59	FS32O	O	32fs or 16fs output
60	LRCKO	O	1fs output
61	AOWCK	—	—
62	ASO	—	—
63	AOTDF1	O	Serial audio data output 2
64	AOTDF2	O	Serial audio data output 3
65	SI	I	Serial data input from control microprocessor
66	SICK	I	Serial clock input for SI
67	SIRQ	I	Request signal input for serial input
68	SIACK	O	Signal output indicating serial input execution
69	SRDY	I	Ready signal input indicating serial data input completion from control microprocessor
70	SO	O	Serial data output to control microprocessor
71	SOCK	I	Serial clock input for SO
72	SORQ	I	Request signal input for serial output
73	SOACK	O	Signal output indicating serial output execution
74	V _{SS4}	—	GND
75	RES	I	Reset signal input
76	INT	—	—
77	V _{DD3}	—	Power supply terminal (+5 V)
78	SELC	I	Connected to V _{SS} terminal
79	SACK1	I	Connected to V _{DD} terminal
80	SACK2	I	Connected to V _{SS} terminal



●IC500 (LC7883K)

Pin No.	Terminal Name	I/O	Function
1	CH1O	O	DAC CH.1 output terminal (L-ch OUT)
2	VREF H	I	Input terminal for reference voltage "H"
3	AV _{DD}	—	Power supply terminal for analog circuit
4	DV _{DD}	—	Power supply terminal for digital circuit
5	BCLK	I	Bit clock terminal
6	DATA	I	Digital audio data input terminal Bit-serial input from the MSB side
7	LRCK	I	LR clock input terminal LRCK="H" CH1 LRCK="L" CH2
8	TEST	I	Test terminal (Normally "L")
9	ATT	I	Attenuation data input terminal Bit-serial input from the LSB side (Not used)
10	SHIFT	I	Clock input terminal for attenuation data transfer (Not used)
11	LATCH	I	Clock input terminal for attenuation data latch (Not used)
12	INITB	I	Initialization signal input terminal (Normally "H")
13	TEST	I	Test terminal (Normally "L") (Not used)

●IC601 (MN8305S)

Pin No.	Terminal Name	I/O	Function
1	V _{SS}	—	Digital ground terminal
2	AV _{SS} (R)	—	Analog ground terminal for PDM circuit (R ch)
3	A1 (R)	I	R/L channel input terminal for PDM circuit
4	A2 (R)	O	R/L channel output terminal for PDM circuit
5	A3 (R)	O	R/L channel output terminal for PDM circuit
6	AV _{DD} (R)	—	Analog power supply terminal for PDM circuit (R ch)
7	AV _{SS} (L)	—	Analog ground terminal for PDM circuit (L ch)
8	A1 (L)	I	R/L channel input for PDM circuit
9	A2 (L)	O	R/L channel output for PDM circuit
10	A3 (L)	O	R/L channel output for PDM circuit
11	AV _{DD} (L)	—	Analog power supply terminal for PDM circuit (L ch)
12	AV _{SS} (R)	—	Analog ground terminal for PWM output terminal (R ch)
13	PWMR	—	—
14	VREFR	—	Analog power supply terminal for PWM output (R ch)

Pin No.	Terminal Name	I/O	Function
14	EMP2	I	De-emphasis setting terminal
15	EMP1	I	
16	D/N	I	Double speed/normal speed switch terminal (Not used)
17	SOC2	I	Input source selection terminal (PULL DOWN) (Not used)
18	SOC1	I	
19	MODE	I	Operating mode setting terminal (PULL DOWN)
20	TEST	I	Test terminal (Normally "L") (PULL DOWN) (Not used)
21	TEST	I	
22	DGND	—	GND terminal for digital circuit (Not used)
23	CLK	O	Clock output terminal (Not used) 392Fs: 1/2XOUT 384Fs, 448Fs, 512Fs: XOUT
24	XIN	I	Crystal oscillator input terminal
25	XOUT	O	Crystal oscillator output terminal
26	AGND	—	GND terminal for analog circuit
27	VREF L	I	Input terminal for reference voltage "L"
28	CH2O	O	DAC CH-2 output terminal (R-ch OUT)

Pin No.	Terminal Name	I/O	Function
15	VREFL	—	Analog power supply terminal for PWM output (L ch)
16	PWML	—	—
17	AV _{SS} (L)	—	Analog ground terminal for PWM output terminal (L ch)
18	V _{SS}	—	Digital ground terminal
19	FSCTL	I	Sampling frequency (fs) control terminal
20	SCKO	O	Serial clock output terminal
21	SDO	O	Serial data output terminal
22	WSO	O	Word select output terminal
23	WSI	I	Word select input terminal
24	SDI	—	—
25	RESET	I	Reset terminal
26	TEST	I	Test terminal
27	CLK	I	Clock input terminal
28	V _{DD}	—	Digital power supply terminal

●IC801 (M38174M8143F)

Pin No.	Terminal Name	I/O	Function
1	VS1	O	Visual selector signal output
2	VS2	O	Visual selector signal output
3	KS	I	Key scan signal input
4	M.CNT	I	Microphone presence detect signal input ("L": present, "H": absent)
5	SORQ	O	DSP control signal input/output
6	SOCK	O	
7	SOAK	I	
8	SO	I	
9	SIRQ	O	
10	SICK/CLK	O	
11	SI/DATA	O	DSP control signal input/output
12	SI/AK	I	
13	SRDY	O	
14	SRST	O	System reset signal output
15	BDI	I	Bus data input
16	BCI	I	Bus clock input
17	BDO	O	Bus data output
18	BCO	O	Bus clock output
19	JOG2	I	Encoder input A
20	JOG1	I	Encoder input B
21	P49	—	—
22	P50	—	—
23	L1	O	D812 (DNR) drive signal output (H: Light)
24	L2	O	D813 (V, BASS) drive signal output (H: Light)
25	L3	O	D814 (PRO-LOGIC) drive signal output (H: Light)

Pin No.	Terminal Name	I/O	Function
26	HALT	I	Backup mode detect signal input
27	RST	I	Reset signal input
28	XCIN	I	One-time oscillation mode switch signal input
29	XCOUT	—	—
30	XIN	I	Ceramic oscillator signal input (6.00 MHz)
31	XOUT	O	Ceramic oscillator signal output (6.00 MHz)
32	V _{SS}	—	GND
33	P27	—	—
34 3 40	G1 G7	O	FL grid signal output
41 53	S1 S13	O	FL segment signal output
54 56	G8 G10	O	FL grid signal output
57 69	S14 S26	O	FL segment signal output
70 72	G11 G13	O	FL grid signal output
73	V _{DD}	—	Power supply input (+5 V)
74	-VP	—	Pull-down power supply input
75	A. GND	—	GND
76	VREF	I	Reference voltage input for A/D converter
77	ST	O	Strobe signal output for TC9164N control
78	DO	O	Data output for BU2040/M50194P control
79	CLI	O	Clock signal output for BU2040 control
80	REQ	O	Request signal output for M50194P control

■ REPLACEMENT PARTS LIST

Notes: *Important safety notice:
Components identified by Δ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.

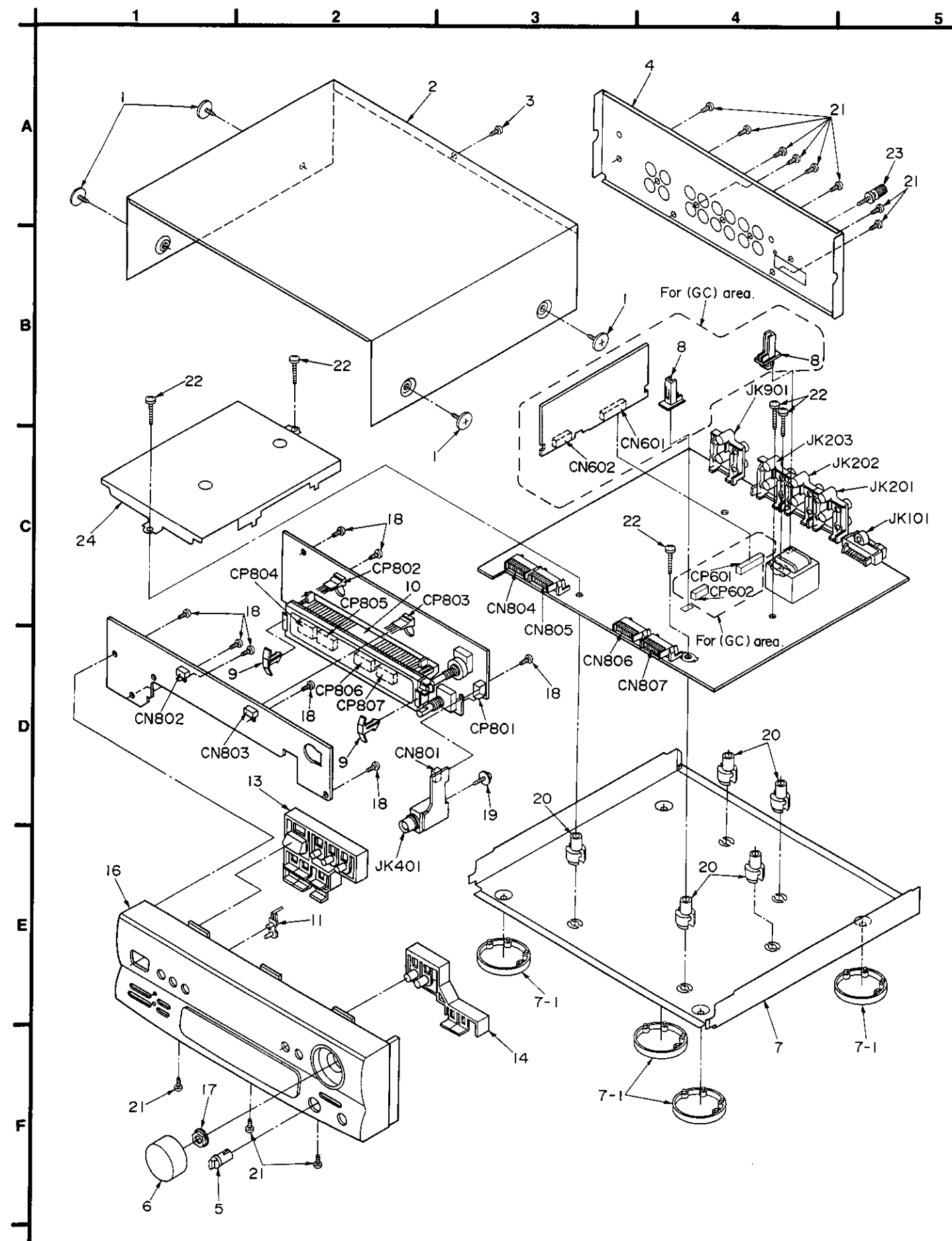
Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)					
IC101	AN6558SFE2	I. C, BUFFER AMP.		Q901	2SA1309A-R	TRANSISTOR	
IC201	TC9164N	I. C, INPUT SELECTOR		Q902, 903	2SC3311A-Q	TRANSISTOR	
IC202	BA4558FDXT1	I. C, BUFFER AMP.				DIODE(S)	
IC301	CS5339-KP	I. C, A/D CONVERTER		D301	MA4051MTA	DIODE	
IC302	TC74HC123AFT	I. C, MONOST. MULTIVIBRATOR		D303, 304	MA165	DIODE	
IC303	TC74HC00AFT1	I. C, NAND GATE		D501-504	MA165	DIODE	
IC304	MC74HC04FEL	I. C, INVERTER		D519, 520	MA165	DIODE	
IC305	LC83016E	I. C, D. S. P.		D701-704	1SR35200TB	DIODE	Δ
IC306	KM41C464P-8	I. C, 256K D-RAM		D705, 706	MA4100MTA	DIODE	
IC307	BU2040F-T2	I. C, SYSTEM CONTROL		D707	MA4056MTA	DIODE	
IC401	AN6558SFE2	I. C, MIC AMP.		D708	MA4062MTA	DIODE	
IC500	LC7883K	I. C, D/A CONVERTER		D709, 710	MA165	DIODE	Δ
IC501	BA4558FDXT1	I. C, BUFFER AMP.		D711	MA4300M	DIODE	
IC502	AN6554NSFE2	I. C, BUFFER AMP.		D712	MA4043M	DIODE	Δ
IC503	AN6554NSFE2	I. C, FILTER AMP.		D713	1SS291TA	DIODE	
IC504	AN6554NSFE2	I. C, BUFFER AMP.		D714, 715	MA165	DIODE	Δ
IC505	M51134FPE2	I. C, SUB HARMONIZER		D721	1SR35200TB	DIODE	
IC506	BA4558FDXT1	I. C, BUFFER AMP.		D800-803	MA165	DIODE	
IC600	BA4558FDXT1	I. C, BUFFER AMP.	(GC)	D812, 813	LN873RP-C	DIODE	
IC601	MN8305S	I. C, A/D CONVERTER	(GC)	D901	MA4051MTA	DIODE	
IC701	LA5608M-TE-L	I. C, BUS LINE DRIVE/RESET		D902, 903	MA165	DIODE	
IC801	M38174M8143F	I. C, FL DRIVE/SYSTEM CONT.				VARIABLE RESISTOR(S)	
IC901	MC14052BFR2	I. C, VIDEO SELECTOR					
		TRANSISTOR(S)		VR401	EVJ02BF03B14	V. R, MIC VOLUME	
				JOG801	EVQMPA02224B	V. R, JOG CONTROL	
						COIL(S)	
Q501, 502	UN4115	TRANSISTOR		L102	ELEXT101KA9	COIL	
Q503-506	2SD2144S	TRANSISTOR		L104	ELEXT101KA9	COIL	
Q508, 509	UN4211	TRANSISTOR		L301	ELEXT101KA9	COIL	
Q511	UN4111	TRANSISTOR		L302	ELEXT100KA9	COIL	
Q512	2SD2144S	TRANSISTOR		L303	ELEXT1R2KA9	COIL	
Q513	UN4111	TRANSISTOR		L304, 305	ELEXT101KA9	COIL	
Q514	UN4211	TRANSISTOR		L310	ELESN101KA	COIL	
Q515	2SC3311A-Q	TRANSISTOR		L311	ELEXT4R7KA9	COIL	
Q516	UN4115	TRANSISTOR		L312	ELEXT101KA9	COIL	
Q517, 518	2SC3327-A	TRANSISTOR		L313	ELEXT2R2KA9	COIL	
Q519, 520	2SK381CTA	TRANSISTOR		L401-403	ELEXT5R6KA9	COIL	
Q521, 522	2SC3311A-Q	TRANSISTOR		L404, 405	BL02RN2R62T4	COIL	
Q700, 701	2SD2037DEFTA	TRANSISTOR		L501	ELEXT101KA9	COIL	
Q702	2SB1357DEFTA	TRANSISTOR		L601	ELEXT101KA9	COIL	(GC)
Q703, 704	2SD1762EF	TRANSISTOR		L602	ELEXT101KA9	COIL	(GC)
Q705	KSB564ACYGTA	TRANSISTOR		L603	ELEXT101KA9	COIL	(GC)
Q801-807	UN4111	TRANSISTOR					
Q808, 809	UN4211	TRANSISTOR					

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
L605	ELEXT101KA9	COIL	(GC)			JACK(S)	
L801	ELEXT101KA9	COIL					
		OSCILLATOR(S)		JK101	RJT065K15	CONNECTOR(15P)	
				JK201	SJF3069-4N	DAT(OUTPUT)/PHONO	
X300	RSXC22M5S01T	OSCILLATOR(22.5792MHz)		JK202	SJF3069-4N	DAT(INPUT)/VCR(OUTPUT)	
X801	RSXY6M00M01T	OSCILLATOR(6MHz)		JK203	SJF3069-4N	VCR(INPUT)/VDP	
		DISPLAY(S)		JK401	RJJ65MA01	MIC JACK	
				JK901	SJF3069-7N	VDP/VCR/TV MONITOR OUT	
FL801	RSL0133-F	FL DISPLAY	Δ				
		SWITCH(ES)					
S801	EVQ21405R	SW, ON/FLAT					
S802	EVQ21405R	SW, SFP FIXED					
S803	EVQ21405R	SW, EQ FIXED					
S804	EVQ21405R	SW, USER					
S805	EVQ21405R	SW, MEMO					
S806	EVQ21405R	SW, BAND					
S807	EVQ21405R	SW, SLOPE(Q)					
S808	EVQ21405R	SW, DNC					
S809	EVQ21405R	SW, V. BASS					
S810	EVQ21405R	SW, JOG MODE					
S811	EVQ21405R	SW, DISPLAY					
S812	EVQ21405R	SW, DEMO					
S816	EVQ21405R	SW, ECHO	(GC)				
S817	EVQ21405R	SW, KEY CON	(E)				
S818	EVQ21405R	SW, VOICE MUTE					
		CONNECTOR(S)					
CN601	RJU057W012	SOCKET(12P)	(GC)				
CN602	RJU057W007	SOCKET(7P)	(GC)				
CN801	RJU057W004	SOCKET(4P)					
CN802, 803	SJS50581BB	SOCKET(5P)					
CN804-807	RJU003K008M1	SOCKET(8P)					
CP601	RJT057W012-1	CONNECTOR(12P)	(GC)				
CP602	RJT057W007-1	CONNECTOR(7P)	(GC)				
CP801	RJT057W004-1	CONNECTOR(4P)					
CP802, 803	SJT30549BB1	CONNECTOR(5P)					
CP804-807	RJT003K008-1	CONNECTOR(8P)					
		EARTH TERMINAL(S)					
E201	SNE1004-1	GND PLATE					
E701, 702	SNE1004-1	GND PLATE					
		TRANSFORMER(S)					
PT701	RTP114G003	POWER TRANSFORMER	Δ				

■ CABINET PARTS LOCATION

Ref. No.	Part No.	Values & Remarks
C577, 578	ECBT1E223ZF	25V 0.022U
C579	ECEAJKA470B	6.3V 47U
C580	ECEAJKA221Q	10V 220U (E)
C580	ECEAJKA221B	10V 220U (GC)
C601, 602	ECBT1E223ZF	25V 0.022U (GC)
C603-605	ECEAJKA100B	16V 10U (GC)
C606, 607	ECBT1E223ZF	25V 0.022U (GC)
C609	ECEAJKA100B	16V 10U (GC)
C611	ECBT1H471KB5	50V 470P (GC)
C612	ECBT1H471KB5	50V 470P (GC)
C614	ECBT1E103ZF	25V 0.01U (GC)
C700	ECBT1E223ZF	25V 0.022U
C701-704	ECQR1H103ZF5	50V 0.01U Δ
C705, 706	ECQV1H104JM3	50V 0.1U Δ
C707	ECA1CM332E	16V 3300U
C708	ECA1EM471B	25V 470U
C709, 710	ECQV1H104JM3	50V 0.1U
C711, 712	ECQR1H103ZF5	50V 0.01U
C713, 714	ECEAJKA101B	16V 100U
C715	ECQR1H103ZF5	50V 0.01U
C716	ECEAJKA101B	10V 100U
C717	ECQR1H103ZF5	50V 0.01U
C718	ECEAJKA100B	16V 10U
C719	ECAJMJ02B	6.3V 1000U
C720	ECEAJKA100B	16V 10U
C721	ECA1H470B	50V 47U
C722	ECQR1H103ZF5	50V 0.01U
C725	ECQV1H104JM3	50V 0.1U
C726	ECBT1H102KB5	50V 1000P
C727	ECEAJHKA47B	50V 0.47U
C728	ECBT1H102KB5	50V 1000P
C730	ECBT1E223ZF	25V 0.022U
C801, 802	ECEAJHKA10B	50V 1U Δ
C803, 804	ECEAJKA101B	6.3V 100U
C805, 806	ECBT1E103ZF	25V 0.01U
C809	ECBT1E103ZF	25V 0.01U
C810	ECEAJHKA10B	50V 1U
C811, 901	ECBT1E103ZF	25V 0.01U
C902	ECEAJKA221B	6.3V 220U
C903, 904	ECEAJKA470B	16V 47U
C990	ECBT1C103NS5	16V 0.01U

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS	
1	RHD30007	SCREW	
2	RKM0203-1K	CABINET	
3	XTB3+8JFZ	SCREW	
4	RGR0153B-A	REAR PANEL	
5	RGM0105-K	KNOB, MIC VOLUME	
6	RGM0159-K	KNOB, JOG	
7	RFKJHCH550PP	BOTTOM BOARD ASS'Y	
7-1	RKA0055-N	FOOT	
8	RMN0203	HOLDER	(GC)
9	RMN0195	FL SPACER	
10	RMN0196	FL HOLDER	
11	RGL0170-Q	LEADING LIGHT PANEL	
13	RGU0798-K	BUTTON, ON/PLAT etc.	
14	RGU0799-K	BUTTON, DISPLAY etc.	
16	RFKGHCH750EK	FRONT PANEL ASS'Y	(E)
16	RFKGHCH750GC	FRONT PANEL ASS'Y	(GC)
17	SNE4021-1	NUT	
18	XTBS26+8J	SCREW	
19	XTWS3+10T	SCREW	
20	SHE185-2	P. C. B. SPACER	
21	XTBS3+8JFZ1	SCREW	
22	XTB3+16JFZ	SCREW	
23	SNE2123	GND SCREW	
24	RSC0303	SHIELD PLATE	



Service Manual

COMPACT
disc
DIGITAL AUDIO

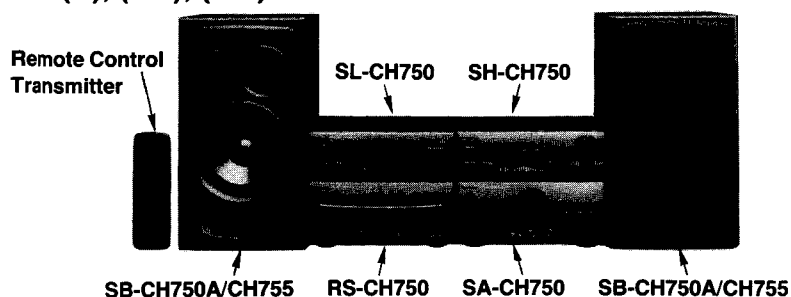
Compact Disc Player

MASH*
multi-stage noise shaping

Compact Disc Player

SL-CH750

•For (E), (EB), (EG) areas



Colour

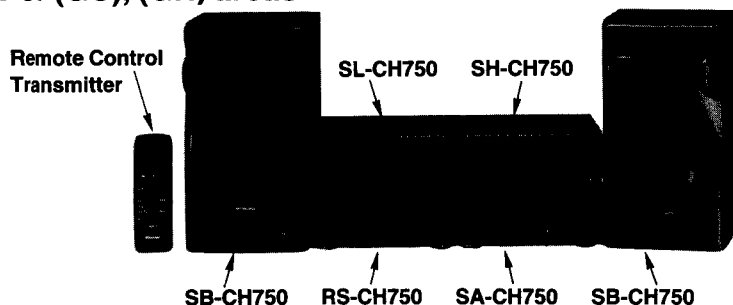
(K) Black Type

Area

Suffix for Model No.	Area	Colour
(E)	Europe, Asia, Latin America, Middle Near East, Africa and Oceania	(K)

System: SC-CH750

•For (GC), (GN) areas



Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

SL-CH550 TRAVERSE DECK SERIES (RAE0111Z)

SPECIFICATIONS

(DIN 45 500)

■ Audio DA converter

1 bit 2 DAC MASH

■ Pickup Wavelength Laser power

780 nm
No hazardous radiation is emitted
(with safety protection)

■ General Dimensions (W×H×D) Weight

270×89.5×258.5 mm
2.1 kg

Notes:

- Specifications are subject to change without notice.
- Weight and dimensions are approximate.

- * •Technics (or Panasonic) developed the world's first MASH type DAC and ADC. MASH technology was invented by NTT (LSI Labs).
•MASH is a trademark of NTT.

System	Sound processor	Tuner amplifier	Compact disc player	Cassette deck	Speakers
SC-CH750	SH-CH750	SA-CH750	SL-CH750	RS-CH750	*SB-CH750A (E), (EB), (EG) areas *SB-CH755 Switzerland only SB-CH750 (GC), (GN) areas

*made in PAES

Technics

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■ HANDLING PRECAUTIONS FOR TRAVERSE DECK

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.

So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

●Handling of traverse deck (optical pickup)

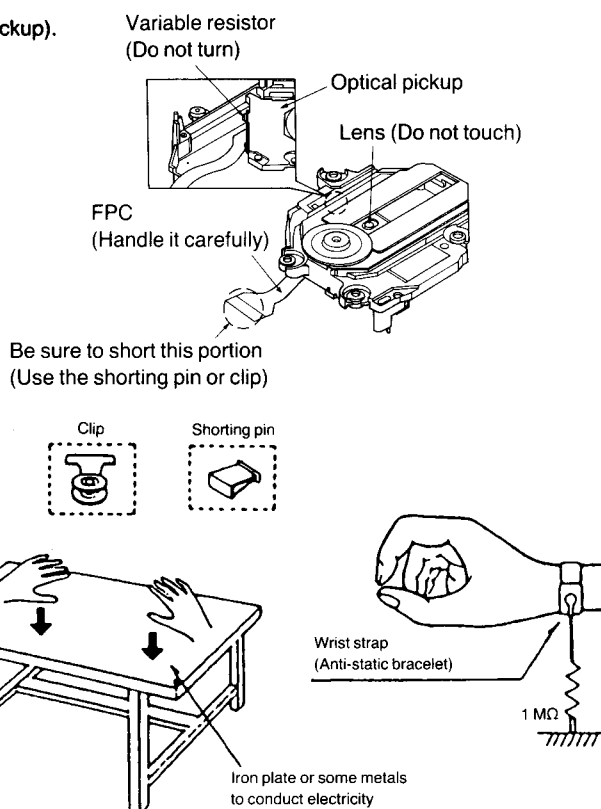
1. Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.
2. To prevent the breakdown of the laser diode, an anti-static shorting pin is inserted into the flexible board (FPC board). When removing or connecting the short pin, finish the job in as short time as possible.
3. Take care not to apply excessive stress to the flexible board (FPC board).
4. Do not turn the variable resistor (laser power adjustment). It has already been adjusted.

●Grounding for electrostatic breakdown prevention

1. Human body grounding
Use the anti-static wrist strap to discharge the static electricity from your body.
2. Work table grounding
Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is placed, and ground the sheet.

Caution:

The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).



■ PRECAUTION OF LASER DIODE

CAUTION: This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pick up lens.

Wave length: 780 nm

Maximum output radiation power from pick up: 100 μ W/VDE

Laser radiation from the pick up unit is safety level, but be sure the followings:

1. Do not disassemble the optical pick up unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pick up lens for a long time.

ACHTUNG: Dieses produkt enthält eine laserdiode. Im eingeschalteten zustand wird unsichtbare laserstrahlung von der lasereinheit abgestrahlt.

Wellenlänge: 780 nm

Maximale strahlungsleistung der lasereinheit: 100 μ W/VDE

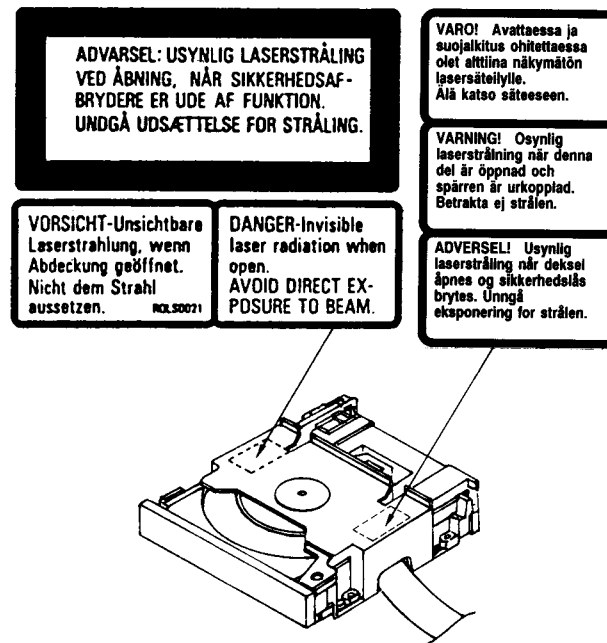
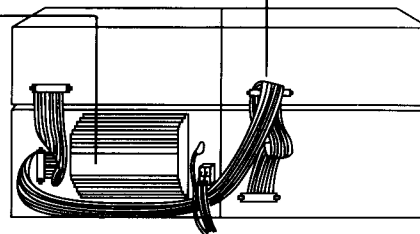
Die strahlung an der lasereinheit ist ungefährlich, wenn folgende punkte beachtet werden:

1. Die lasereinheit nicht zerlegen, da die strahlung an der freigelegten laserdiode gefährlich ist.
2. Den werksseitig justierten einstellregler der lasereinheit nicht verstellen.
3. Nicht mit optischen instrumenten in die fokussierlinse blicken.
4. Nicht über längere zeit in die fokussierlinse blicken.



LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

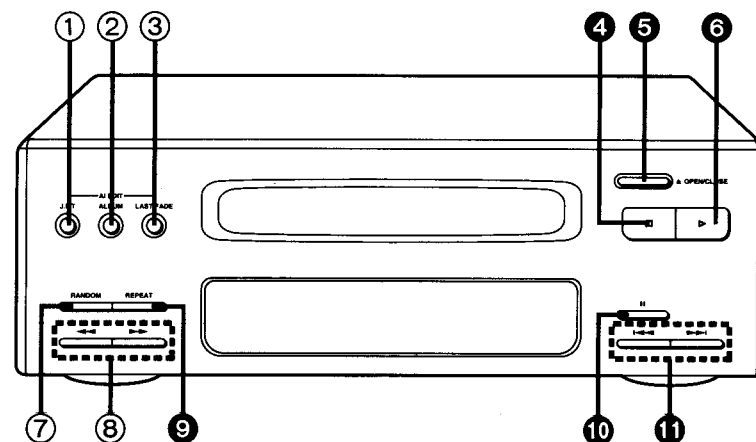
Heat prevention
cover



NOTE:

Refer to the service manual for Model No. SA-CH750 (Order No. AD9211379C8) for information on "ACCESSORIES", "STACKING THE COMPONENTS", "CONNECTIONS" and "PACKAGING".

LOCATION OF CONTROLS

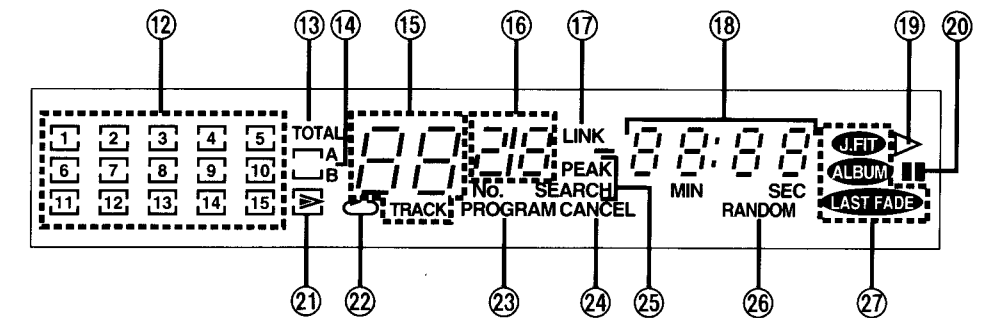


Note:

The functions indicated by the numbers with black background (for example ④) can also be activated from the remote control.

- | | |
|---|--|
| <p>① Fit edit button (J. FIT)
Press to activate the fit editing mode.</p> <p>② Sequential CD recording button (ALBUM)
Press to activate the sequential CD recording mode.</p> <p>③ Last fade edit button (LAST FADE)
Press to activate the fade out editing mode.</p> <p>④ Stop button (□)
Press to stop the disc play.</p> <p>⑤ Disc tray open/close button (▲ OPEN/CLOSE)
Press to open and close the disc tray.</p> | <p>⑥ Play button (▷)
Press to start disc play and synchro start function.</p> <p>⑦ Random play button (RANDOM)
Press to play the disc's tracks in random order.</p> <p>⑧ Search buttons (◀◀, ▶▶)
Press and hold to find the desired point on the track while in the play mode.</p> <p>⑨ Repeat button (REPEAT)
Press to activate the repeat mode.</p> <p>⑩ Pause button ()
Press to stop the disc play temporarily.</p> <p>⑪ Skip buttons (◀◀, ▶▶)
Press to skip tracks.</p> |
|---|--|

Display Panel



- | | |
|--|---|
| <p>⑫ Matrix display
Shows the total number of tracks on a disc, and shows the current playing track by flashing.</p> <p>⑬ Total tracks indicator (TOTAL)
Lights to show the total number of tracks edited on side A and B when you use the edit-recording from a compact disc.</p> <p>⑭ Tape side indicator (A, B)
Shows which side of the cassette tape (A or B) will be recorded on when you use the edit-recording from a compact disc.</p> <p>⑮ Track number display
Shows the total number of tracks, and current playing or recording track number.</p> <p>⑯ Program number display
Lights together with the program indicator to show the programmed order.</p> <p>⑰ Link indicator (LINK)
Lights to show the disc link is possible when you use the edit-recording from a compact disc.</p> <p>⑱ Time display
Shows the total playing time on the disc, and elapsed play time of the current track.</p> <p>⑲ Play indicator (▷)
Lights when you play a compact disc.</p> | <p>⑳ Pause indicator ()
Lights when you press the pause button to stop the disc play temporarily.</p> <p>㉑ Over indicator (≧)
Lights if there are 16 or more tracks on a disc.</p> <p>㉒ Repeat mode indicator (↺)
Lights during the repeat mode of a compact disc.</p> <p>㉓ Program indicator (PROGRAM)
Lights during program play mode of a compact disc.</p> <p>㉔ Program cancel indicator (CANCEL)
Lights when you cancel a program.</p> <p>㉕ Peak search indicator (PEAK SEARCH)
In the edit-recording mode, lights when the compact disc player is automatically scanning the peak level on a disc. When peak search ends, "PEAK" flashes to indicate the peak level of a compact disc.</p> <p>㉖ Random play indicator (RANDOM)
Lights during the random play mode.</p> <p>㉗ Edit mode indicators (J. FIT, ALBUM, LAST FADE)
J. FIT: Lights when you activate the fit editing mode.
ALBUM: Lights when you activate the sequential CD recording mode.
LAST FADE: Lights when you activate the fade out editing mode.</p> |
|--|---|

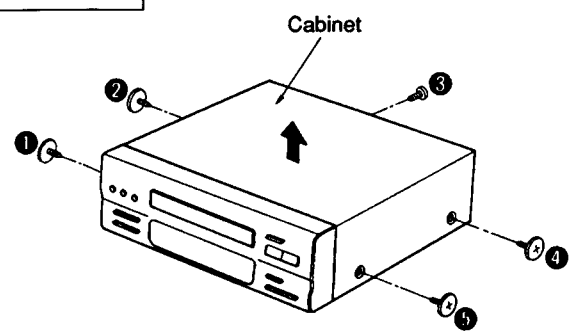
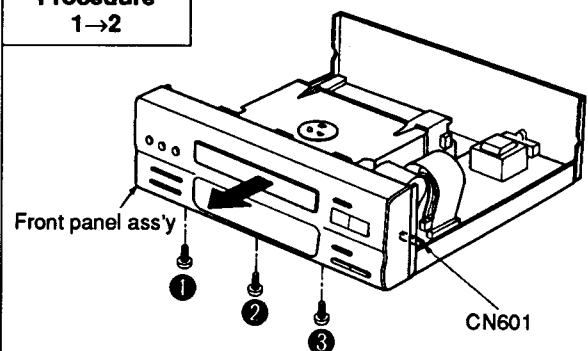
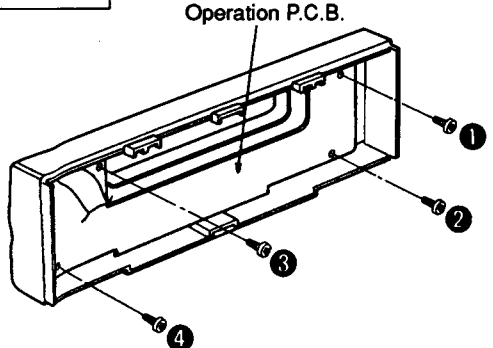
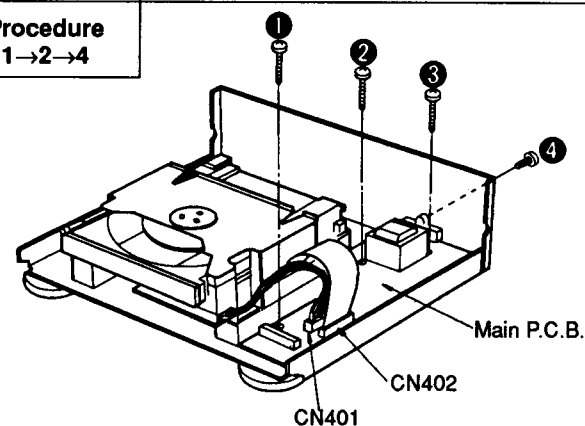
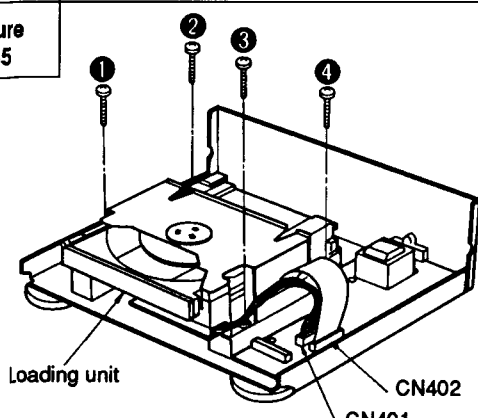
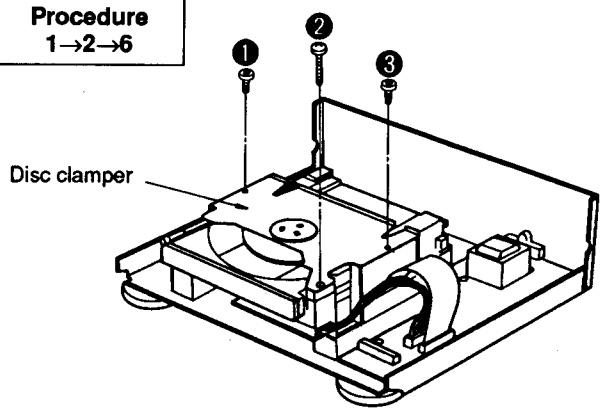
DISASSEMBLY INSTRUCTIONS

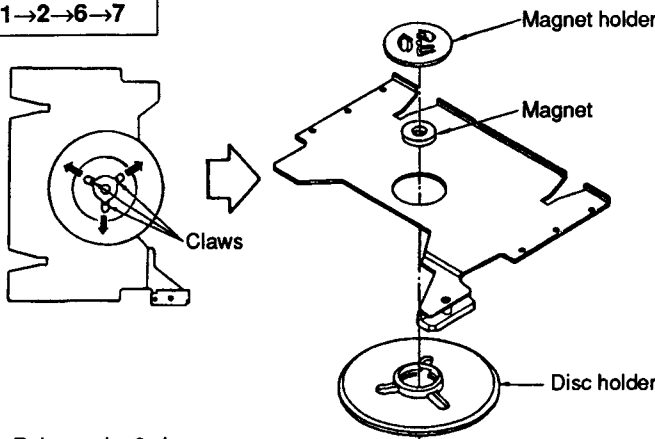
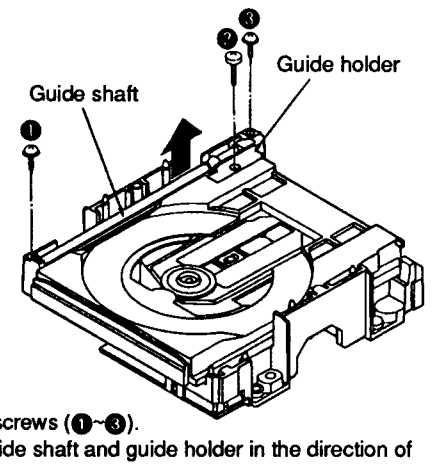
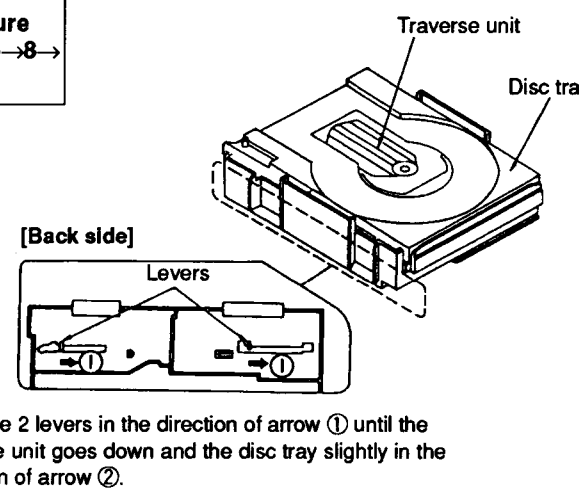
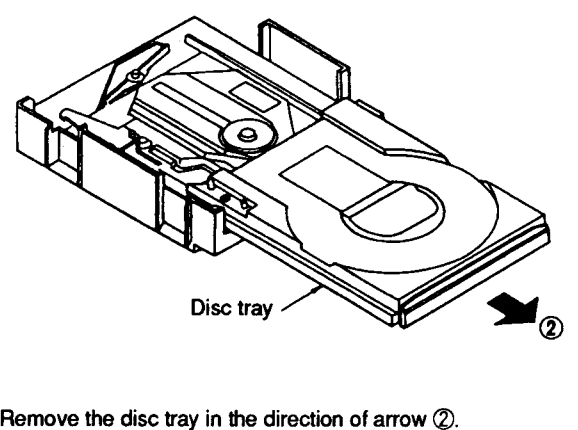
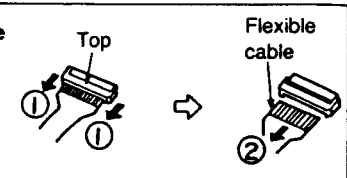
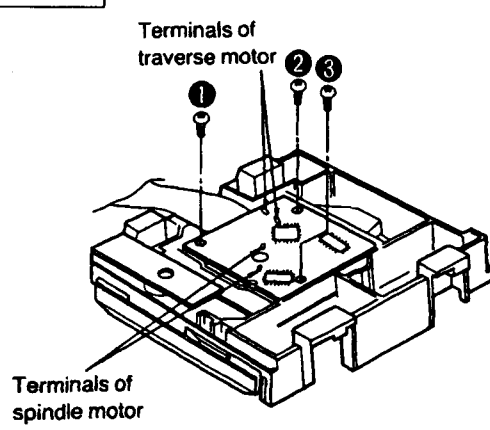
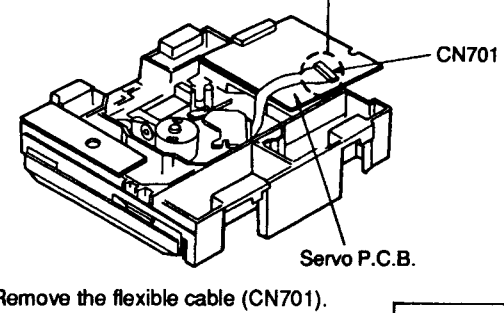
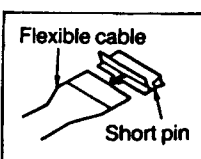
Warning: This product uses a laser diode. Refer to caution statements on page 2.

ACHTUNG: Die Lasereinheit nicht zerlegen.

Die Lasereinheit darf nur gegen eine vom Hersteller spezifizierte Einheit ausgetauscht werden.

"ATTENTION SERVICER" Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1	Removal of the Cabinet	Ref. No. 2	Removal of the Front Panel Ass'y
Procedure 1	 1. Remove the 5 screws (①~⑤). 2. Remove the cabinet in the direction of arrow.	 1. Remove the 1 connector (CN601). 2. Remove the 3 screws (①~③). 3. Remove the front panel ass'y in the direction of arrow.	
Ref. No. 3	Removal of the Operation P.C.B.	Ref. No. 4	Removal of the Main P.C.B.
Procedure 1→2→3	 • Remove the 4 screws (①~④).	 1. Remove the 2 connectors (CN401, CN402). 2. Remove the 4 screws (①~④).	
Ref. No. 5	Removal of the Loading Unit	Ref. No. 6	Removal of the Disc Clamper
Procedure 1→2→5	 1. Remove the 2 connectors (CN401, CN402). 2. Remove the 4 screws (①~④).	 • Remove the 3 screws (①~③).	

Ref. No. 7	Removal of the Magnet Holder, Magnet and Disc Holder	Ref. No. 8	Removal of the Guide Shaft and Guide Holder
Procedure 1→2→6→7	 • Release the 3 claws.	Procedure 1→2→6→8	 1. Remove the 3 screws (1-3). 2. Remove the guide shaft and guide holder in the direction of arrow.
Ref. No. 9	Removal of the Disc Tray		
Procedure 1→2→5→6→8→9	 1. Push the 2 levers in the direction of arrow ① until the traverse unit goes down and the disc tray slightly in the direction of arrow ②.	 2. Remove the disc tray in the direction of arrow ②.	
Ref. No. 10	Removal of the Servo P.C.B.	• Removal of the flexible cable 	
Procedure 1→2→5→10	 1. Remove the 3 screws (1-3). 2. Unsolder the 2 terminals of spindle motor. 3. Unsolder the 2 terminals of traverse motor.	 4. Remove the flexible cable (CN701). Note: Insert a short pin into the traverse unit flexible cable. (Refer to "Handling precautions for traverse deck" on page 2) 	

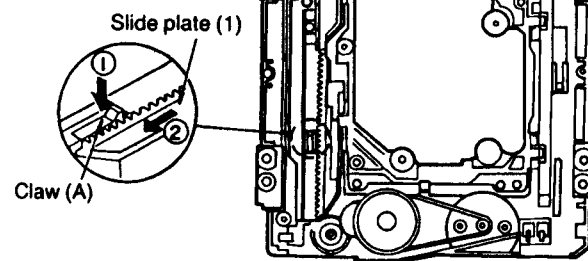
Ref. No. 11	Removal of the Traverse Unit
Procedure 1→2→5→6→8→ 9→10→11	Driver Boss Pin 1. Widen the boss by using a regular screwdriver or similar object. 2. Pull out the pin. Traverse unit Claw 1. Remove the 3 pins in the direction of arrow ①. 2. Release the claw and then remove the traverse unit in the direction of arrow.
Ref. No. 12	Removal of the Loading Motor P.C.B. and Loading Motor
Procedure 1→2→5→6→8→ 9→12	Belt Loading motor P.C.B. Loading motor Terminals 1. Remove the belt. 2. Remove the 2 screws (①, ②). 3. Remove the 1 screw (③). 4. Unsolder the 2 terminals of loading motor. Loading motor terminal polarity
Ref. No. 13	Removal of the Lock Lever
Procedure 1→2→6→8→9→ 13	Lock lever Lock lever spring Claw 1. Remove the lock lever spring. 2. Release the claw in the direction of the arrow ①, and then remove the lock lever in the direction of arrow ②.
Ref. No. 14	Removal of the Conversion Lever
Procedure 1→2→5→6→8→ 9→10→11→13→14	Slide plate (1) Claw (A) Spring Conversion lever 1. Remove the spring. 2. Push the claw (A) in the direction of arrow ①, and then move the slide plate (1) in the direction of arrow ②. 3. Remove the conversion lever in the direction of arrow ③.

Ref. No. 15	Removal of the Traverse Chassis
Procedure 1→2→5→6→ 8→9→10→11→ 13→14→15	Slide plate (1) Claw (A) 1. Push the claw (A) in the direction of arrow ①, and then move the slide plate (1) in the direction of arrow ②. Traverse chassis Claws (B) 2. Push 2 claws (B) in the direction of arrow ③, and then remove the traverse chassis.
Ref. No. 16	Removal of the Slide Plate (1) and Slide Plate (2)
Procedure 1→2→5→6→ 8→9→10→11→ 13→14→15→16	Slide plate (1) ■ Removal of the Slide Plate (1) • Move the slide plate (1) in the direction of the arrow ①, and remove the slide plate (1) in the direction of the arrow ②. Slide plate (2) Claw ■ Removal of the Slide Plate (2) • Push the claw in the direction of arrow ③, and then remove the slide plate (2) in the direction of arrow ④.
Ref. No. 17	How to check the Main P.C.B.
Procedure 1→2→17	Main P.C.B. 1. Remove the 4 screws (①-④). 2. Remove the main P.C.B. and then stand the main P.C.B. at the side of unit. Rear panel Lead wire GND terminal Main P.C.B. CN601 Flexible cable Front panel ass'y 3. Reinstall the front panel ass'y to the unit and then connect the flexible cable (CN601). 4. Connect the GND terminal to the rear panel by the lead wire. 5. When checking the soldered surfaces of main P.C.B. and replacing the parts, do as show.

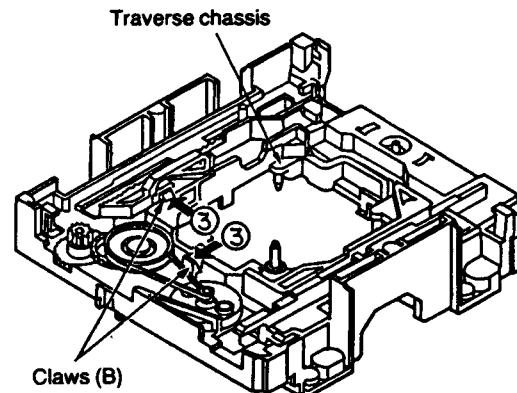
Ref. No.
15

Removal of the Traverse Chassis

Procedure
1→2→5→6→
8→9→10→11→
13→14→15



1. Push the claw (A) in the direction of arrow ①, and then move the slide plate (1) in the direction of arrow ②.

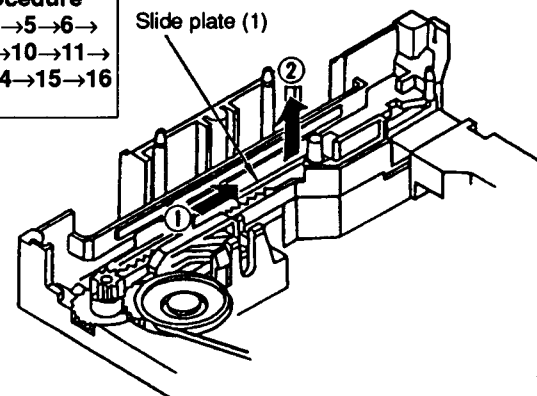


2. Push 2 claws (B) in the direction of arrow ③, and then remove the traverse chassis.

Ref. No.
16

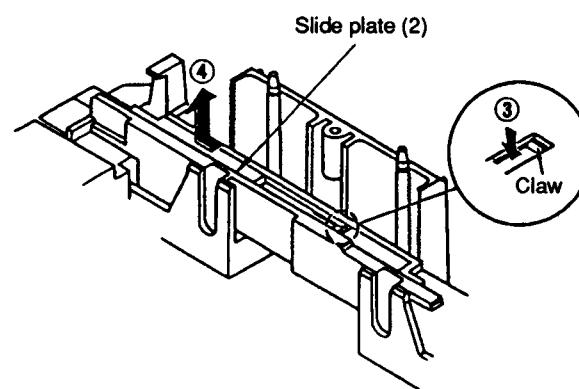
Removal of the Slide Plate (1) and Slide Plate (2)

Procedure
1→2→5→6→
8→9→10→11→
13→14→15→16



■ Removal of the Slide Plate (1)

- Move the slide plate (1) in the direction of the arrow ①, and remove the slide plate (1) in the direction of the arrow ②.



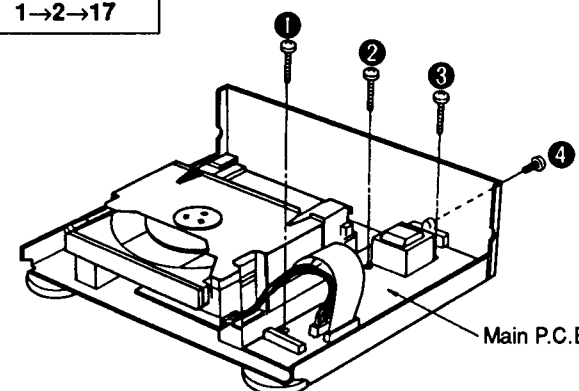
■ Removal of the Slide Plate (2)

- Push the claw in the direction of arrow ③, and then remove the slide plate (2) in the direction of arrow ④.

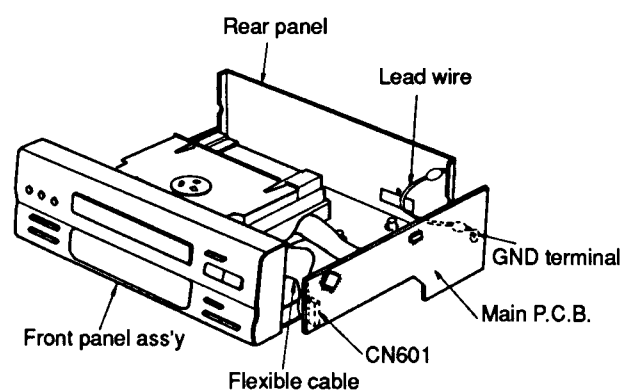
Ref. No.
17

How to check the Main P.C.B.

Procedure
1→2→17



1. Remove the 4 screws (①~④).
2. Remove the main P.C.B. and then stand the main P.C.B. at the side of unit.

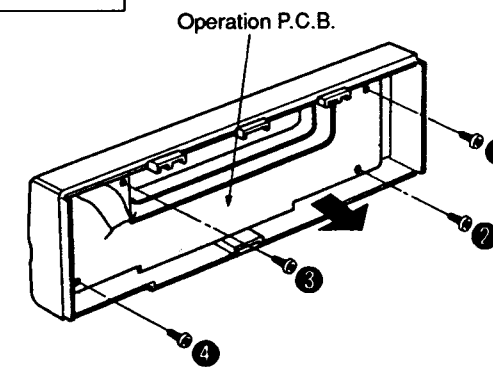


3. Reinstall the front panel ass'y to the unit and then connect the flexible cable (CN601).
4. Connect the GND terminal to the rear panel by the lead wire.
5. When checking the soldered surfaces of main P.C.B. and replacing the parts, do as show.

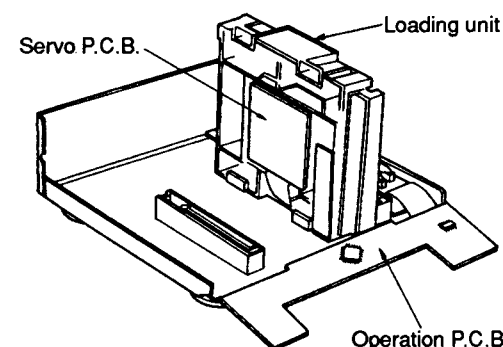
Ref. No.
18

How to check the Operation P.C.B. and Servo P.C.B.

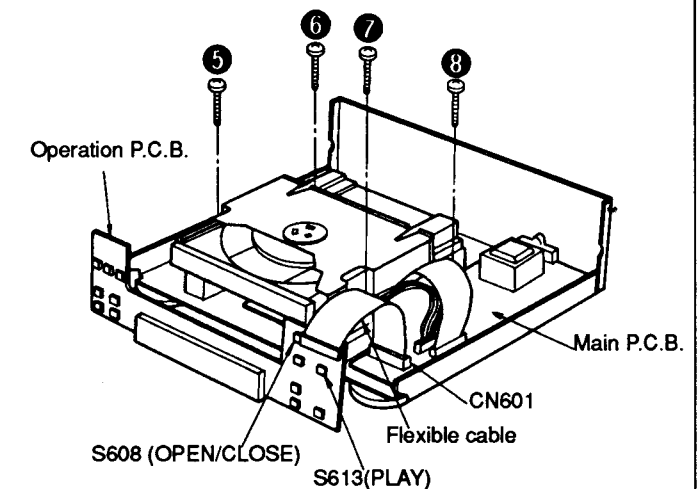
Procedure
1→2→18



1. Remove the 4 screws (①~④).
2. Remove the operation P.C.B..



5. Place the loading unit sideways as shown above.
6. When checking the soldered surfaces of the operation P.C.B. and servo P.C.B., do as shown above.



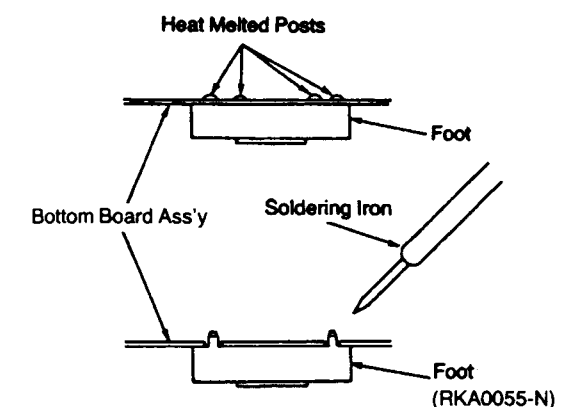
3. Remove the 4 screws (⑤~⑧).
4. Connect the flexible cable to connector (CN601).

To play a disc

1. Push the S608 (OPEN/CLOSE) switch so that the loading unit comes up.
2. Playing the test disc on the tray. Then, push the S608 (OPEN/CLOSE) switch to set the test disc.
3. Push the S613 (PLAY) switch to start the disc play.

● Replacement of the Foot.

1. Remove the 4 heat melted posts on the Bottom board ass'y with a pair of nippers or similar tool.
2. To replace the foot (RKA0055-N) on the Bottom board ass'y, melt the 4 posts with a soldering iron.

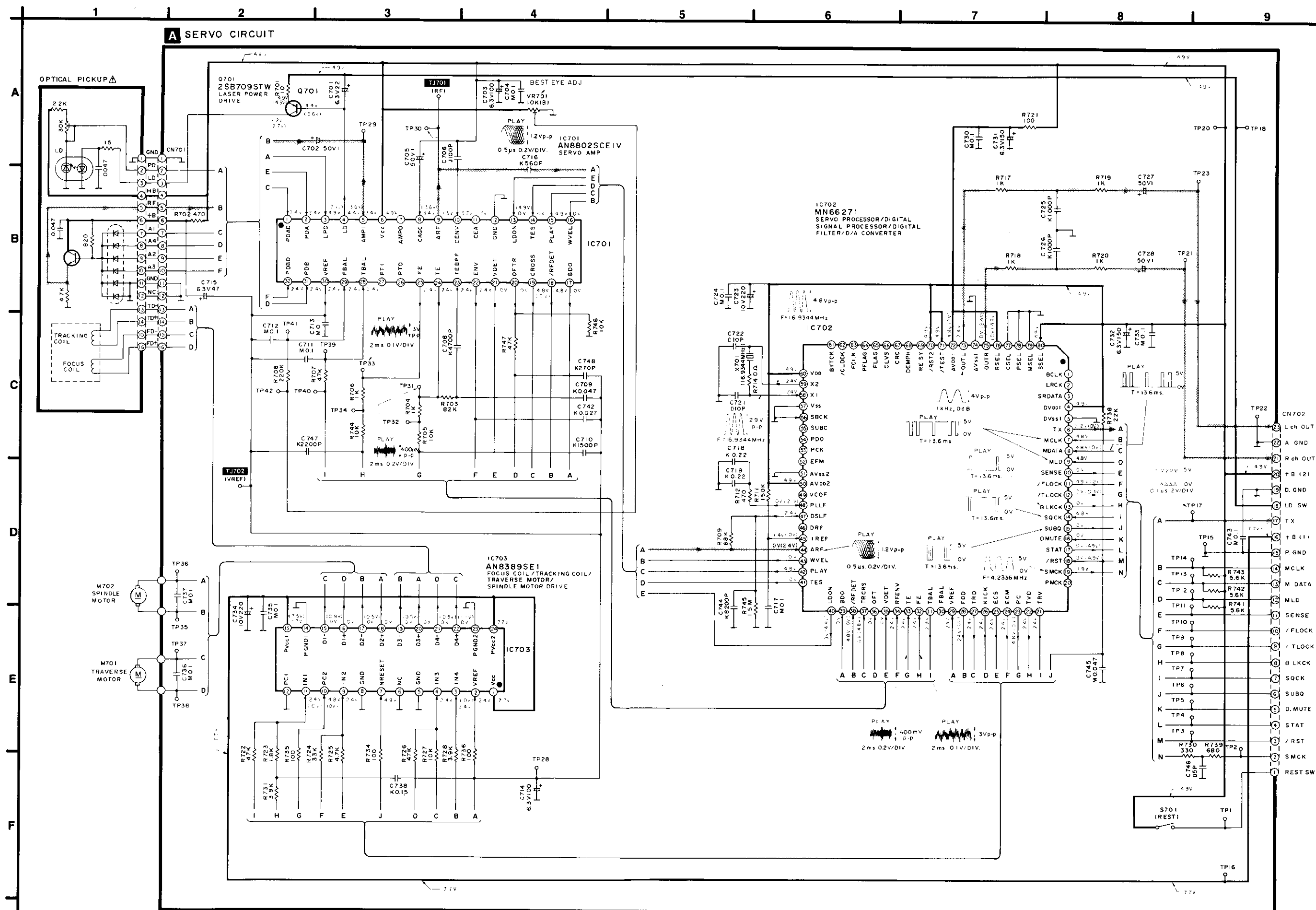


NOTE:

Please refer to pages 10-13 in the service manual for Model No. SL-CH550 (Order No. AD9208264C8) for information on "INSTALLING SERVO P.C.B.", "INSTALLING OF GUIDE SHAFT", "CD UNIT ASSEMBLY", "INSTALLING DISC TRAY UNIT" and "INSTALLING DISC TRAY".

SCHEMATIC DIAGRAM • OPTICAL PICKUP AND SERVO CIRCUIT (Parts list on pages 33 and 34.)

A SERVO CIRCUIT



Notes:

- S601
- S602
- S603
- S604
- S605
- S606
- S607
- S608
- S609
- S610
- S611
- S612
- S613
- S701
- S790
- S791

Indicated vol
chassis take
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Important sa
Components
Furthermore
are used. W

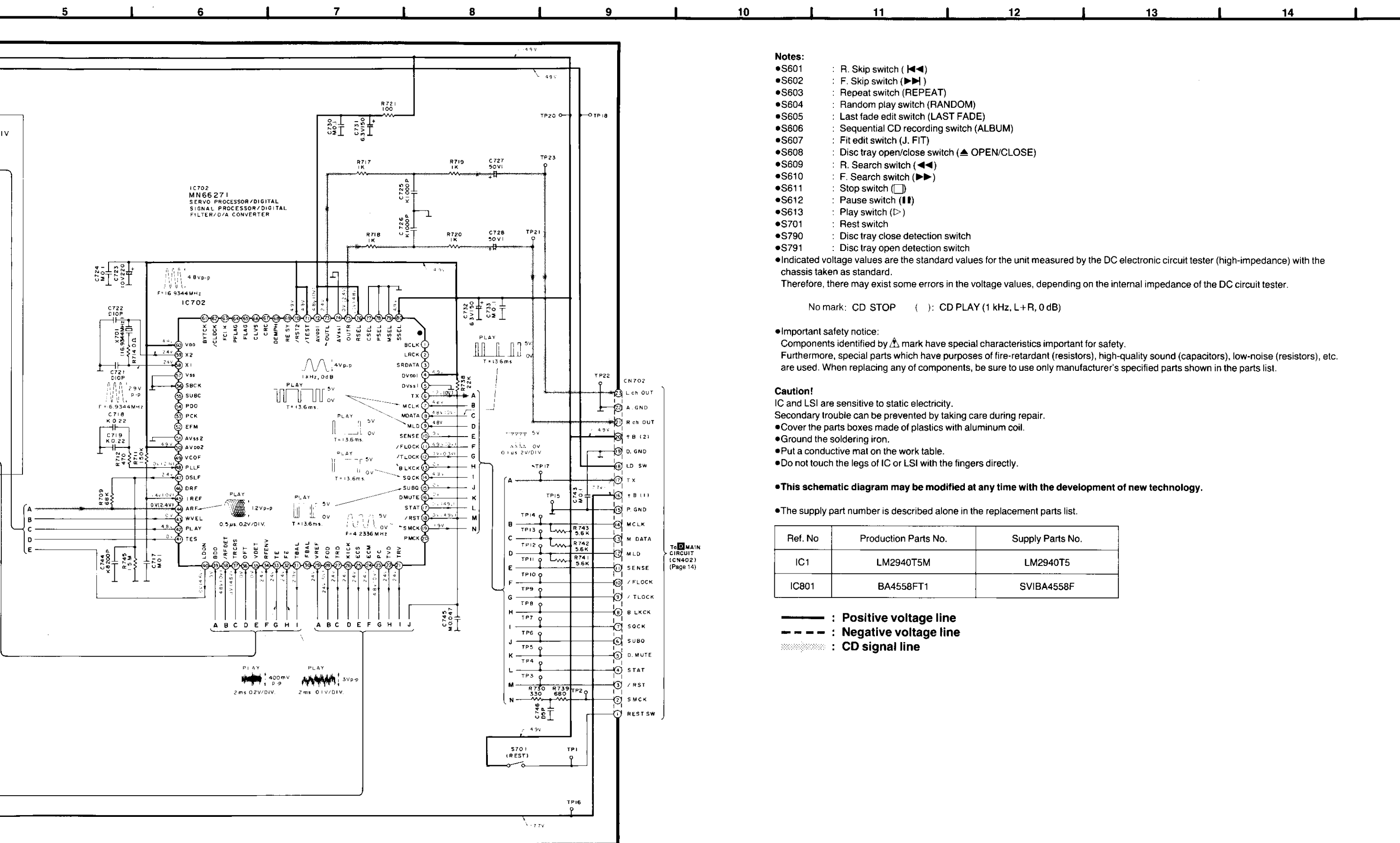
Caution!

IC and LSI are
Secondary tro
•Cover the pa
•Ground the s
•Put a conduc
•Do not touch

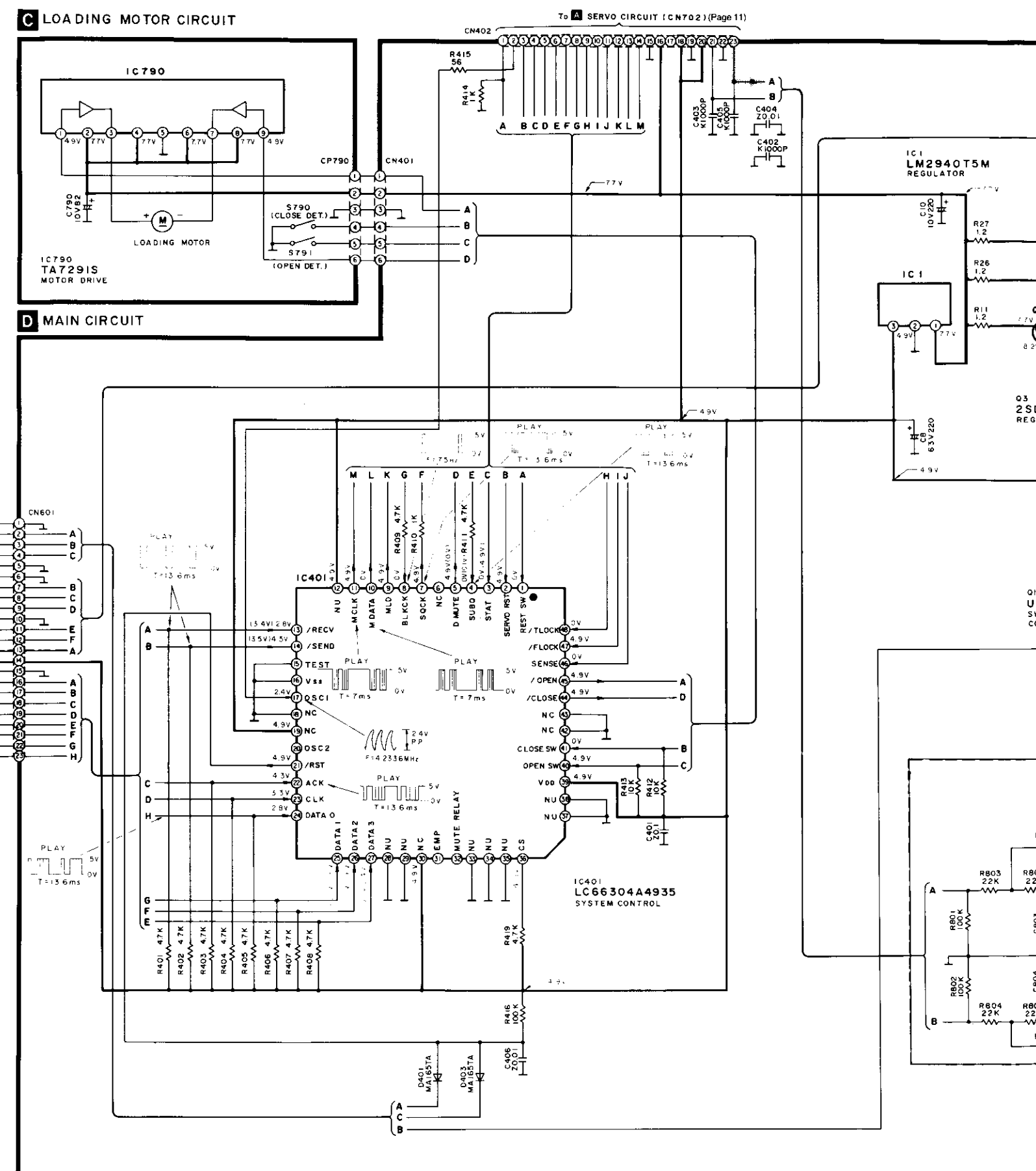
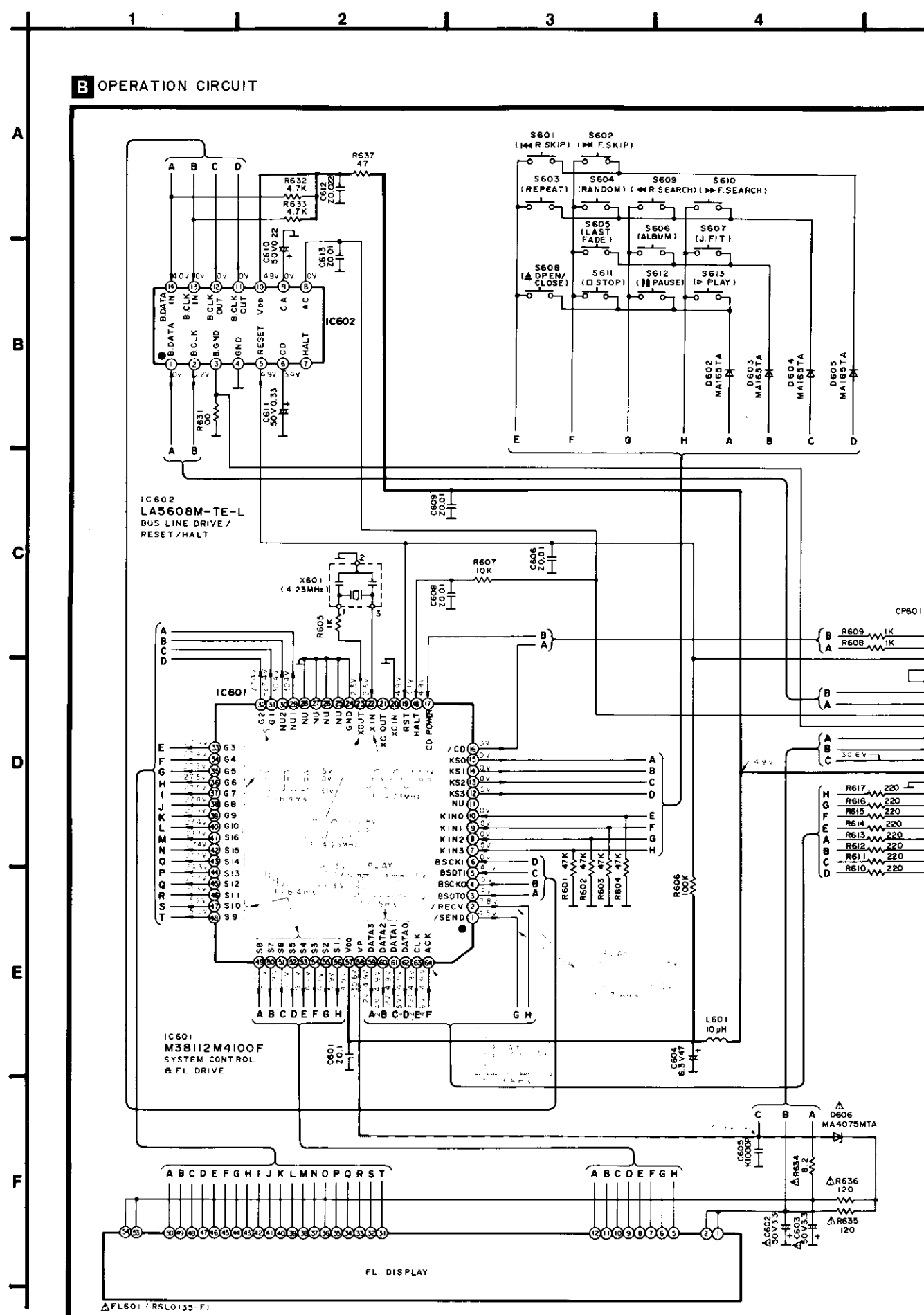
•This schem

•The supply p

Ref. No	
IC1	
IC801	



■ SCHEMATIC DIAGRAM • LOADING MOTOR, OPERATION AND MAIN CIRCUIT (Parts list on pages 33 and 34.)



CUIT (Parts list on pages 33 and 34.)

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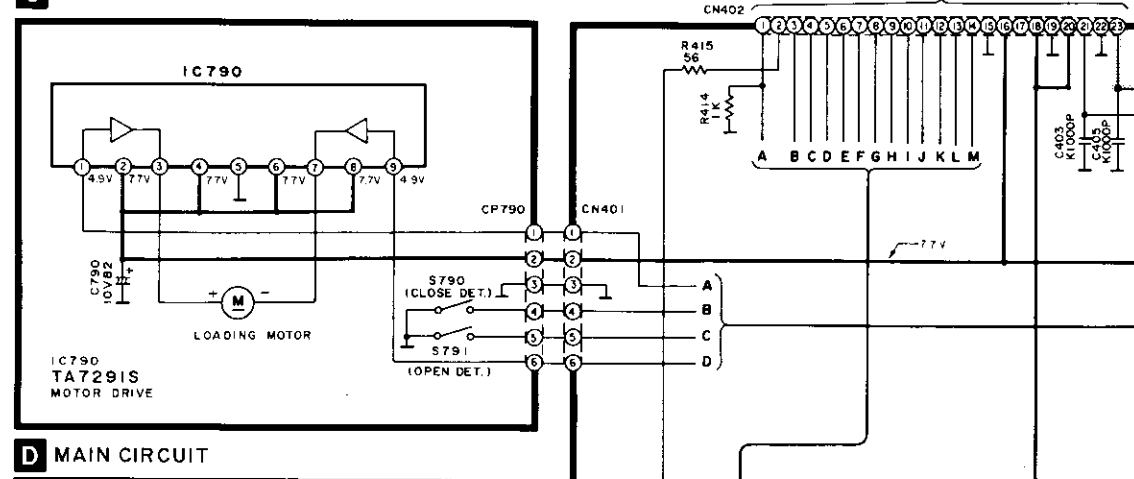
11

12

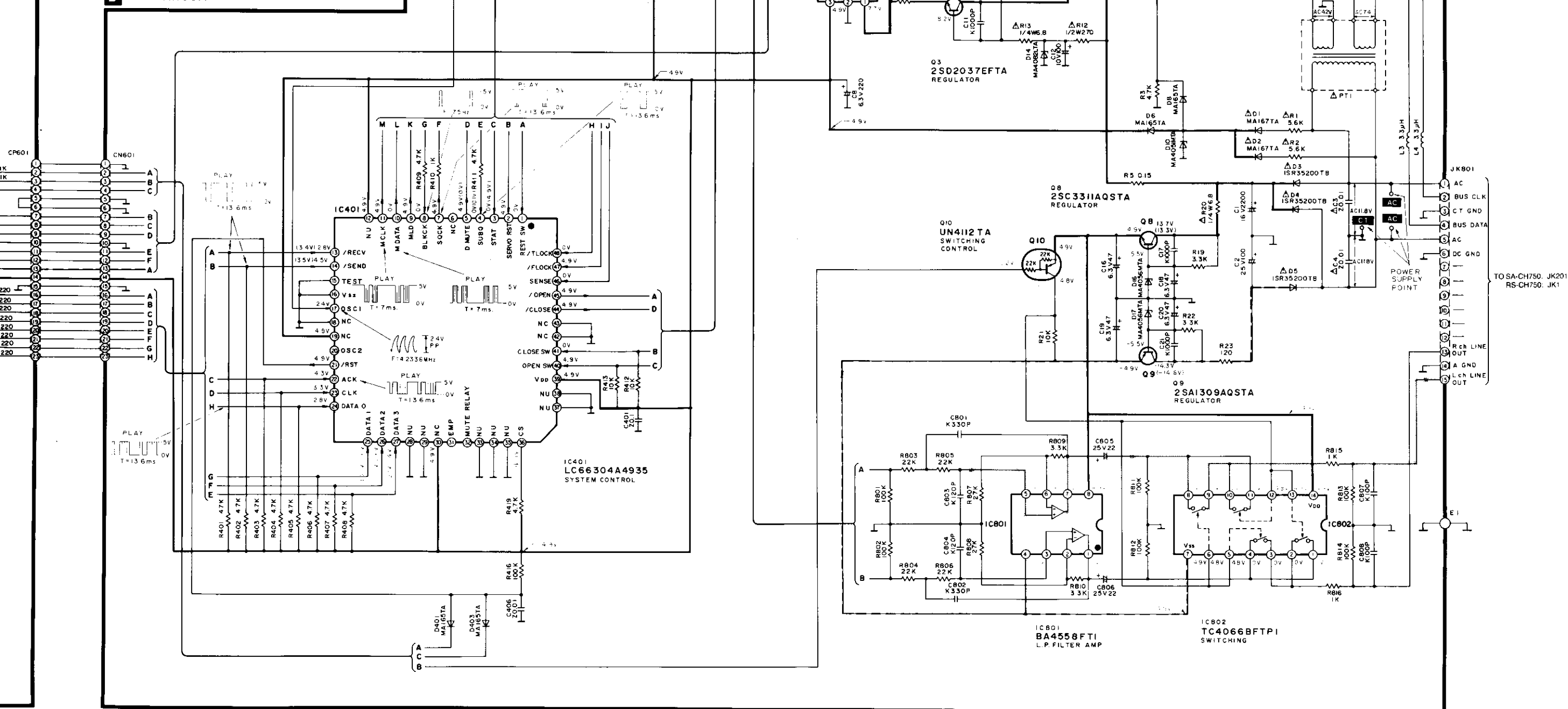
13

14

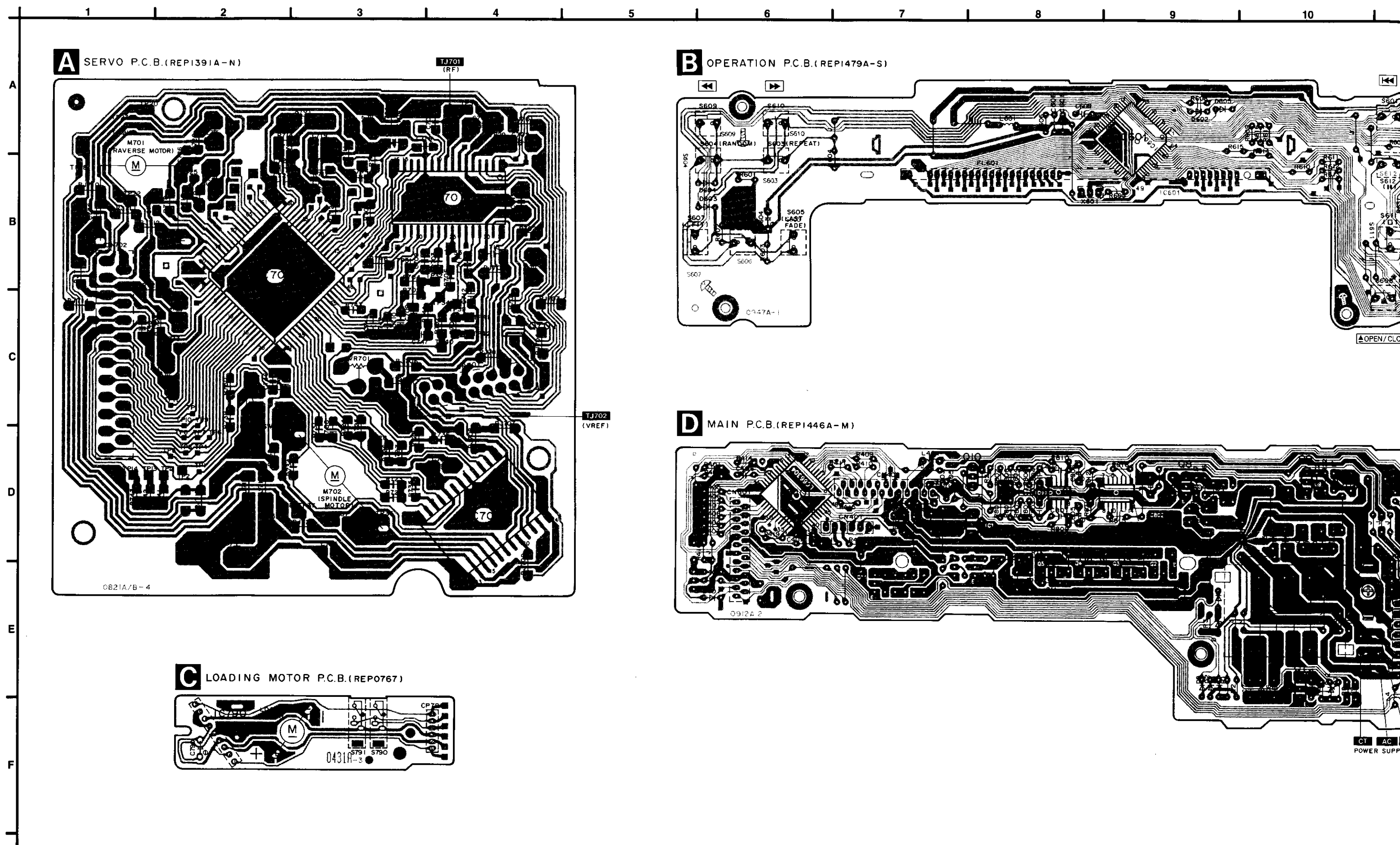
C LOADING MOTOR CIRCUIT



D MAIN CIRCUIT



■ PRINTED CIRCUIT BOARD DIAGRAM



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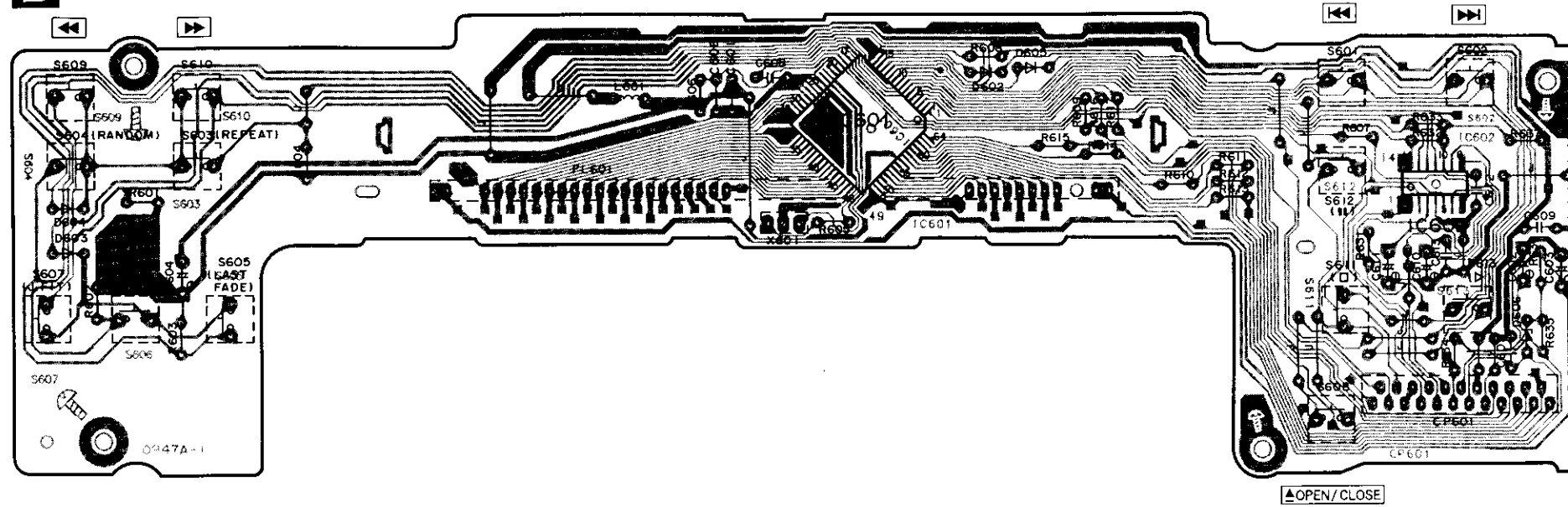
10

11

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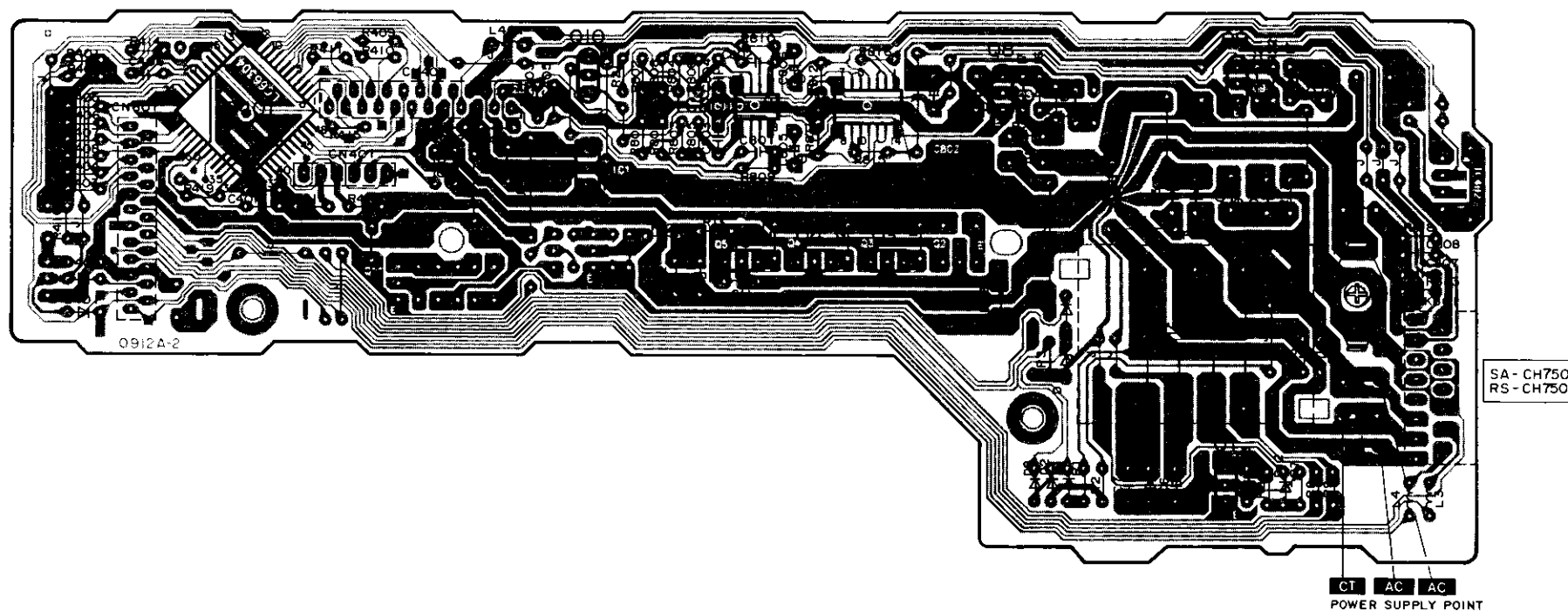
13

14

B OPERATION P.C.B.(REPI479A-S)

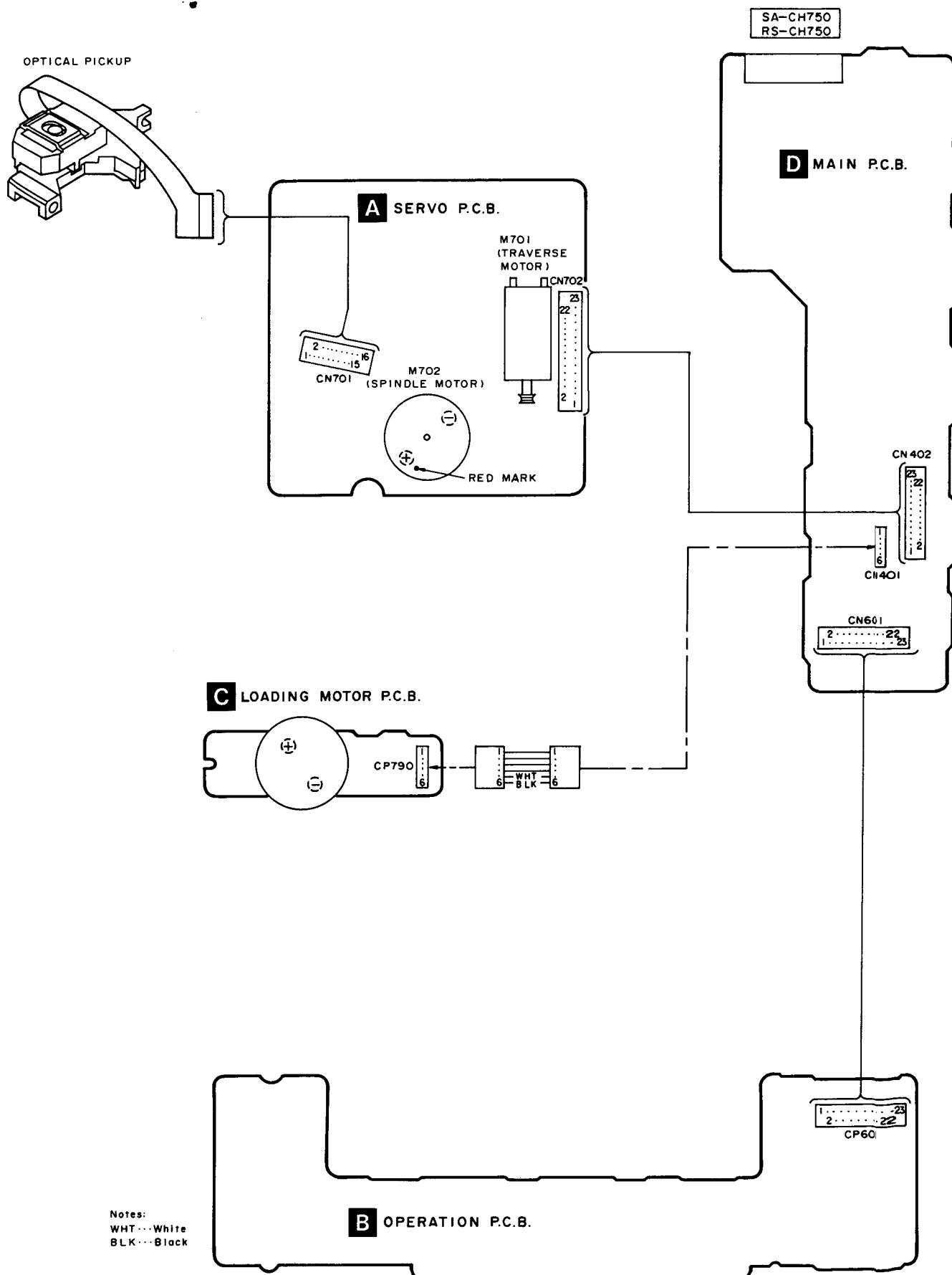
•Terminal guide of IC's, transistors and diodes

BA4558FT1 	TC4066BFTP1 	<table border="1"> <tr> <td>LA5608M-TE-L</td> <td>14Pin</td> </tr> <tr> <td>AN8802SCE1V</td> <td>32Pin</td> </tr> </table>	LA5608M-TE-L	14Pin	AN8802SCE1V	32Pin
LA5608M-TE-L	14Pin					
AN8802SCE1V	32Pin					
<table border="1"> <tr> <td>M38112M4100F</td> <td>64Pin</td> </tr> <tr> <td>MN66271</td> <td>80Pin</td> </tr> </table>	M38112M4100F	64Pin	MN66271	80Pin	LC66304A4935 	TA7291S
M38112M4100F	64Pin					
MN66271	80Pin					
LM2940T5M 	AN8389SE1 	2SA1309AQSTA 2SC3311AQSTA UN4112TA				
2SB1238QSTV6 	2SD2037EFTA 	2SB709STW 	MA4300MTA 			
MA165TA MA167TA MA185TA 1SR35200TB	MA4051MTA MA4056MTA MA4075MTA MA4082LTA					

D MAIN P.C.B.(REPI446A-M)

•This circuit board diagram may be modified at any time with the development of new technology.

■ WIRING CONNECTION DIAGRAM



■ MEASUREMENTS AND ADJUSTMENTS

Caution:

- It is very dangerous to look at or touch the laser beam. (Laser radiation is invisible.)
With the unit turned "on", laser radiation is emitted from the pickup lens.
Avoid exposure to the laser beam, especially when performing adjustments.

■ This unit (SL-CH750) is actuated by power supply from the tuner amplifier SA-CH750.

If you wish to actuate this unit without using the tuner amplifier SA-CH750 for checking or repairing, follow below procedure.

- Apply AC 10 V between **AC** (J1)–**CT** (J3)–**AC** (J2).

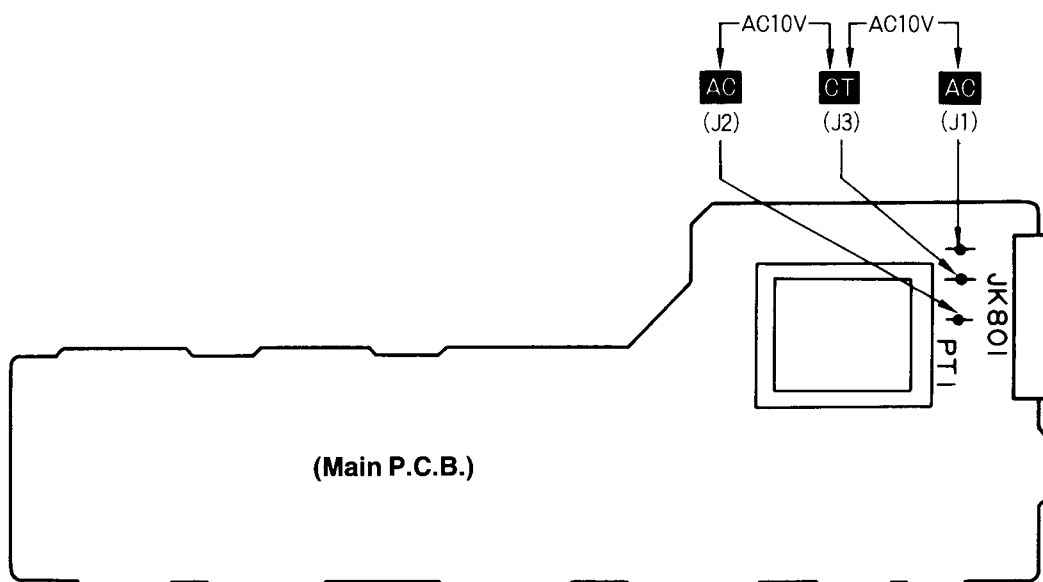


Fig. 1

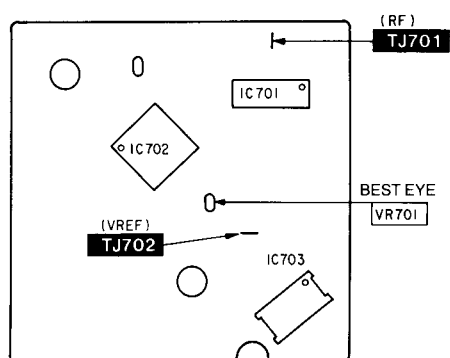


Fig. 2

Mechanical adjustment screw

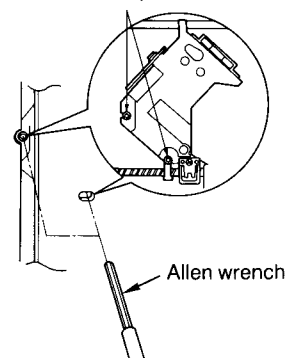


Fig. 3

Measuring Instruments and Special Tools

•Test disc

1. Playability test disc (SZZP1054C)
2. Uneven test disc (SZZP1056C)

•Allen wrench (M2.0) (SZZP1101C)

•Oscilloscope

(1) MECHANICAL ADJUSTMENT

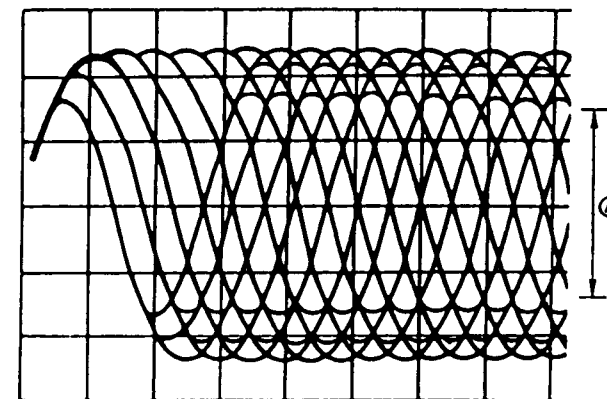
- When the traverse deck is replaced, making adjustments is not necessary. (The traverse deck ass'y is already adjusted.)
- Make adjustments to improve playability when the traverse deck has not been replaced. Make the electrical adjustments first.

1. Connect the oscilloscope's CH. 1 probe across **TJ701** (+) and **TJ702** (VREF) on the Servo P.C.B.

Oscilloscope setting:

VOLT 200 mV
 SWEEP 0.5 μ sec
 Input coupling AC

2. Switch the player power ON, and play track 19 on the test disc (SZZP1056C).
3. Leave the player in Play mode and place it as shown in the figure on the right.
4. Alternately adjust the two mechanical adjusting screws with the 2.0 mm allen wrench (SZZP1101C) until the RF signal amplitude on the oscilloscope is maximize. (Shown in Fig. 3)
5. After completing the adjustment, lock the mechanical adjustments with lock paint (RZZ0L01).



Ⓐ Maximize the amplitude.

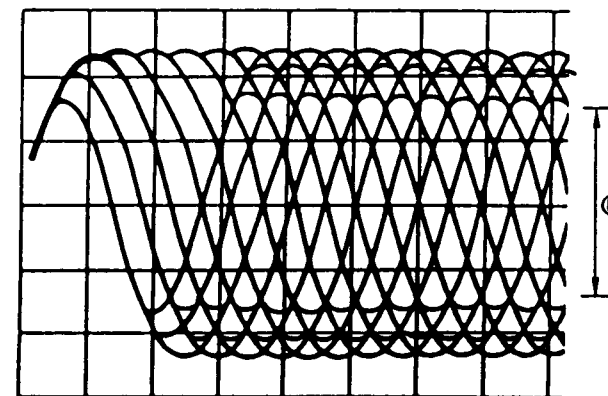
(2) BEST EYE (PD BALANCE) ADJUSTMENT

1. Connect the oscilloscope's CH. 1 probe across **TJ701** (+) and **TJ702** (VREF) on the Servo P.C.B.

Oscilloscope setting:

VOLT 200 mV
 SWEEP 0.5 μ sec
 Input coupling AC

2. Switch the player power ON, and play the 1 kHz (track 1) on test disc (SZZP1054C).
3. Adjust VR701 until the RF signal eye pattern amplitude is maximized. (Shown in Fig. 2)



Ⓑ Maximize the amplitude.

(3) CHECK OF PLAY OPERATION AFTER ADJUSTMENT

•Checking Skip Search

1. Play an ordinary musical program disc.
2. Press the skip button to check for normal skip search operation (in both the forward and reverse directions).

•Checking Manual Search

1. Play an ordinary musical program disc.
2. Press the manual search button to check for smooth manual search operations at either low or high speed (in both the forward and reverse directions).

•Checking Playability

1. Play the 0.7 mm black dot and the 0.7 mm wedge on the test disc (SZZP1054C) and verify that no sound skip or noise occurs.
2. Play the middle tracks of the uneven test disc and verify that no sound skip or noise occurs.

NEW DIGITAL SERVO CIRCUIT

This model employs a new digital servo circuit. Compared to the old digital servo circuit, the following points have been improved.

1. Reduced operated noise

Loading mechanism 2-level speed reducer

2. Reduced access time

[(old) 2.9 seconds $\rightarrow$ (new) 1.9 seconds]

Change of traverse gear

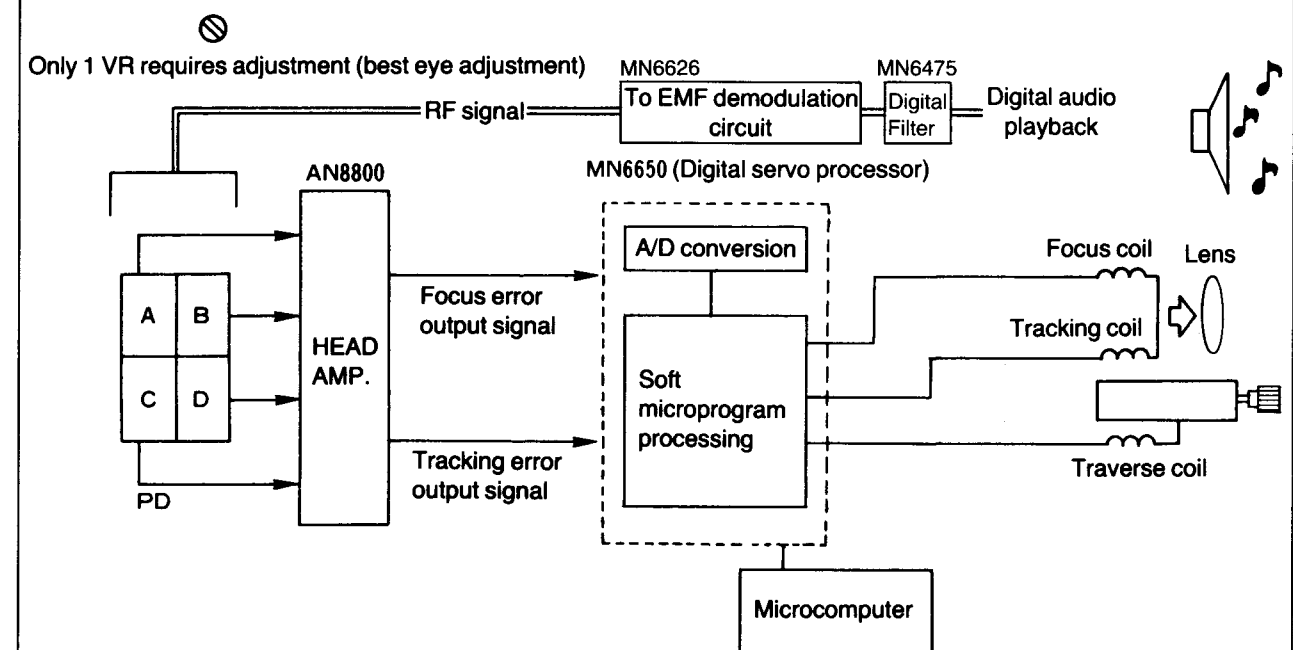
3. Improved vibration resistance

Rubber and spring 2-level floating mechanism
 [fo=50 Hz (old) $\rightarrow$ 20 Hz (new)]

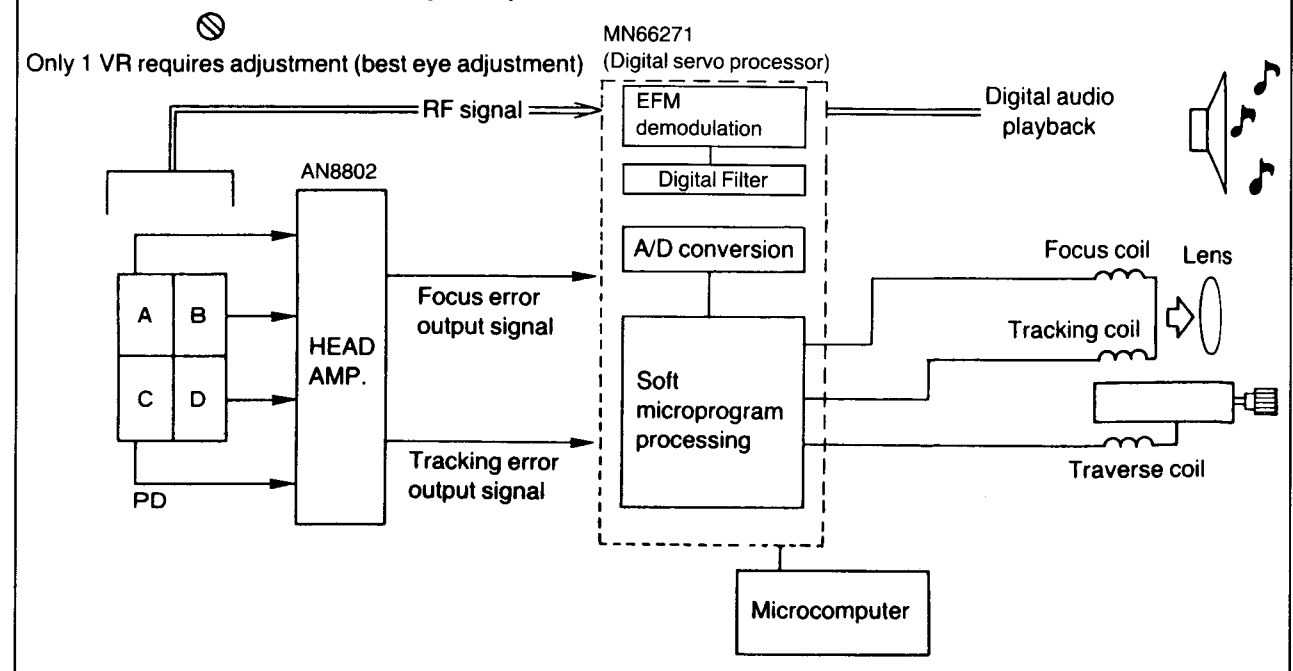
4. Reduced number of parts

Use of a single super IC tip
 3 chips (MN6626, MN6650, MN6475) are reduced to a single chip (MN66271)

DIGITAL SERVO SYSTEM (OLD)

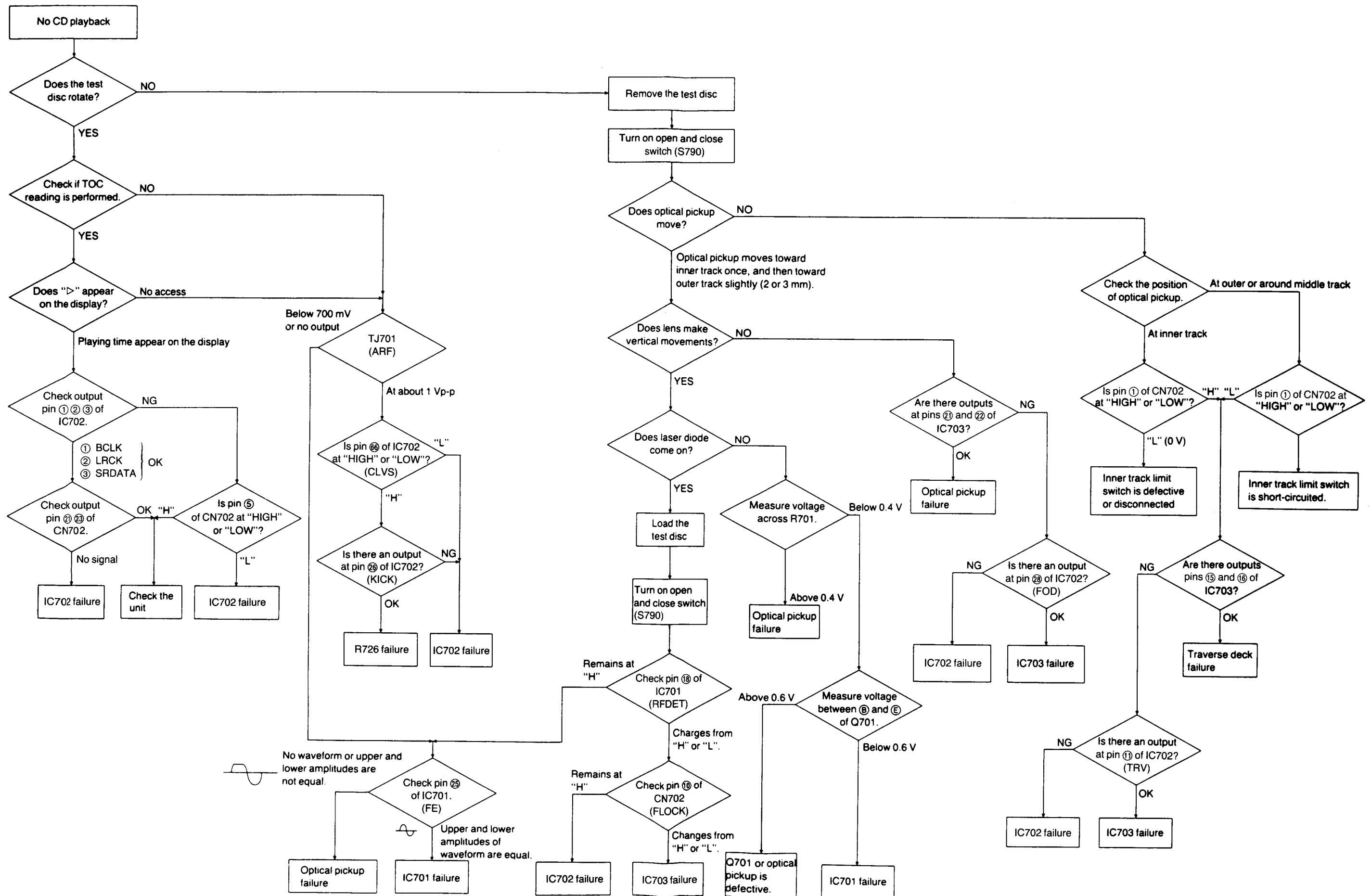


DIGITAL SERVO SYSTEM (NEW)



•Refer to the service manual for Model No. SL-CH7 (Order No. AD9104084C8) for information on "DIGITAL SERVO SYSTEM" and "CHECKING THE OPERATION PROBLEMS ON THE TRAVERSE DECK (OPTICAL PICKUP)".

TROUBLESHOOTING GUIDE



FUNCTION OF IC TERMINALS

IC401 (LC66304A4935)

Pin No.	Pin Function	I/O	Description
1	REST SW	I	Innermost track sense switch status
2	SERVO RST	I	Reset signal input
3	STAT	I	Status signal input
4	SUBQ	I	Subcode Q input
5	D MUTE	O	Muting signal output
6	NC	—	
7	SQCK	O	External clock for subcode Q register
8	BLKCK	I	Subcode block clock input
9	MLD	O	Microprocessor command load signal
10	MDATA	O	Microprocessor command data
11	MCLK	O	Microprocessor command clock
12	NU	—	Tied high
13	/RECV	I	Send enable
14	/SEND	I	Receive enable
15	TEST	—	GND
16	V _{SS}		
17	OSC1	I	Clock input from IC702
18	NC	—	GND
19	NC	—	Tied high
20	OSC2	—	
21	/RST	O	Reset signal output
22	ACK	I	Acknowledge input for communication with IC601
23	CLK	I	Clock for communication with IC601

Pin No.	Pin Function	I/O	Description
24	DATA0	I	Parallel 4-bit data from IC601
25	DATA1		
26	DATA2		
27	DATA3		
28	NU	—	GND
29		—	
30	NC	—	Tied high
31	EMP	—	
32	MUTE RELAY	—	
33	NU	—	GND
34		—	
35		—	
36	CS	—	
37	NU	—	GND
38		—	
39	V _{DD}	I	Power supply
40	OPEN SW	I	Disc tray "open" sense switch status
41	CLOSE SW	I	Disc tray "close" sense switch status
42	NC	—	GND
43		—	
44	/CLOSE	O	Close Disc Tray command output
45	/OPEN	O	Open Disc Tray command output
46	SENSE	I	Sense signal input
47	/FLOCK	I	Focus servo pull-in signal
48	/TLOCK	I	Tracking servo pull-in signal

IC601 (M38112M4100F)

Pin No.	Pin Function	I/O	Description
1	/SEND	O	Send enable for communication with IC401
2	/RECV	O	Receive enable for communication with IC401
3	BSDTO	O	Bus data output
4	BCKO	O	Bus clock output
5	BSDTI	I	Bus data input
6	BCKI	I	Bus clock input
7	KIN3	I	Key matrix input
8	KIN2		
9	KIN1		
10	KIN0		
11	NU	—	
12	KS3	O	Key scan strobe outputs
13	KS2		
14	KS1		
15	KS0		
16	/CD	O	CD muting signal output
17	CD POWER	I	CD drive power supply control input
18	HALT	I	Power failure sense signal input
19	RST	I	Reset signal input
20	XC IN	—	GND
21	XC OUT	—	

IC703 (AN8389SE1)

Pin No.	Terminal Name	I/O	Function
1	V _{CC}	I	Power supply
2	VREF	I	VREF input
3	IN4	I	Motor driver (4) input
4	IN3	I	Motor driver (3) input
5	GND	—	Ground connection
6	NC	—	No connection
7	NRESET	I	Reset input
8	GND	—	Ground connection
9	IN2	I	Motor driver (2) input
10	PC2	I	PC2 (power cut) input
11	IN1	I	Motor driver (1) input
12	PC1	I	PC1 (power cut) input (no use, open)

Pin No.	Pin Function	I/O	Description
22	X IN	I	Crystal oscillator terminal
23	X OUT	O	Crystal oscillator terminal
24	GND	—	GND
25	NU	—	GND
26			
27			
28			
29	NU1	O	
30	NU2		
31 }	G1 }	O	FL grid drive signal output
40	G10		
41 }	S16 }	O	FL segment signal output
56	S1		
57	V _{DD}	I	Power supply
58	VP	I	FL pull-down power supply
59	DATA3	O	Data output from IC401
60	DATA2		
61	DATA1		
62	DATA0		
63	CLK	O	Clock for communication with IC401
64	ACK	O	Acknowledge output for communication with IC401

Pin No.	Terminal Name	I/O	Function
13	PV _{CC} 1	I	Power supply (1) for driver
14	PGND1	—	Ground connection (1) for driver
15	D1—	O	Motor driver (1) reverse-action output
16	D1+	O	Motor driver (1) forward-action output
17	D2—	O	Motor driver (2) reverse-action output
18	D2+	O	Motor driver (2) forward-action output
19	D3—	O	Motor driver (3) reverse-action output
20	D3+	O	Motor driver (3) forward-action output
21	D4—	O	Motor driver (4) reverse-action output
22	D4+	O	Motor driver (4) forward-action output
23	PGND2	—	Ground connection (2) for driver
24	PV _{CC} 2	I	Power supply (2) for driver

IC701

Pin No.	
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●IC701 (AN8802SCE1V)

Pin No.	Terminal Name	I/O	Function
1	PDAD	I	PD A channel signal input with delay
2	PDA	I	PD A channel signal input without delay
3	LPD	I	Laser PD connection
4	LD	O	Power supply for LD driving
5	AMPI	I	RF amplifier input
6	Vcc	I	Power supply connection
7	AMPO	O	RF amplifier output (no use, open)
8	CAGC	I	AGC loop filter connection
9	ARF	O	RF AGC output
10	CENV	I	Capacitor connection for RF detection
11	CEA	I	Capacitor connection for HPF amplifier
12	GND	—	Ground connection
13	LDON	I	ON/OFF input of LD APC ("H": ON, "L": OFF)
14	TES	I	Tracking error shunt signal input ("H": shunt)
15	PLAY	I	Play signal input ("H": PLAY)
16	WVEL	I	WVEL control
17	BDO	O	BDO output
18	/RFDET	O	NRFDET output
19	CROSS	O	CROSS output
20	OFTR	O	OFTR output
21	VDET	O	VDET output
22	ENV	O	ENV output
23	TEBPF	I	Vibration detection input
24	TE	O	Tracking error output
25	FE	O	Focus error output
26	PTO	O	Potentioamplifier output (no use, open)
27	PTI	I	Potentioamplifier inversion input (no use, open)
28	TBAL	I	Tracking balance input
29	FBAL	I	Focus balance input
30	VREF	O	VREF output
31	PDB	I	PD B channel signal input without delay
32	PDBD	I	PD B channel signal input with delay

●IC702 (MN66271)

Pin No.	Terminal Name	I/O	Function
1	BCLK	O	Bit clock output for serial data (no used, open)
2	LRCK	O	L/R identification signal output (no use, open)
3	SRDATA	O	Serial data output (no used, open)
4	DV _{DD1}	I	Power supply input (for digital circuit)
5	DV _{SS1}	—	GND (for digital circuit)
6	TX	O	Digital audio interface signal output
7	MCLK	I	Microprocessor command clock signal input (Latches data at first transition)
8	MDATA	I	Microprocessor command data signal input
9	MLD	I	Microprocessor command load signal input
10	SENSE	O	Sence signal output (OFT, FESL, MAGEND, NAJEND, POSAD, SFG)
11	/FLOCK	O	Focus servo feeding signal output ("L": Feed)
12	/TLOCK	O	Tracking servo feeding signal output ("L": Feed)
13	BLKCK	O	Sub-code block clock signal output (fBLKCK=75 Hz during normal playback)
14	SQCK	I	External clock signal input for sub-code Q register
15	SUBQ	O	Sub-code Q code output
16	DMUTE	I	Muting input ("H": Mute)
17	STAT	O	Status signal output (CRC, CUE, CLVS, TTSTVP, FCLV, SQCK)
18	/RST	I	Reset input
19	SMCK	O	1/2-divided clock signal of crystal oscillating at MSEL="H" (fSMCK=8.4672 MHz) 1/4-divided clock signal of crystal oscillating at MSEL="L" (fSMCK=4.2336 MHz)
20	PMCK	O	1/192-divided clock signal of crystal oscillating (fPMCK=88.2 KHz) (no use, open)
21	TRV	O	Traverse forced feed output
22	TVD	O	Traverse drive output
23	PC	O	Spindle motor ON signal output ("L": ON)
24	ECM	O	Spindle motor drive signal output (forced mode output)
25	ECS	O	Spindle motor drive signal output (servo error signal output)
26	KICK	O	Kick pulse output
27	TRD	O	Tracking drive output
28	FOD	O	Focus drive output

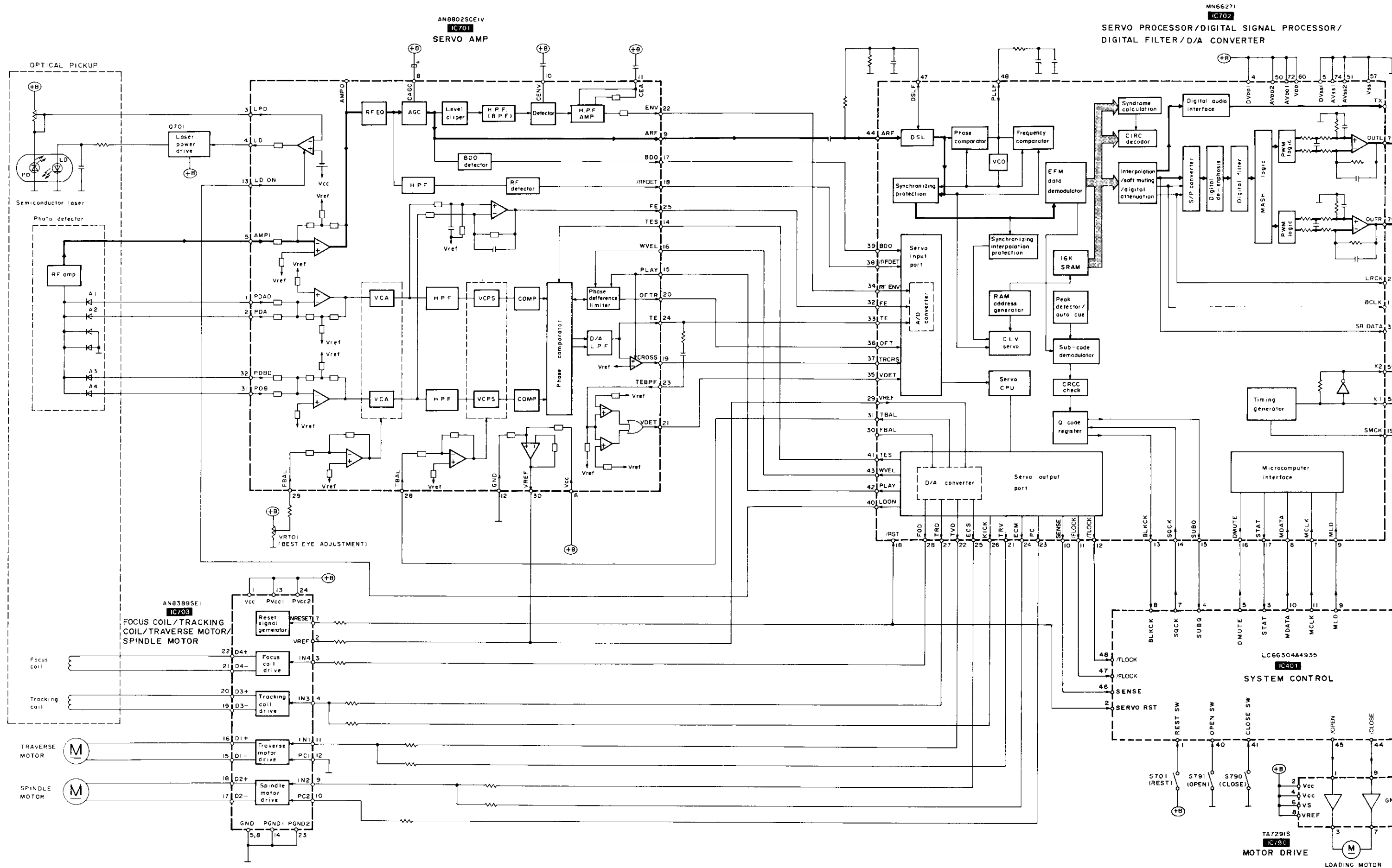
Pin No.	Terminal Name	I/O	Function
29	VREF	I	D/A (drive) output (TVD, ECS, TRD, FOD, FBAL, TBAL) Reference voltage input
30	FBAL	O	Focus balance adjustment output (no use, open)
31	TBAL	O	Tracking balance adjustment output
32	FE	I	Focus error signal input (analog input)
33	TE	I	Tracking error signal input (analog input)
34	RFENV	I	RF envelope signal input
35	VDET	I	Vibration detection signal input ("H": detection)
36	OFT	I	Off-track signal input ("H": off track)
37	TRCRS	I	Track cross signal input
38	/RFDET	I	RF detection signal input ("L": detection)
39	BDO	I	Dropout signal input ("H": Dropout)
40	LDON	O	Laser on signal output ("H": ON)
41	TES	O	Tracking error shunt signal output ("H": shunt)
42	PLAY	O	Play signal out ("H": PLAY)
43	WVEL	O	Double speed status signal output ("H": Double speed)
44	ARF	I	RF signal input
45	IREF	I	Reference current input
46	DRF	I	DSL bias (no use, open)
47	DSLIF	I/O	DSL loop filter
48	PLLIF	I/O	PLL loop filter
49	VCOF	I/O	VCO loop filter (no use, open)
50	AV _{DD2}	I	Power supply input (for analog circuit)
51	AV _{SS2}	—	GND (for analog circuit)
52	EFM	O	EFM signal output (not use, open)
53	PCK	O	PLL extraction clock output (fPCK=4.321 MHz during normal playback) (no use, open)
54	PDO	O	Phase comparison signal of EFM and PCK signals (no use, open)
55	SUBC	O	Sub-code serial data output (no use, open)
56	SBCK	I	Clock input for sub-code serial data (no use, open)
57	V _{SS}	—	GND
58	X1	I	Crystal oscillating circuit input (f=16.9344 MHz)
59	X2	O	Crystal oscillation circuit output (f=16.9344 MHz)
60	V _{DD}	I	Power supply input (for oscillating circuit)
61	BYTCK	O	Byte clock output (no use, open)

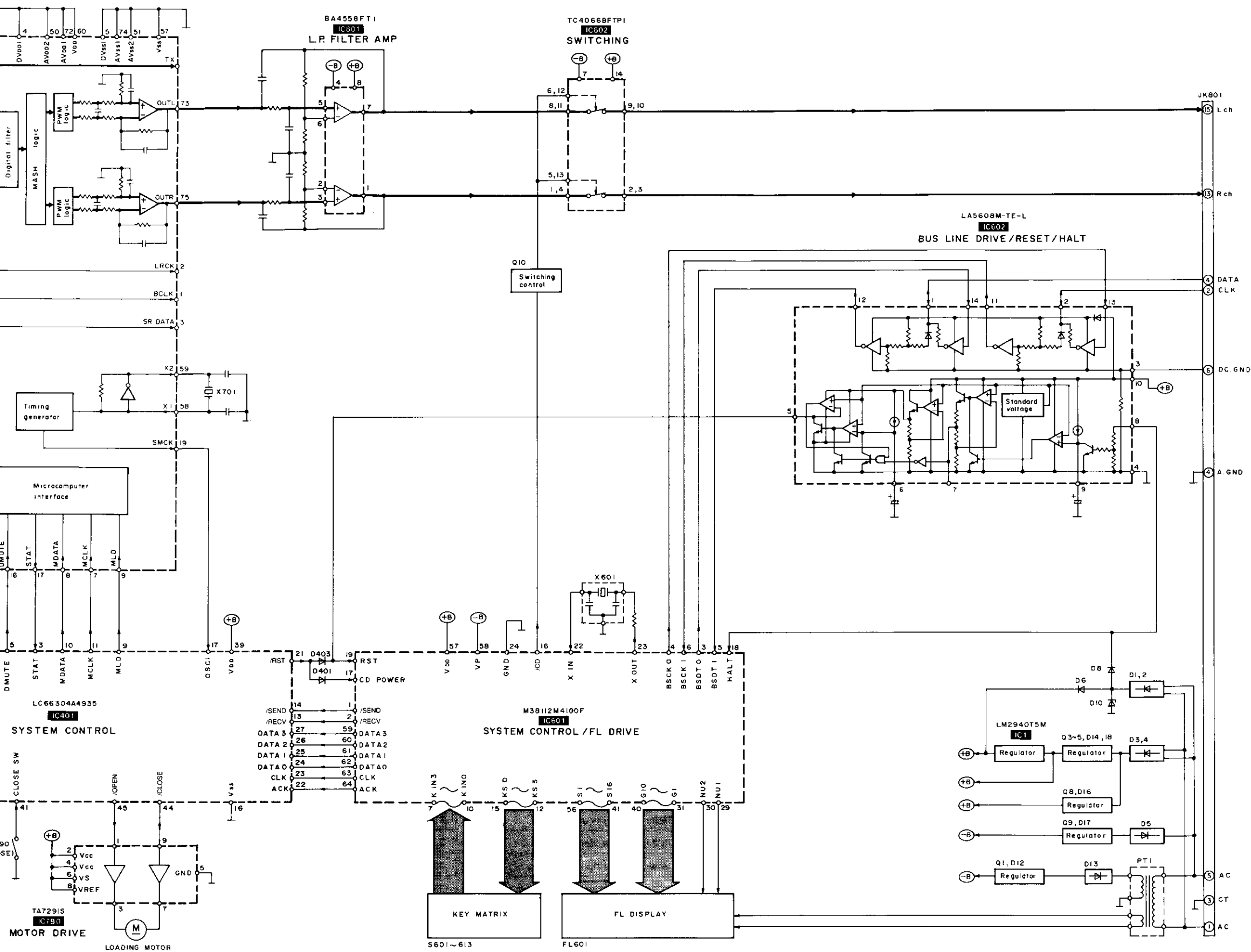
Pin No.	Terminal Name	I/O	Function
62	/CLDCK	O	Sub-code frame clock signal output (fCLDCK=7.35 kHz during normal playback)
63	FCLK	O	Crystal frame clock signal output (fFCLK=7.35 kHz, double=14.7 kHz)
64	PFLAG	O	Interpolation flag output ("H": Interpolation) (no use, open)
65	FLAG	O	Flage output (no use, open)
66	CLVS	O	Spindle servo phase synchronizing signal output ("H": CLV, "L": rough servo) (no use, open)
67	CRC	O	Sub-code CRC checked output ("H": OK, "L": NG) (no use, open)
68	DEMPH	O	De-emphasis ON signal output ("H": ON) (no use, open)
69	RESY	O	Frame resynchronizing signal output (no use, open)
70	/RST2	I	Reset input through MASH circuit ("L": Reset)
71	/TEST	I	Test input
72	AV _{DD1}	I	Power supply input (for analog circuit)
73	OUTL	O	Left channel audio signal output
74	AV _{SS1}	—	GND
75	OUTR	O	Right channel audio signal output
76	RSEL	I	RF signal polarity assignment input (at "H" level, RSEL="H"; at "L" level, RSEL=L)
77	CSEL	I	Crystal oscillating frequency designation input ("L": 16.9344 MHz, "H": 33/8688 MHz)
78	PSEL	I	Test input (normally, "L") (no use, open)
79	MSEL	I	Output frequency switching for SMCK terminal "H": SMCK=8.4672 MHz "L": SMCK=4.2336 MHz (no use, open)
80	SSEL	I	Output mode switching of SUBQ terminal ("H": Q code buffer mode)

BLOCK DIAGRAM

SL-CH750

SL-CH750



L SIGNAL PROCESSOR/
VERTER

■ REPLACEMENT PARTS LIST

Notes: *Important safety notice:

Components identified by Δ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)

Parts without these indications can be used for all areas.

*Warning: This product uses a diode. Refer to caution statements on page 2.

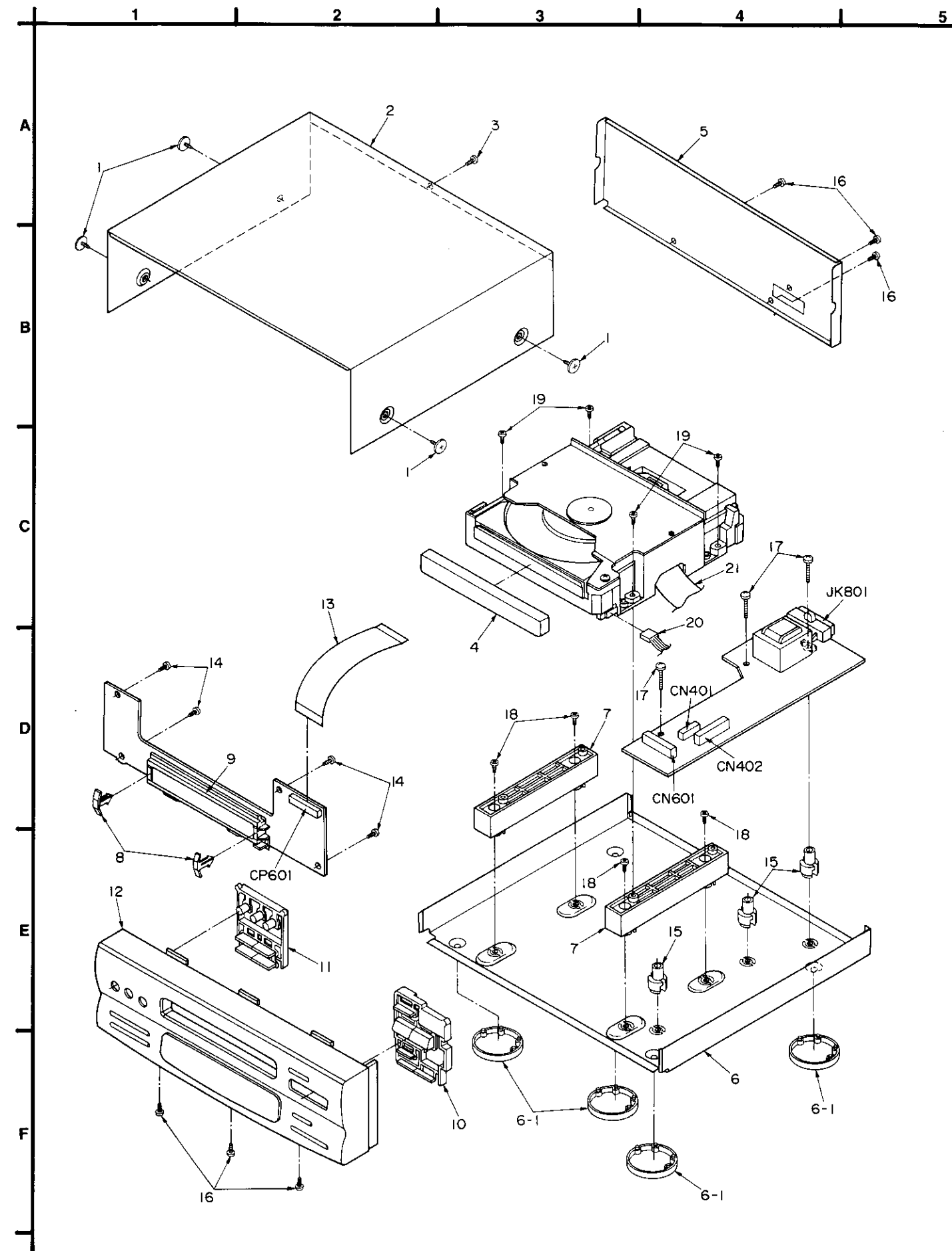
Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
INTEGRATED CIRCUIT(S)				DISPLAY(S)			
IC1	LM2940T5	I. C. REGULATOR		FL601	RSL0135-F	FL DISPLAY	Δ
IC401	LC66304A4935	I. C. SYSTEM CONTROL		SWITCH(ES)			
IC601	M38112M4100F	I. C. FL. DRIVE/SYSTEM CONT.		S601	EVQ21405R	SW. R. SKIP	
IC602	LA5608M-TE-L	I. C. BUS LINE/HALT/RESET		S602	EVQ21405R	SW. F. SKIP	
IC701	AN8802SCE1V	I. C. SERVO AMP.		S603	EVQ21405R	SW. REPEAT	
IC702	MN66271	I. C. SERVO PROCESSOR		S604	EVQ21405R	SW. RANDOM	
IC703	AN8389SE1	I. C. MOTOR DRIVE		S605	EVQ21405R	SW. LAST FADE	
IC790	TA7291S	I. C. MOTOR DRIVE		S606	EVQ21405R	SW. ALBUM	
IC801	SV1BA4558F	I. C. L. P. F.		S607	EVQ21405R	SW. JUST FIT	
IC802	TC4066BFTP1	I. C. SWITCHING		S608	EVQ21405R	SW. OPEN/CLOSE	
TRANSISTOR(S)				S609	EVQ21405R	SW. R. SEARCH	
Q1	2SB1238QSTV6	TRANSISTOR		S610	EVQ21405R	SW. F. SEARCH	
Q3-5	2SD2037EFTA	TRANSISTOR		S611	EVQ21405R	SW. STOP	
Q8	2SC3311A-Q	TRANSISTOR		S612	EVQ21405R	SW. PAUSE	
Q9	2SA1309A-R	TRANSISTOR		S613	EVQ21405R	SW. PLAY	
Q10	UN4112	TRANSISTOR		S701	RSM0006-P	SW. REST	
Q701	2SB709S	TRANSISTOR		S790	RSH1A005	SW. LOADING CLOSE DETECT	
DIODE(S)				S791	RSH1A005	SW. LOADING OPEN DETECT	
D1, 2	MA167	DIODE	Δ	CONNECTOR(S)			
D3-5	1SR35200TB	DIODE	Δ	CN401	RJT029W06VT	CONNECTOR(6P)	
D6	MA165	DIODE		CN402	RJS1A6823	SOCKET(23P)	
D8	MA165	DIODE		CN601	RJS1A6823	SOCKET(23P)	
D10	MA4051MTA	DIODE		CN701	RJU035T016-1	SOCKET(16P)	
D12	MA4300M	DIODE		CN702	RJS1A6723-1Q	SOCKET(23P)	
D13	MA185TA	DIODE	Δ	CP601	RJS1A6723-Q	SOCKET(23P)	
D14	MA4082LTA	DIODE		CP790	RJP6G17ZA	CONNECTOR(6P)	
D16, 17	MA4056MTA	DIODE		JK801	RJT065K15	CONNECTOR(15P)	
D18	1SR35200TB	DIODE		EARTH TERMINAL(S)			
D401	MA165	DIODE		E1	SNE1004-1	GND PLATE	
D403	MA165	DIODE		TRANSFORMER(S)			
D602-605	MA165	DIODE		PT1	RTP114G003	POWER TRANSFORMER	Δ
D606	MA4075MTA	DIODE	Δ	TEST JUMPER(S)			
COIL(S)				TJ701	RRJ8GET001H	TEST JUMPER	
L3, 4	ELEXT3R3KA9	COIL		TJ702	RRJ8GET001H	TEST JUMPER	
L601	ELEXT100KA9	COIL		VARIABLE RESISTOR(S)			
OSCILLATOR(S)				VR701	EVNDXAA00B14	V. R. BEST EYE ADJ.	
X601	RSXY4M23M01T	OSCILLATOR		OSCILLATOR(S)			
X701	RSXZ16M9M02T	OSCILLATOR					

Notes : * Capacity values are in microfarads (μ F) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)

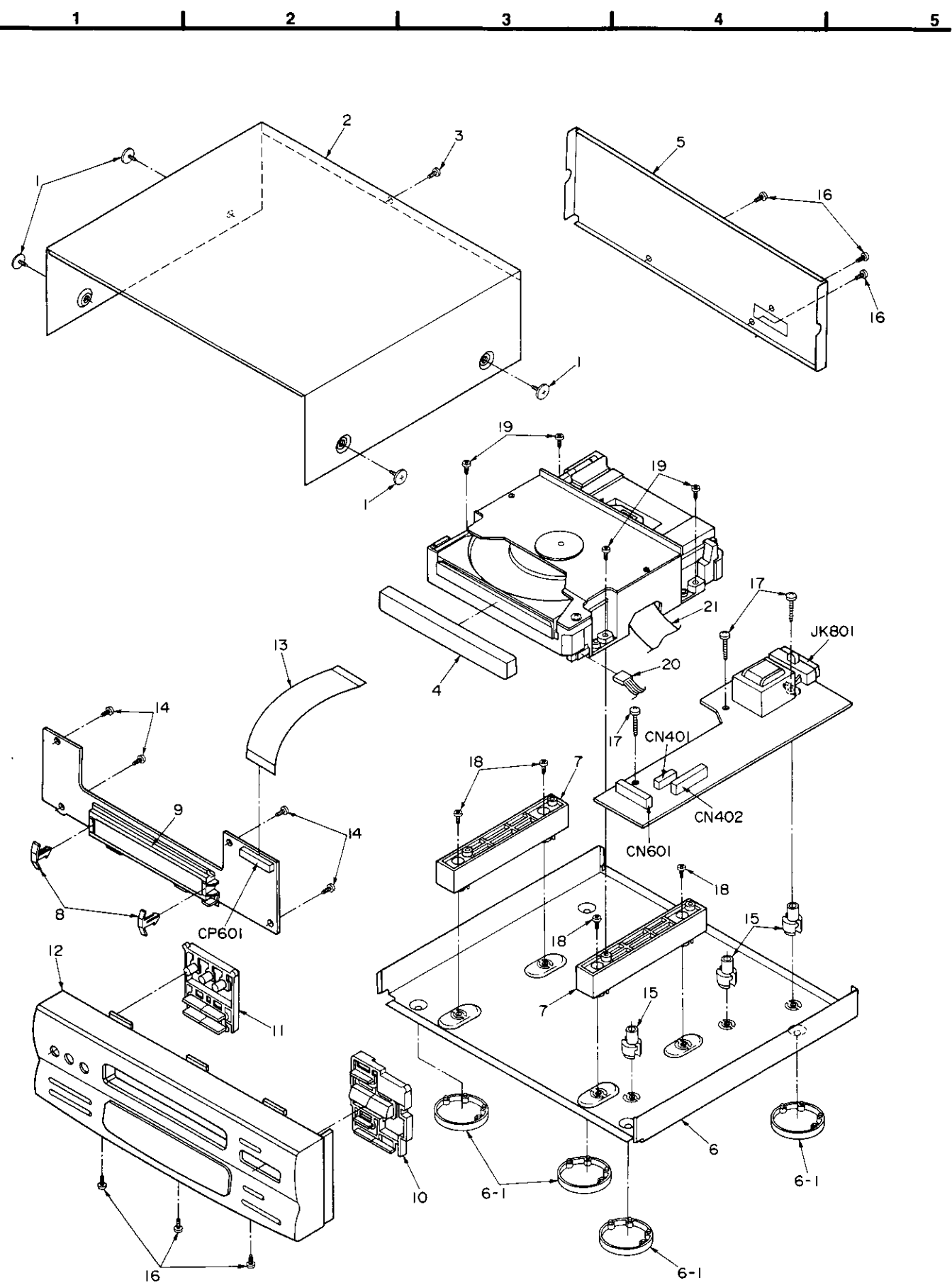
Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
RESISTORS			R723	ERJ6GEYJ182V	1/10W 1.8K	C608, 609	ECBT1E103ZF	25V 0.01U
R1, 2	ERDS2TJ562	1/4W 5.6K Δ	R724	ERJ6GEYJ333V	1/10W 33K	C610	ECEA1HMSR22B	50V 0.22U
R3	ERDS2TJ472	1/4W 4.7K	R725	ERJ6GEYJ472V	1/10W 4.7K	C611	ECEA1HMSR33B	50V 0.33U
R5	ERQ16NKR15E	1W 0.15	R726	ERJ6GEYJ473V	1/10W 47K	C612	ECBT1E223ZF	25V 0.022U
R7	ERDS2TJ562	1/4W 5.6K	R727	ERJ6GEYJ103V	1/10W 10K	C613	ECBT1E103ZF	25V 0.01U
R8	ERDS2TJ8R2T	1/4W 8.2 Δ	R728	ERJ6GEYJ392V	1/10W 3.9K	C701	ECEA0JKA220	6.3V 22U
R9	ERDS2TJ6R8	1/4W 6.8 Δ	R730	ERJ6GEYJ331V	1/10W 330	C702, 705	ECEA1HKA0101	50V 1U
R11	ERDS2TJ1R2	1/4W 1.2	R731	ERJ6GEYJ392V	1/10W 3.9K	C703	ECEA0JKA1011	6.3V 100U
R12	ERDS1FVJ271T	1/2W 270 Δ	R734-736	ERJ6GEYJ101V	1/10W 100	C704	ECUZ1E104MBN	25V 0.1U
R13	ERD2FCVJ6R8T	1/4W 6.8 Δ	R738	ERJ6GEYJ223V	1/10W 22K	C706	ECUE1H101JCN	50V 100P
R19	ERDS2TJ332	1/4W 3.3K	R739	ERJ6GEYJ681V	1/10W 680	C708	ECUE1H472KBN	50V 4700P
R20	ERD2FCVJ6R8T	1/4W 6.8 Δ	R741-743	ERJ6GEYJ562V	1/10W 5.6K	C709	ECUE1C473KBN	16V 0.047U
R21	ERDS2TJ103	1/4W 10K	R744	ERJ6GEYJ103V	1/10W 10K	C710	ECUE1H152KBN	50V 1500P
R22	ERDS2TJ332	1/4W 3.3K	R745	ERJ6GEYJ155V	1/10W 1.5M	C711, 712	ECUZ1E104MBN	25V 0.1U
R23	ERDS2EJ121	1/4W 120	R746	ERJ6GEYJ103V	1/8W 10K	C713	ECUV1C104MBM	16V 0.1U
R24	ERDS2TJ471	1/4W 470	R747	ERJ6GEYJ473V	1/10W 47K	C714	ECEA0JKA1011	6.3V 100U
R26, 27	ERDS2TJ1R2	1/4W 1.2	R801, 802	ERDS2TJ104	1/4W 100K	C715	ECEA0JKA4701	6.3V 47U
R401-409	ERDS2TJ472	1/4W 4.7K	R803-806	ERDS2TJ223	1/4W 22K	C716	ECUE1H561KBN	50V 560P
R410, 414	ERDS2TJ102	1/4W 1K	R807, 808	ERDS2TJ273	1/4W 27K	C717	ECUZ1E104MBN	25V 0.1U
R411	ERDS2TJ472	1/4W 4.7K	R809, 810	ERDS2TJ332	1/4W 3.3K	C718, 719	ECUV1C224KBN	16V 0.22U
R412, 413	ERDS2TJ103	1/4W 10K	R811-814	ERDS2TJ104	1/4W 100K	C721, 722	ECUE1H100DCN	50V 10P
R415	ERDS2TJ560T	1/4W 56	R815, 816	ERDS2TJ102	1/4W 1K	C723	ECEA1AKA2211	10V 220U
R416, 606	ERDS2TJ104	1/4W 100K	CHIP JUMPERS			C724	ECUV1C104MBM	16V 0.1U
R419	ERDS2TJ472	1/4W 4.7K	RJ701-717	ERJ8GEYOR00A	1/10W 0	C725, 726	ECUE1H102KBN	50V 1000P
R601-604	ERDS2TJ473	1/4W 47K	RJ721, 722	ERJ8GEYOR00A	1/10W 0	C727, 728	ECEA1HKA0101	50V 1U
R605	ERDS2TJ102	1/4W 1K	RJ724-726	ERJ8GEYOR00A	1/10W 0	C730	ECUZ1E104MBN	25V 0.1U
R607	ERDS2TJ103	1/4W 10K	CAPACITORS			C731, 732	ECA05SD1511	6.3V 150U
R608, 609	ERDS2TJ102	1/4W 1K	C1	ECA1CM222B	16V 2200U	C733	ECUZ1E104MBN	25V 0.1U
R610-617	ERDS2TJ221	1/4W 220	C2	ECA1EM101B	25V 100U	C734	ECEA1AKA2211	10V 220U
R631	ERDS2TJ101	1/4W 100	C3, 4	ECBT1E103ZF	25V 0.01U Δ	C735-737	ECUZ1E104MBN	25V 0.1U
R632, 633	ERDS2TJ472	1/4W 4.7K	C5, 11	ECBT1H102KB5	50V 1000P	C738	ECUV1C154KBN	16V 0.15U
R634	ERDS2TJ8R2T	1/4W 8.2 Δ	C6	ECA1HM101B	50V 100U	C742	ECUV1E273KBN	25V 0.027U
R635, 636	ERDS2EJ121	1/4W 120 Δ	C7	ECKR2H1022F5	500V 1000P Δ	C743	ECUZ1E104MBN	25V 0.1U
R637	ERDS2TJ470	1/4W 47	C8	ECEA0JKA221B	6.3V 220U	C744	ECUE1E822KBN	25V 8200P
R701	ERJ6GEYJ100	1/10W 10	C10	ECEA1AKA221Q	10V 220U	C745	ECUE1C473MBN	16V 0.047U
R702	ERJ6GEYJ471V	1/10W 470	C12	ECEA1AKA101B	10V 100U	C746	ECUE1H050DCN	50V 5P
R703	ERJ6GEYJ823	1/10W 82K	C16	ECEA0JKA470B	6.3V 47U	C747	ECUE1H222KBN	50V 2200P
R704, 706	ERJ6GEYJ102A	1/10W 1K	C17	ECBT1H102KB5	50V 1000P	C748	ECUV1H271KBN	50V 270P
R705	ERJ6GEYJ103V	1/10W 10K	C18-20	ECEA0JKA470B	6.3V 47U	C790	ECA1AKF820E	10V 82U
R707	ERJ6GEYJ473V	1/10W 47K	C21, 605	ECBT1H102KB5	50V 1000P	C801, 802	ECBT1H331KB5	50V 330P
R708	ERJ6GEYJ224V	1/10W 220K	C401, 601	ECBT1H104ZF5	50V 0.1U	C803, 804	ECBT1H121KB5	50V 120P
R709	ERJ6GEYJ683V	1/10W 68K	C402, 403	ECBT1H102KB5	50V 1000P	C805, 806	ECEA1EKA220B	25V 22U
R711	ERJ6GEYJ154V	1/10W 150K	C404	ECBT1E103ZF	25V 0.01U	C807, 808	ECBT1H101KB5	50V 100P
R712	ERJ6GEYJ471V	1/10W 470	C405	ECBT1H102KB5	50V 1000P			
R714	ERJ6GEYOR00A	1/10W 0.00	C406, 606	ECBT1E103ZF	25V 0.01U			
R717-720	ERJ6GEYJ102A	1/10W 1K	C602, 603	ECEA1HMS3R3B	50V 3.3U Δ			
R721	ERJ8GEYJ101V	1/8W 100	C604	ECEA0JKA470	6.3V 47U			
R722	ERJ6GEYJ473V	1/10W 47K						

■ CABINET PARTS LOCATION

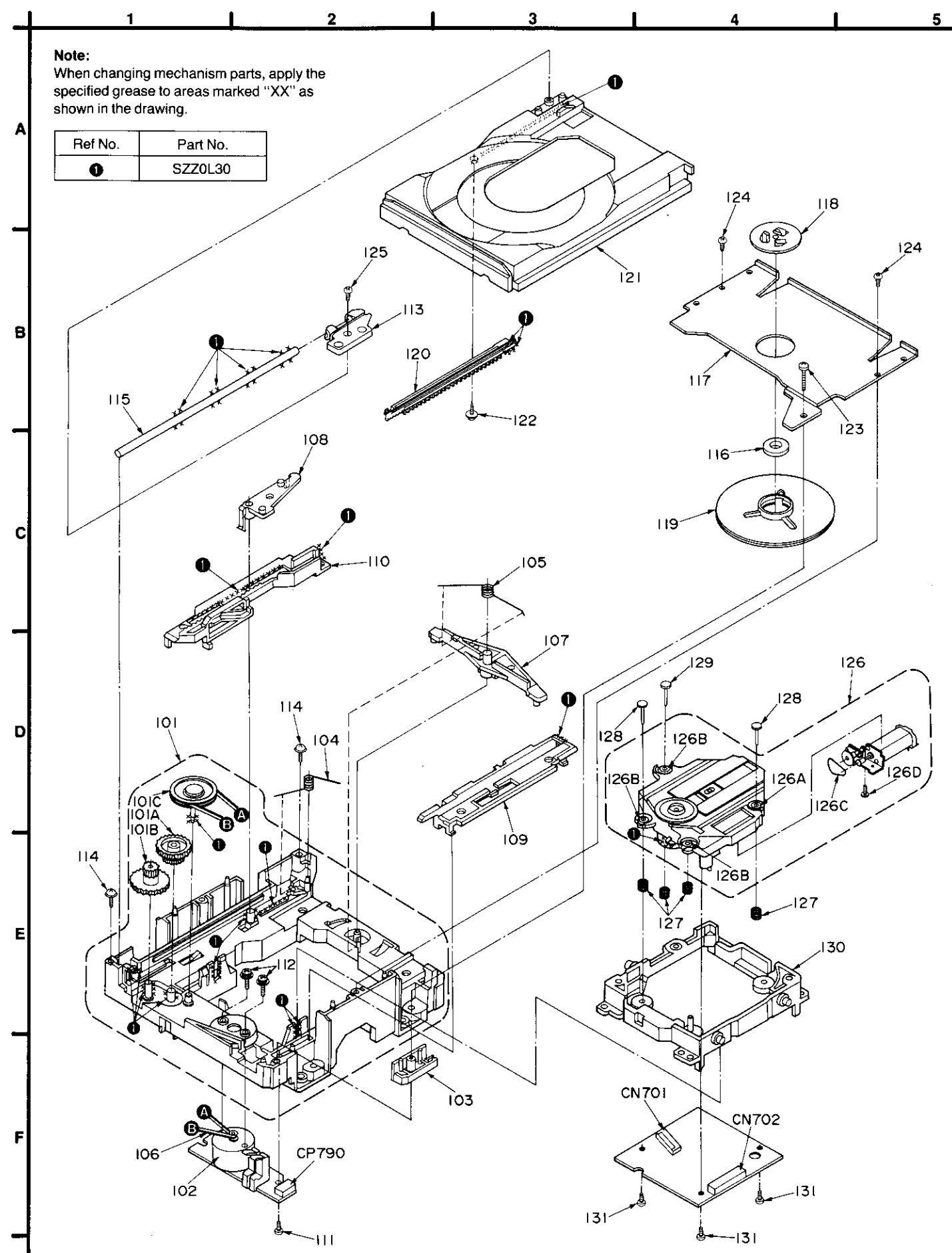
Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS				LOADING PARTS	
1	RHD30007	SCREW		101	RFKJLPG440BK	CHASSIS ASS'Y	
2	RKMD203-1K	CABINET		101A	RDG0142	LOADING GEAR	
3	XTBS3+8JF21	SCREW		101B	RDG0193	LOADING GEAR(1)	
4	RGRD496-K	TRAY PANEL		101C	RDP0041	PULLEY	
5	RGRD146A-E	REAR PANEL		102	REM0019	MOTOR ASS'Y	
6	RFKJLCH550PP	BOTTOM BOARD ASS'Y		103	RMA0339	HOLDER	
6-1	RKA0055-N	FOOT		104	RME0063	LOCK LEVER SPRING	
7	RMRO343	HOLDER		105	RME0087	SPRING	
8	RMN0195	FL. SPACER		106	RMG0158	BELT	
9	RMN0197	FL. HOLDER		107	RML0177	CONVERSION LEVER	
10	RGU0801-K	BUTTON, PLAY etc.		108	RML0178-1	LOCK LEVER	
11	RGU0802-K	BUTTON, SEARCH etc.		109	RMMD059-1	SLIDE PLATE(2)	
12	RFKGLCH750EK	FRONT PANEL ASS'Y		110	RMMD079	SLIDE PLATE(1)	
13	RWJ5423130EE	FLEXIBLE CABLE (23P)		111	XTN26+6G	SCREW	
14	XTBS26+8J	SCREW		112	XYN2+F6F2	SCREW	
15	SHE185-2	P. C. B. SPACER		113	RDB0036	GUIDE HOLDER	
16	XTBS3+8JF21	SCREW		114	RHD20010	SCREW	
17	XTB3+16JF2	SCREW		115	RMU0046	GUIDE SHAFT	
18	XTB3+8FF2	SCREW		116	RHM2452A	MAGNET	
19	XTB3+8JF2	SCREW		117	RMA0327-1	DISC CLAMPER	
20	REX0354	LEAD CABLE(6P)		118	RMRO334	MAGNET HOLDER	
21	REZ0537	FLEXIBLE CABLE (23P)		119	RXQ0123	DISC HOLDER	
				120	RFKNLPG440-K	DRIVE RACK ASS'Y	
				121	RGQ0088-K	DISC TRAY	
				122	RHD20009-1	SCREW	
				123	XTB3+25GF2	SCREW	
				124	XTN26+6G	SCREW	
				125	XTN3+8JF2	SCREW	
				126	RAE0111Z	TRAVERSE UNIT ASS'Y	
				126A	SHGD112	RUBBER(A)	
				126B	SHGD113-1	RUBBER(B)	
				126C	RDVD023	BELT	
				126D	SNSD38	SCREW	
				127	RME0109	SPRING	
				128	RMS0123-1	PIN(A)	
				129	RMS0350	PIN(B)	
				130	RMRO533-K	TRAVERSE CHASSIS	
				131	XTV2+6G	SCREW	



CABINET PARTS LOCATION



LOADING UNIT PARTS LOCATION



Service Manual

Tuner Amplifier

Tuner Amplifier

• For (E), (EB), (EG) areas

SA-CH750

Colour

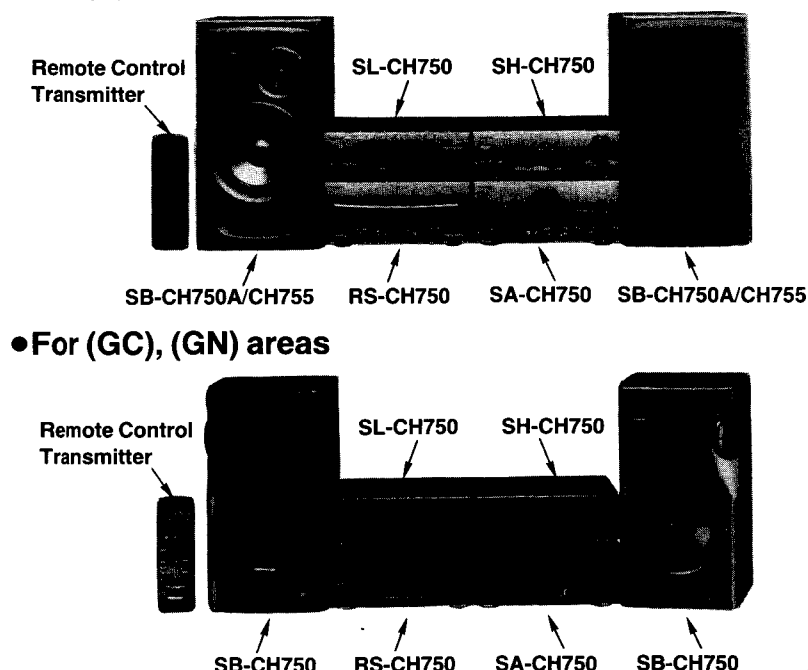
(K) Black Type

Areas

Suffix for Model No.	Area	Colour
(E)	Europe	(K)
(EB)	Great Britain	
(EG)	Germany and Italy	
(GC)	Asia, Latin America, Middle Near East and Africa	
(GN)	Oceania	

System: SC-CH750

• For (GC), (GN) areas



SPECIFICATIONS

(DIN 45 500)

■ Main Amp. Section

Power output

DIN 1 kHz THD 1%
both channel driven

For (GC), (GN) areas

SFP, mode 1 kHz THD 1%

MAIN

SURROUND

Total harmonic distortion

Rated power at 1 kHz 1% (6Ω)

Half power at 1 kHz 0.09% (6Ω)

Load impedance

MAIN 6-8Ω

SURROUND 8Ω

S/N (rated power)

84 dB

Frequency response

40 Hz-30 kHz (-3 dB)

■ FM Tuner Section

Frequency range 87.50 MHz-108.00 MHz (0.05 MHz steps)

Sensitivity 1.8 μV (IHF, usable)

S/N 26 dB 1.5 μV (75Ω)

S/N

MONO 70 dB (75 dB, IHF)

Stereo separation at 1 kHz

35 dB

Antenna terminal(s)

75Ω (unbalanced)

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

■ AM TUNER SECTION

Frequency range

MW

For (E), (EB), (EG), (GN) areas 522-1611 kHz (9 kHz steps)

530-1620 kHz (10 kHz steps)

For (GC) area

531-1602 kHz (9 kHz steps)

530-1600 kHz (10 kHz steps)

LW

For (E), (EB), (EG), (GN), areas 144-288 kHz (9 kHz steps)

For (GC) area 153-279 kHz (9 kHz steps)

Sensitivity (S/N 20 dB)

MW

500 μV/m

LW

50 μV

■ Timer Section

Clock

Quartz-lock type

Function

24-hour programmable; Play timer (1 time)

Rec timer (1 time)

Sleep (120 min. 1 min. intervals)

Setting

1 minute-23 hours 59 minutes (1 min. intervals)

System	Sound processor	Tuner amplifier	Compact disc player	Cassette deck	Speakers
SC-CH750	SH-CH750	SA-CH750	SL-CH750	RS-CH750	*SB-CH750A (E), (EB), (EG) areas *SB-CH755 Switzerland only SB-CH750 (GC), (GN) areas

*Made in PAES

Technics

■ GENERAL	
Power consumption	175 W
Power supply	
For (E), (EG) areas	AC 50/60 Hz, 230 V
For (EB), (GN) areas	AC 50/60 Hz, 230 V–240 V
For (GC) area	AC 50/60 Hz, 110/127/220/240 V

Dimension (W×H×D)	270×119×334 mm
Weight	5.5 kg

- Notes:**
- 1. Specifications are subject to change without notice.
 - 2. Weight and dimensions are approximate.
 - 3. Total harmonic distortion is measured by the digital spectrum analyzer.

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	Page		Page
●BEFORE REPAIR	2	●SCHEMATIC DIAGRAM	14~22
●PROTECTION CIRCUITRY	2	●PRINTED CIRCUIT BOARD DIAGRAM	23~27
●ACCESSORIES	2, 3	●WIRING CONNECTION DIAGRAM	28
●LOCATION OF CONTROLS	3, 4	●BLOCK DIAGRAM	29~31
●STACKING THE COMPONENTS	5	●FUNCTION OF IC TERMINALS	32
●CONNECTIONS	6~9	●REPLACEMENT PARTS LIST	33~38
●SETTING THE TIME OF DAY	9	●CABINET PARTS LOCATION	39
●DISASSEMBLY INSTRUCTIONS	10~13	●PACKAGING	40

■ BEFORE REPAIR

- (1) Turn off the power supply. Using a 10Ω, 10 W resistor, connect both ends of power supply capacitors (C701, C702) in order to discharge the voltage.
- (2) Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50/60 Hz in NO SIGNAL mode is mode should be shown below with respect to supply voltage 230 V/240 V.

Power supply voltage	AC 230 V	AC 240 V
Consumed current 50 Hz	130~230 mA	110~210 mA

■ PROTECTION CIRCUITRY

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

- *No sound is heard when the power is switched ON.
- *Sound stops during a performance.

The functions 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.

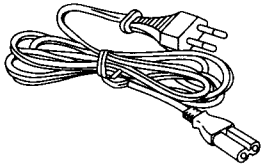
If this occurs, follow the procedure outlined below:

- 1. Switch OFF the power.
- 2. Determine the cause of the problem and correct it.
- 3. Switch ON the power once again.

Note:
When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

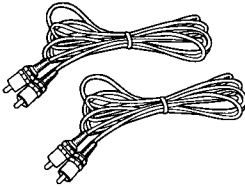
■ ACCESSORIES

Check the packing carton for these accessories.

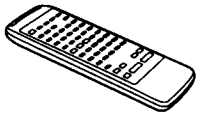


(RJA0019-2K) for (E), (EG), (GC) areas
(VJA0733) for (EB) area
(SJA173) for (GN) area

●AC power supply cord 1 pc.

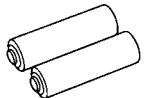


●Surround speaker cords 2 pcs.
(RJL1P001B25) for (GC), (GN) areas



(RAK-SC709WH)

●Remote control transmitter 1 pc.



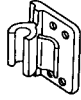
Note: These are available on sale route.

●Remote control batteries
UM-4, AAA, R03 2 pcs.



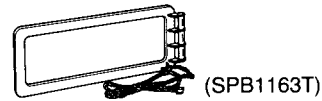
(REX0462)

●Flat cable 1 pc.

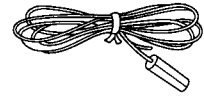


(SMA233-1M)

●Antenna holder 1 pc.

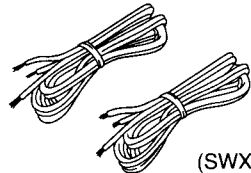


•LW/MW loop antenna 1 pc.

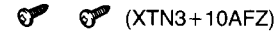


(RSA0007) for (E), (EB), (EG) areas
(RSA0006) for (GC), (GN) areas

•FM indoor antenna 1 pc.



•Speaker cords 2 pcs.



•Mounting screws 2 pcs.



•Attachment plug 1 pc.
(SJP9009) for (EB) area



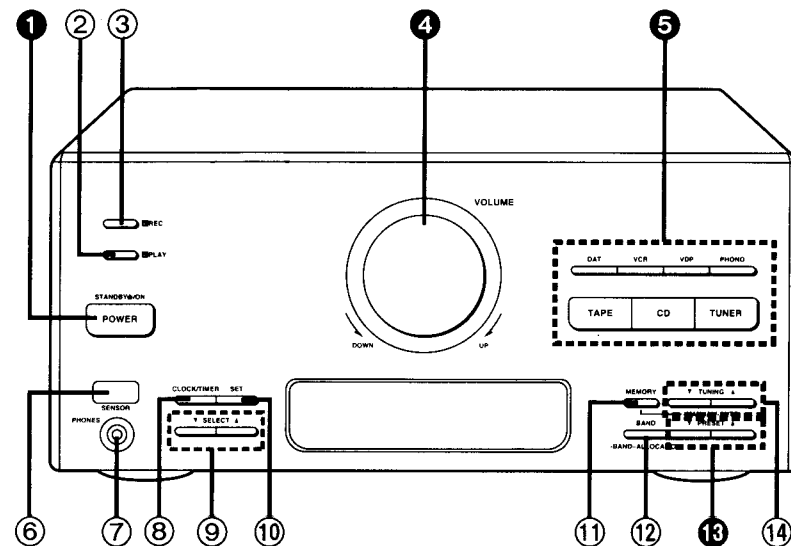
(SJP5213-2) for (GC) area

•Power plug adaptor 1 pc.

Note:

The configurations of AC power supply cord and FM indoor antenna differ according to area.

LOCATION OF CONTROLS



1 Power "STANDBY /ON" switch (POWER, STANDBY /ON)

This switch switches ON and OFF the secondary circuit power only. The unit is in the "standby" condition when this switch is set to the STANDBY position. Regardless of the switch setting, the primary circuit is always "live" as long as the power cord is connected to an electrical outlet.

2 Timer play button (PLAY)

Press to confirm, exit or reset the play timer.

3 Timer recording button (REC)

Press to confirm, exit or reset the record timer.

4 Volume level control (VOLUME)

Turn to adjust the volume level.

Note that — dB is the lowest volume setting and 0 dB is the highest.

5 Input select buttons (TAPE, CD, TUNER, DAT, VCR, VDP, PHONO)

Press to select the sound source.

6 Remote control signal sensor (SENSOR)

Receives the signals from the remote control.

7 Headphones jack (PHONES) (Ø3.5, 32Ω)

Plug headphones cord into this jack.

8 Clock/timer button (CLOCK/TIMER)

Press to select the clock set mode or desired timer mode.

9 Timer select buttons (SELECT)

Use when setting the current time and timer.

10 Setting button (SET)

Press to set the present time in the clock mode, or set the various selection in the timer mode.

11 Preset memory button (MEMORY, -MANUAL, -AUTO)

Press to put a broadcast station into the memory.

12 Band select/allocation change button (BAND, -BAND -ALLOCATION)

Press to select the MW, LW or FM radio band.
Press and hold to change the MW frequency step.

13 Preset tuning buttons (PRESET)

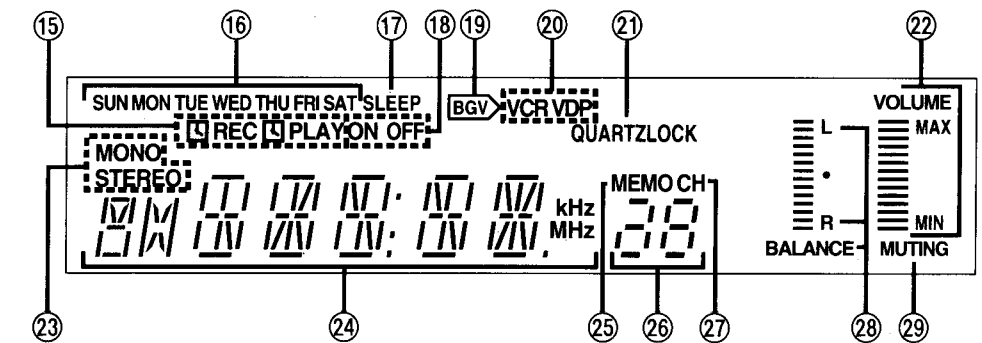
Use to select channel number for a broadcast station which has been stored in the tuner's memory.

14 Tuning buttons (TUNING)

Use to tune in a desired broadcast station.

The functions indicated by the numbers with black background (for example 1) can also be activated from the remote control.

Display section



15 Timer mode indicators (REC, PLAY)

REC: Lights when you have set the record timer mode.
 PLAY: Lights when you have set the play timer mode.

16 Day indicators (SUN-SAT)

Shows the day of the week or the day the timer has been set for.

17 Sleep timer indicator (SLEEP)

Lights when you have set the sleep timer mode.

18 Timer on/off indicator (ON, OFF)

Lights together with the setting time to show the timer ON time and OFF time.

19 BGV (background visual) indicator ()

Lights when listening to audio sound source.

20 Visual source indicators (VCR, VDP)

Lights to show it is possible to enjoy BGV (Back Ground Visual) if you connect video deck or video disc player to this system.

21 Quartz lock indicator (QUARTZLOCK)

Lights when you precisely tune in a broadcast station.

22 Volume level display (VOLUME, MAX, MIN)

Shows the volume level.

23 FM STEREO/MONO indicator (MONO, STEREO)

"STEREO" lights when an FM stereo broadcast is being received. If you press FM mode button on the remote control to select monaural mode, "MONO" lights.

24 Alpha-numeric display

Shows the selected source, present time, and the contents of the timer setting, received frequencies, volume level.

25 Memory indicator (MEMO)

Lights when the preset memory button is pressed.

26 Preset channel display

Shows the preset channel you select.

27 Channel indicator (CH)

Lights when the unit is in the preset tuning mode.

28 Balance display (L, R, BALANCE)

Shows the left-right volume balance.

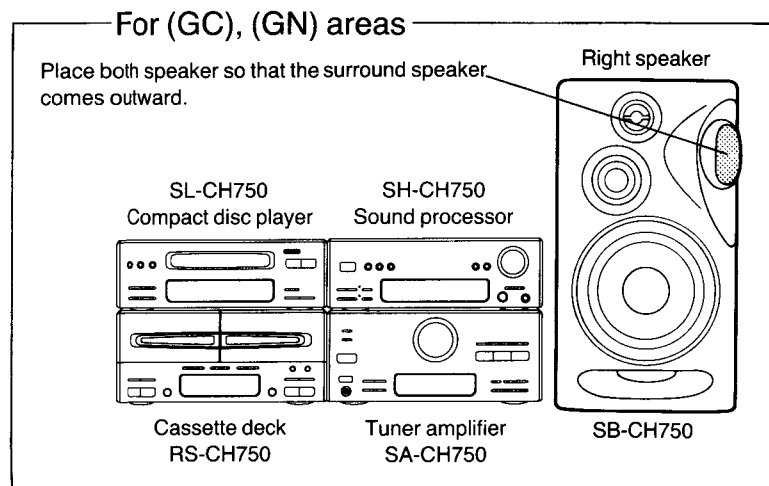
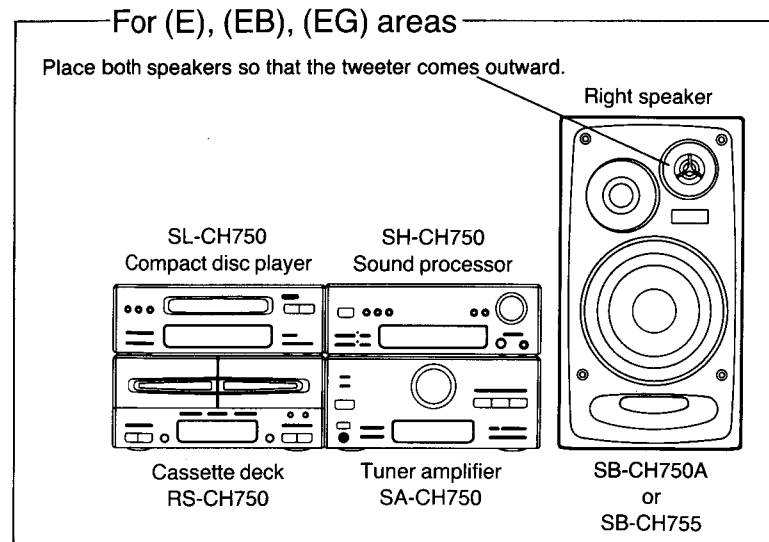
29 Muting indicator (MUTING)

Lights when you activate the muting mode.

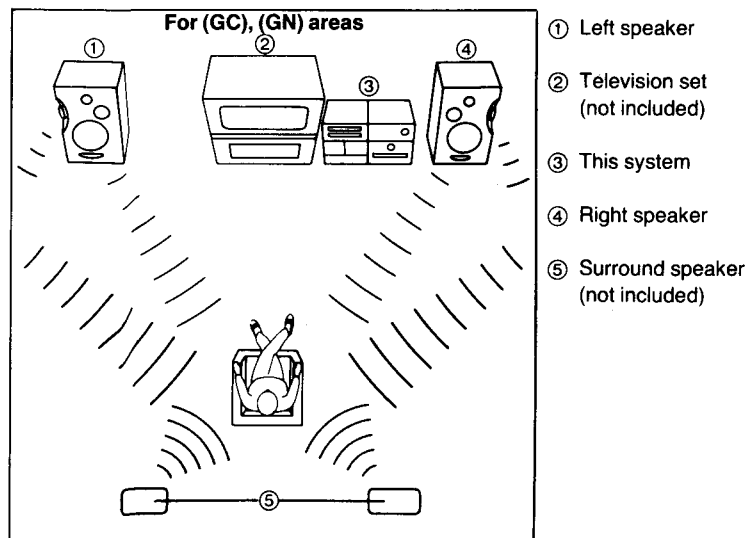
■ STACKING THE COMPONENTS

Install the various components as shown below.

■ Horizontal stacking

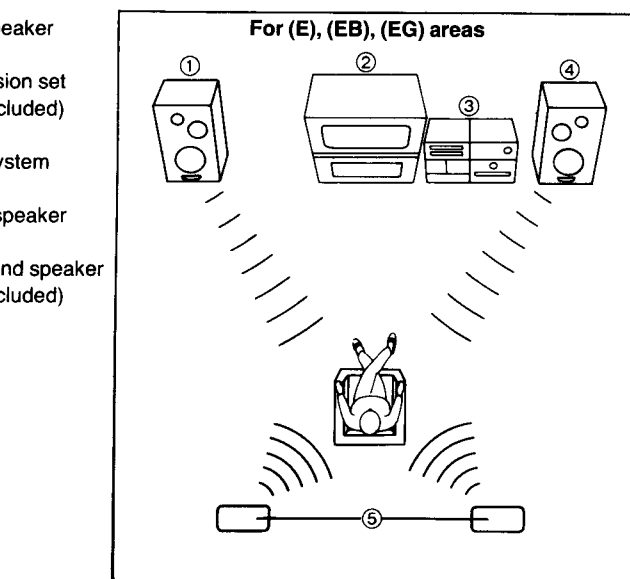


■ System layout



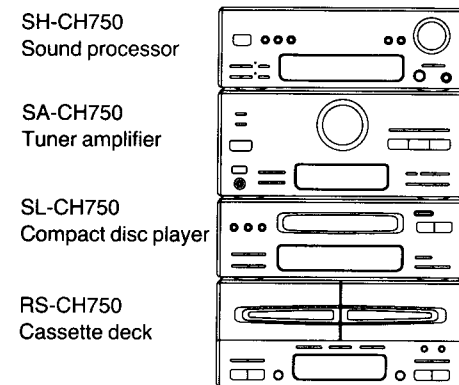
To produce a better stereo sound, install both speakers away from the system.

This speaker system has built-in surround speaker, so you can easily enjoy the surround sound.

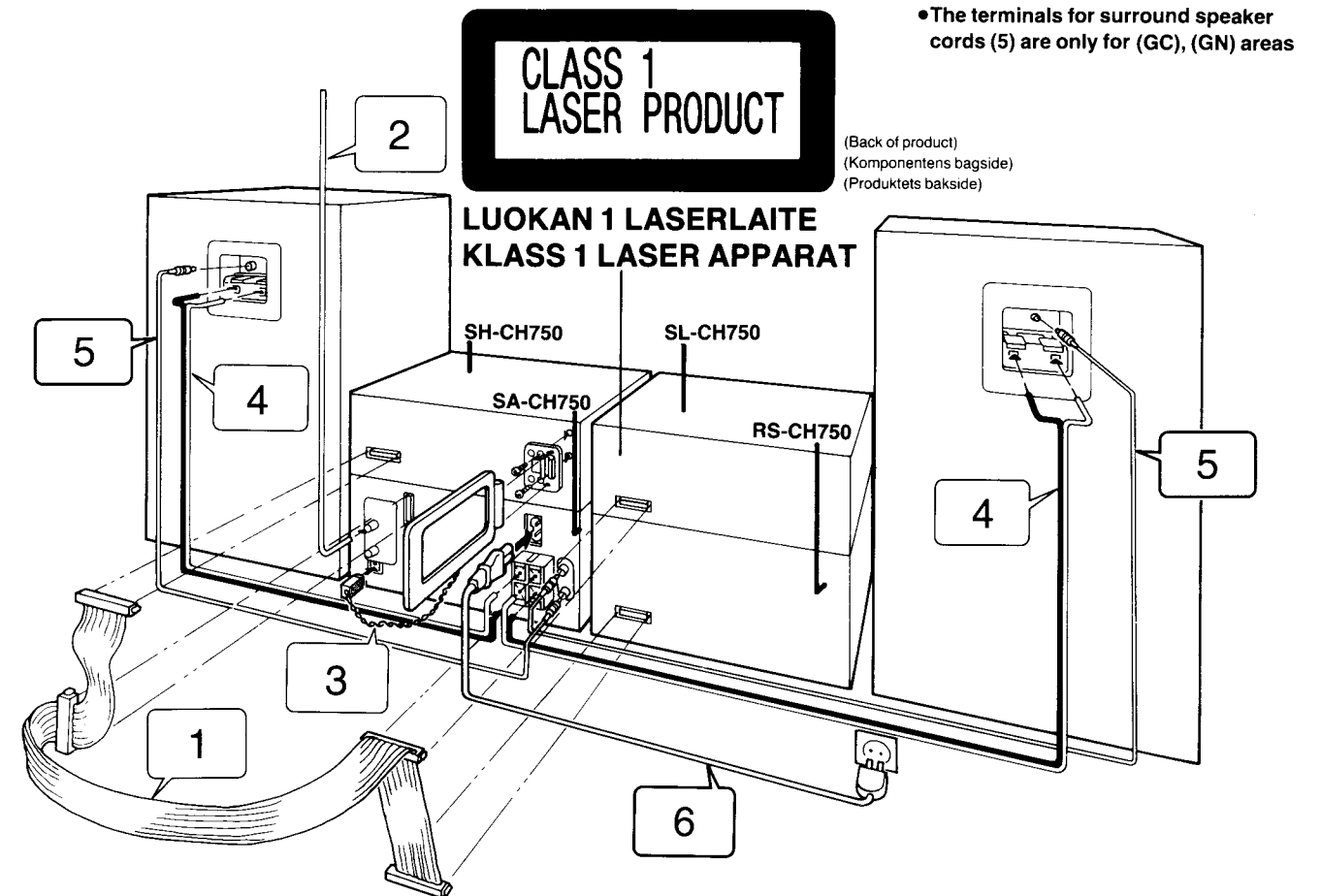


Surround sound effect differs according to where you install the surround speakers. Install them as you like.

■ Vertical stacking

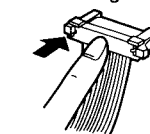


■ CONNECTIONS

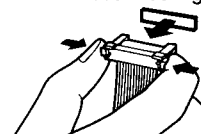


1 Connect the flat cable.

Connecting



Disconnecting

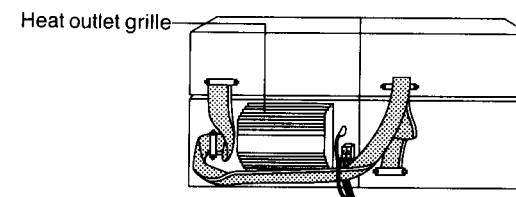


Hold the connector with the recessed part up and press in at the center until you hear a click.

First connect the blue-colored connector to the terminal of the sound processor (A), then connect the rest in the order B, C, D.

Route the cable horizontally (underneath the heat outlet grille) so that the side with the white-color lead is positioned at the front.

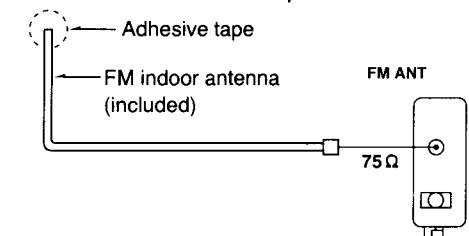
After connection, fold and press the cable as flat to the back of the unit as possible.



Do not try connecting or disconnecting the flat cable while the power is switched to ON.

2 Connect the FM indoor antenna.

Install the antenna on a wall at a height and in a direction which result in the best reception.



The tip of the internal antenna wire should not come into contact with any metal objects.

When you cannot get a good reception with this FM indoor antenna, we recommend you install an FM outdoor antenna (not included). Disconnect the FM indoor antenna if you install an FM outdoor antenna.

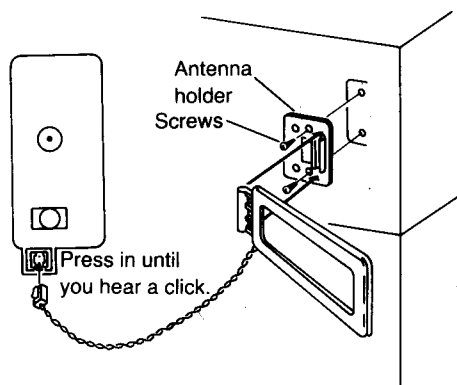
3 Connect the LW/MW loop antenna.

1. Attach the antenna holder with screws (included) to the rear panel of the sound processor.
2. Clamp the antenna to the antenna holder and connect the antenna terminal to the rear panel of the tuner amplifier.
3. Position the loop for the best reception.

You may attach the LW/MW antenna holder to a rack or other structure.

Notes:

- To minimize noise pickup, keep the LW/MW loop antenna away from the speaker cable, power cord, and metal surfaces.
- For better reception, keep the LW/MW loop antenna cord along the heat outlet grille, and away from the flat cable.



4 Connect the speaker cables.

Connection of speaker cables

1. Strip off the outer covering, and twist the center conductor.

Make sure the bare ends of the wires are not unraveled. (If they are, twist them tight again.)

2. Insert the wire to the rear panel of the speakers, and then pull down the lever.

3. Insert the wire to the rear panel of the tuner amplifier, and close the lever.

Notes:

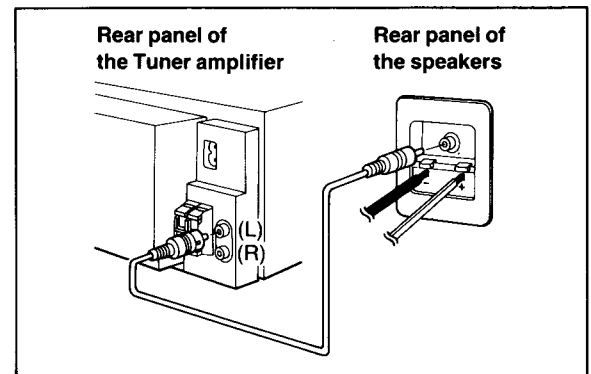
- To prevent damage to circuitry, never short-circuit positive (+) and negative (-) speaker wires.
- Be sure to connect only positive (red) wires to positive (+) terminals and negative (black) wires to negative (-) terminals.

Note:

- Be sure to connect speaker cables before connecting the AC power supply cord.

5 Connect the surround speaker cord.

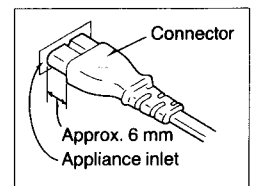
For (GC), (GN) areas



6 Connect the AC power supply cord after you have connected all other cables and cords.

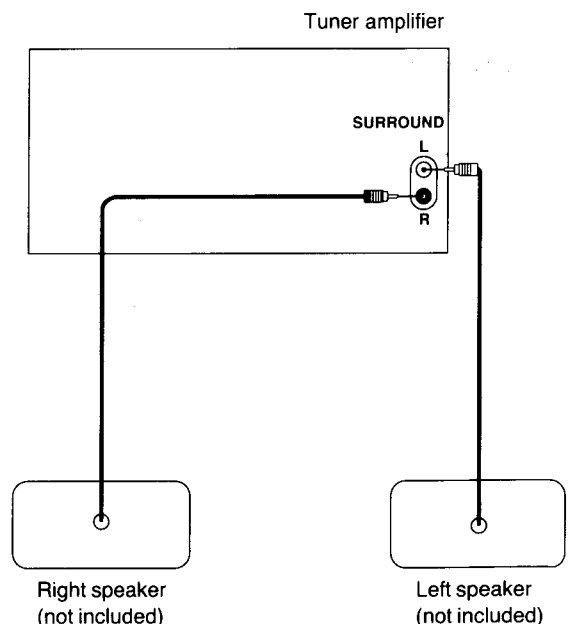
Insertion of Connector

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing. However there is no problem using the unit.



■ External unit connection

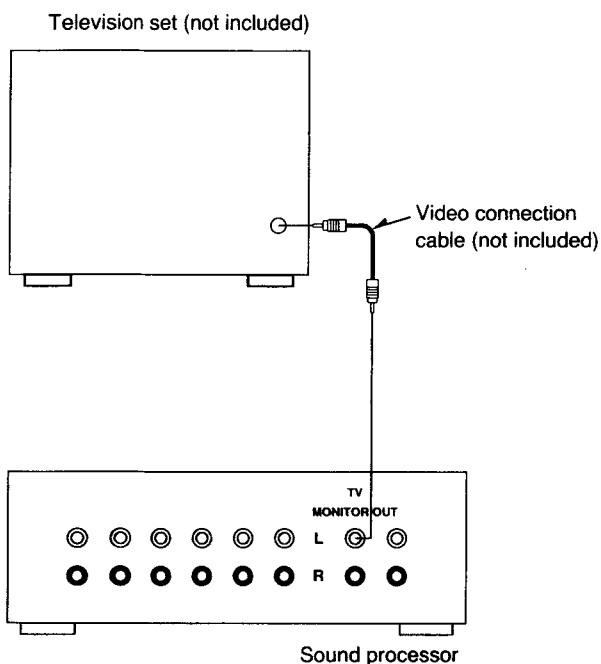
Surround speaker



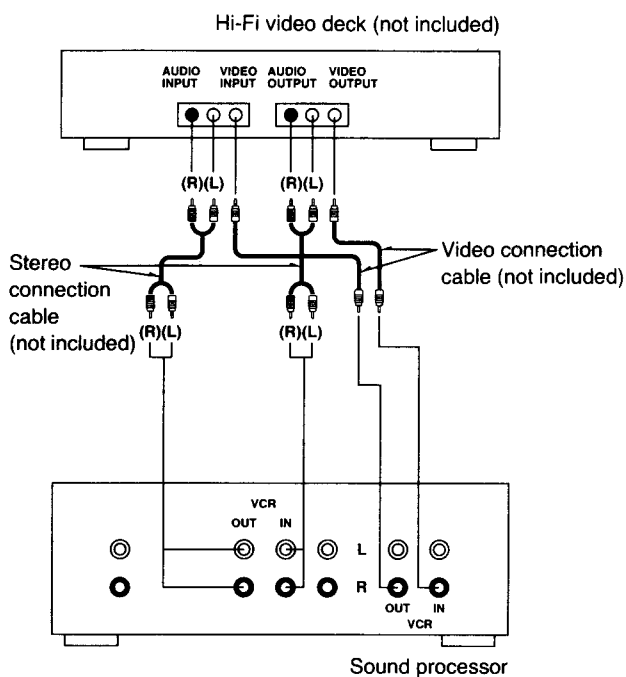
Notes:

Install each speaker left and right at the back of the listening space. Be sure to connect both speaker systems. If only one side is connected, no sound will be heard.

Television

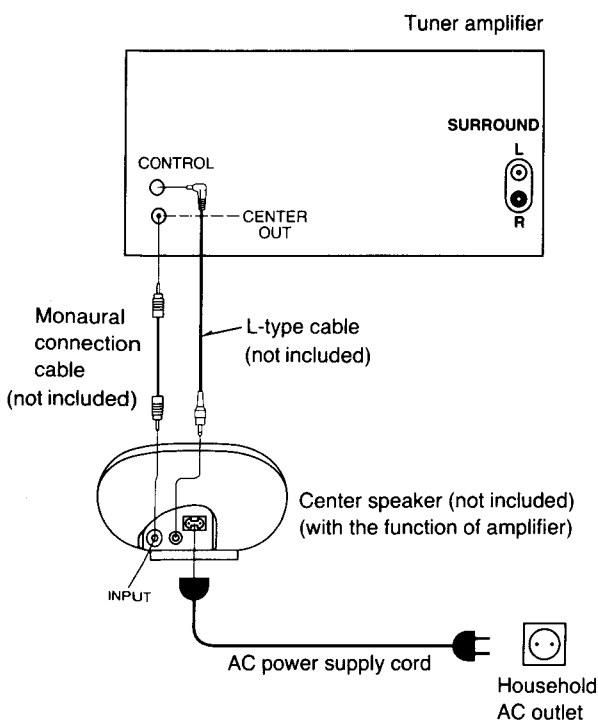


Video deck



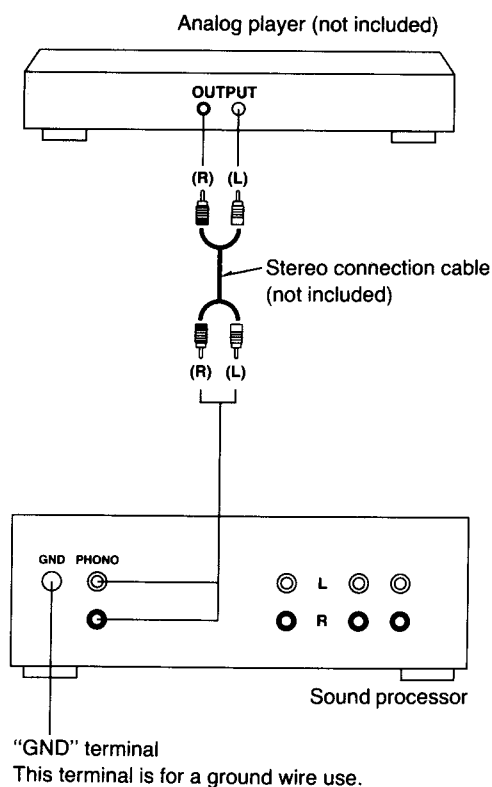
When you use a monaural video deck, connect it with monaural video connection cable.

Center speaker for (GC), (GN) areas

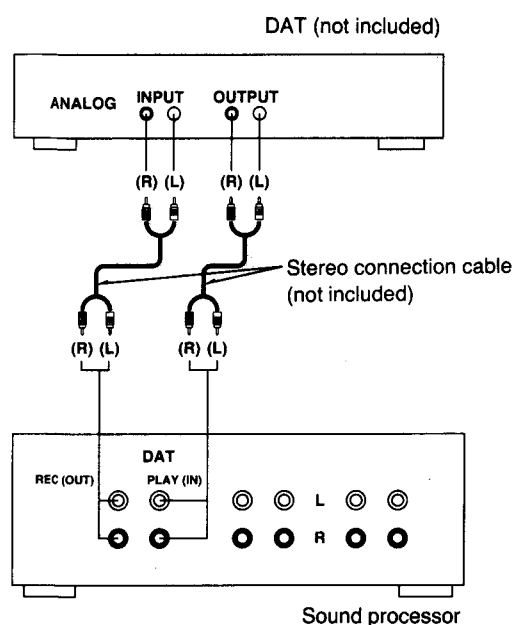


Note:
When you use a center speaker which has not a built-in amplifier, connect it to an another amplifier.

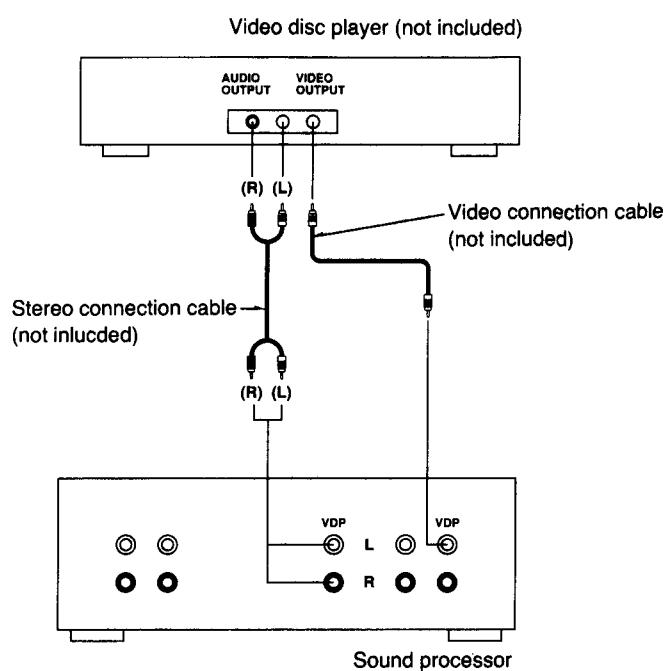
Analog player



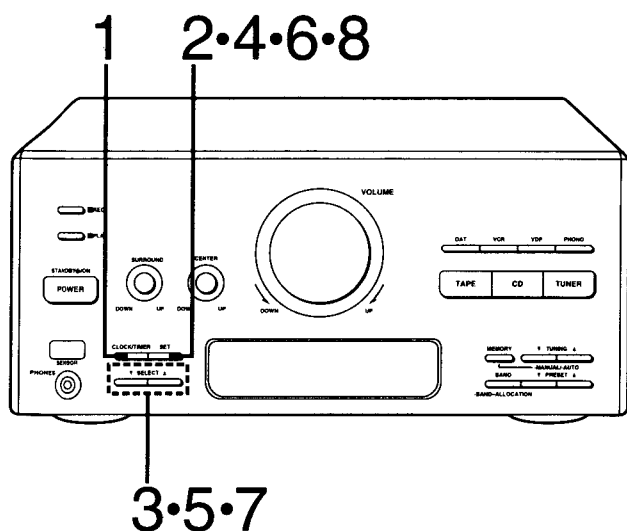
DAT (digital audio tape deck)



Video disc player



SETTING THE TIME OF DAY



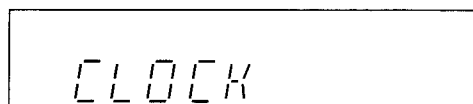
These instructions explain how to set the time for 16:25 (4:25 p.m.) on Wednesday.

Switch on the power.

1 Press CLOCK/TIMER to select "CLOCK".

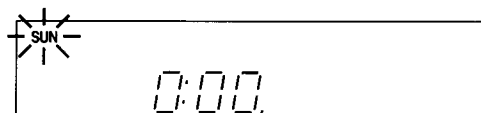
The display will show CLOCK.

The display will return to what was previously indicated if you allow 7 or more seconds to elapse before you accomplish the next operation.



2 Press SET.

The day indicator will start to flash.



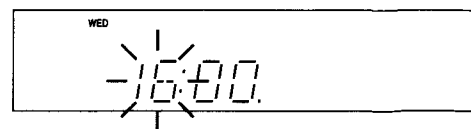
3 Press one of the SELECT buttons to select "WED".



4 Press SET.

5 Press one of the SELECT buttons to select "16".

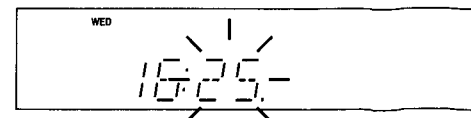
Going from 23:59 to 00:00 on the hour display will not change the day display.



6 Press SET.

7 Press one of the SELECT buttons to select "25".

Going from 59 to 00 on the minute display will not change the hour display.



Flashing

8 Press SET to finish setting the time.

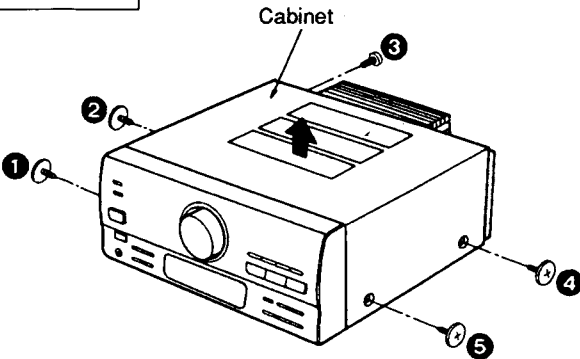
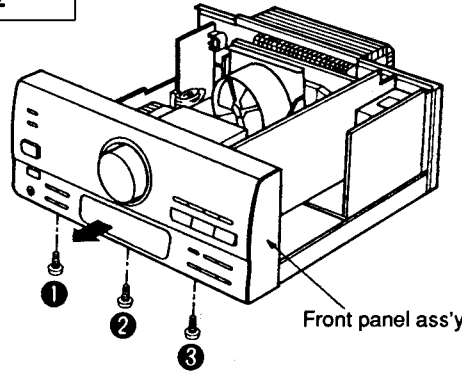
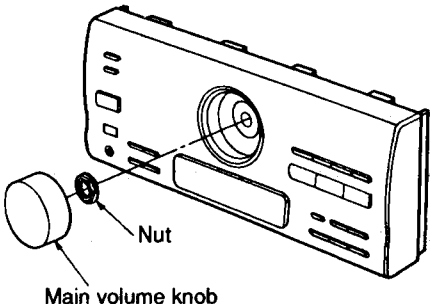
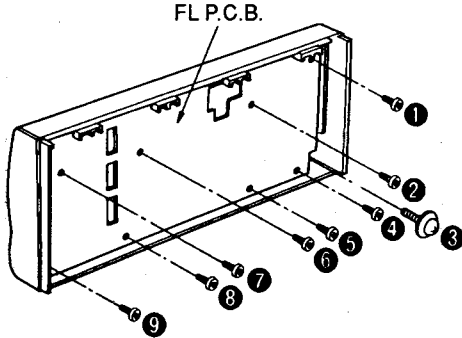
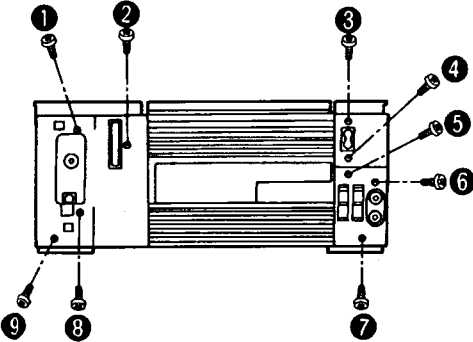
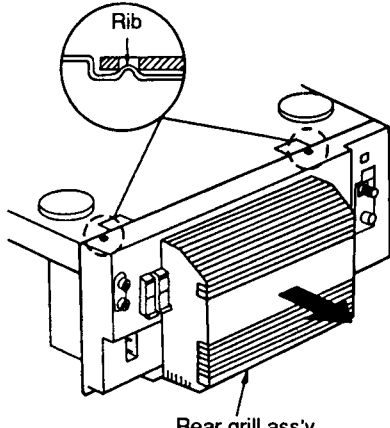
After about 2 seconds, the display will return to what it was before entering the clock setting mode.

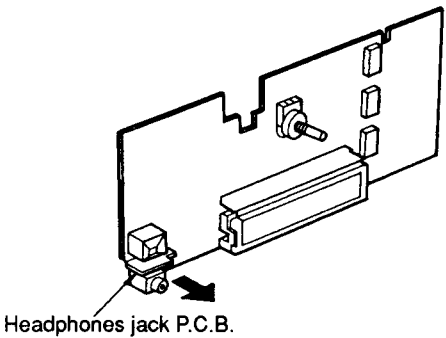
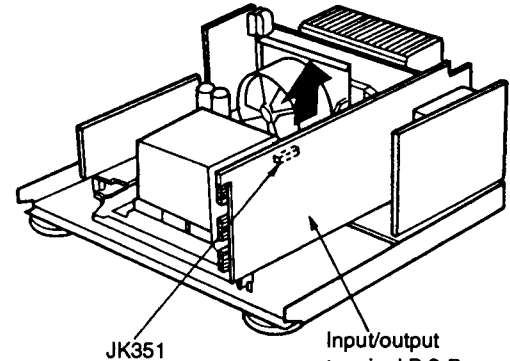
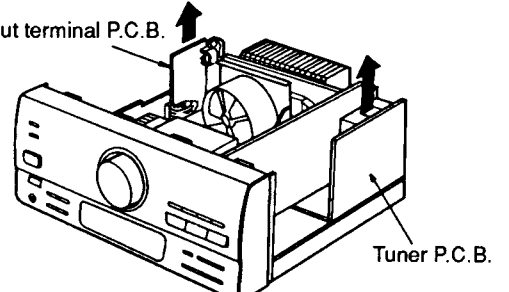
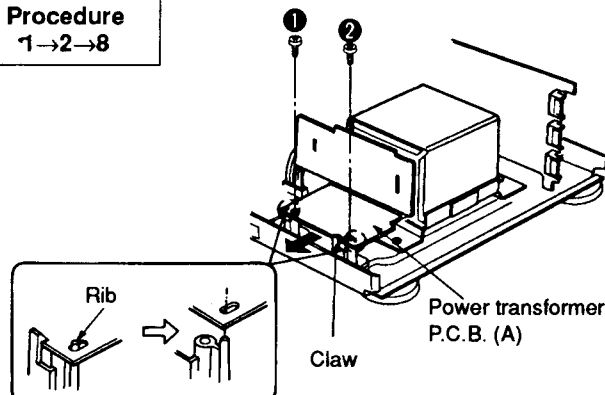
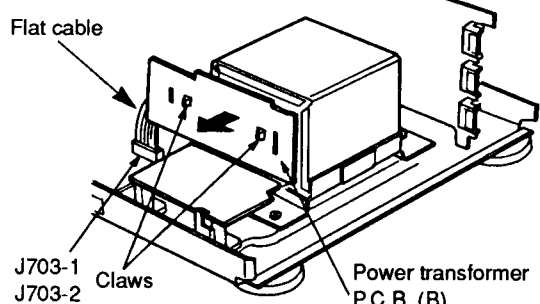
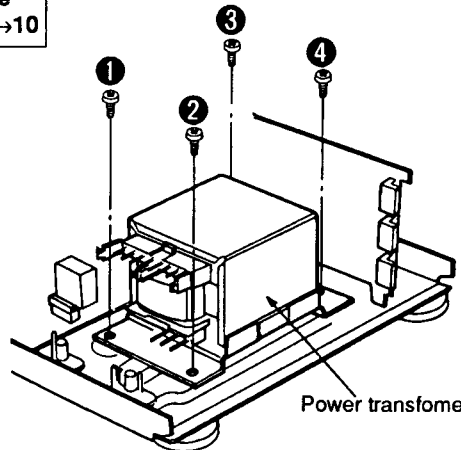
To display the clock again, press CLOCK/TIMER. The display will show "CLOCK", and then clock will appear for 5 seconds.

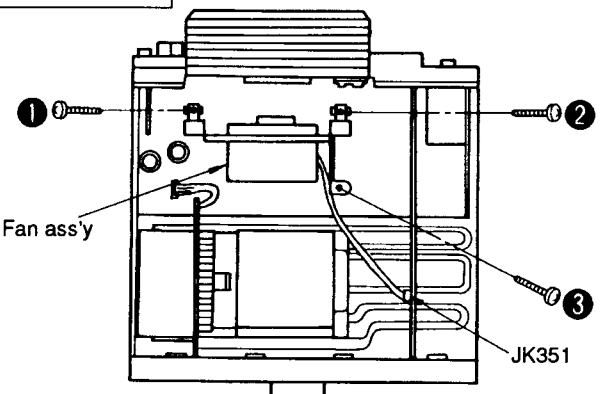
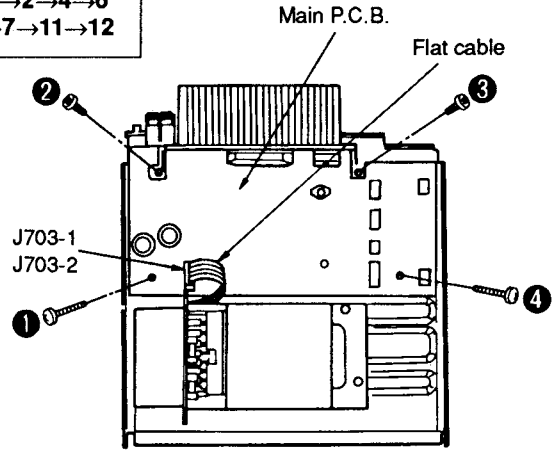
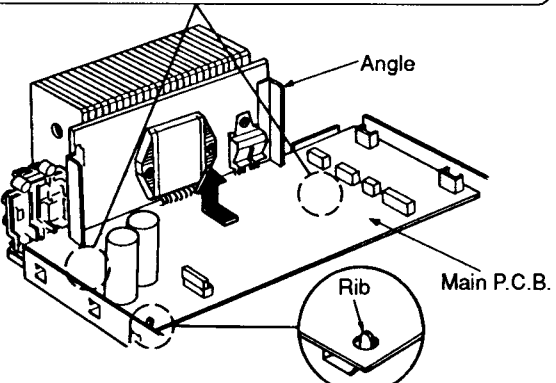
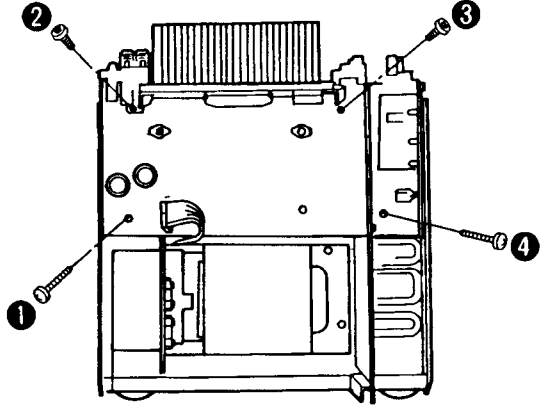
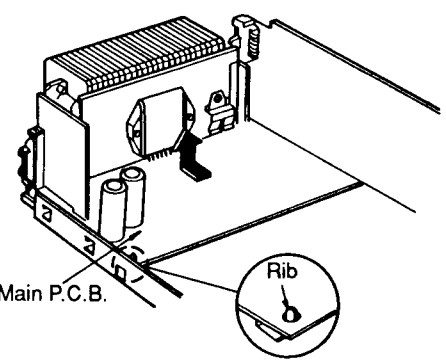
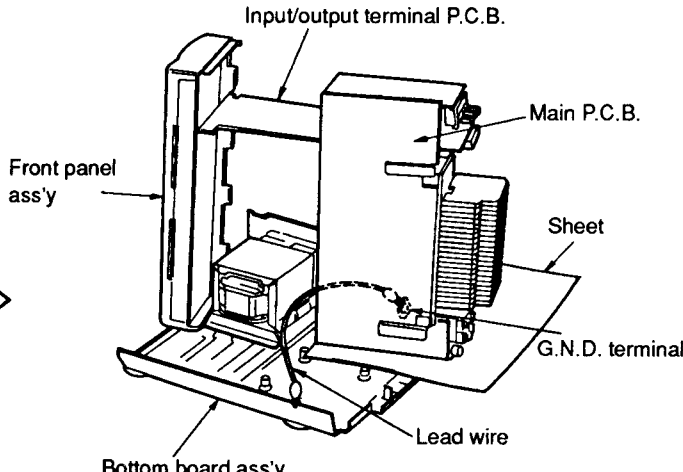
"E" appears on the display if the power cord has been once disconnected or there has been a power failure. If this happens, reset the time.

DISASSEMBLY INSTRUCTIONS

“ATTENTION SERVICER”
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1	Removal of the Cabinet	Ref. No. 2	Removal of the Front Panel Ass'y
Procedure 1	 1. Remove the 5 screws (1~5). 2. Remove the cabinet in the direction of arrow.	Procedure 1→2	 1. Remove the 3 screws (1~3). 2. Remove the front panel ass'y in the direction of arrow.
Ref. No. 3	Removal of the FL P.C.B.		
Procedure 1→2→3	 1. Pull out the main volume knob. 2. Remove the nut.	 3. Remove the 9 screws (1~9).	
Ref. No. 4	Removal of the Rear Grill Ass'y		
Procedure 1→4	 1. Remove the 9 screws (1~9).	 2. Remove the 2 ribs. 3. Remove the rear grill ass'y in the direction of arrow.	

Ref. No. 5	Removal of the Headphones Jack P.C.B.	Ref. No. 6	Removal of the Input/output Terminal P.C.B.
Procedure 1→2→3→5	 Headphones jack P.C.B. ● Remove the headphones jack P.C.B. in the direction of arrow.	Procedure 1→2→4→6	 JK351 Input/output terminal P.C.B. 1. Remove the connector (JK351). 2. Remove the input/output terminal P.C.B. in the direction of arrow.
Ref. No. 7	Removal of the AC Input Terminal P.C.B. and Tuner P.C.B.	Ref. No. 8	Removal of the Power Transformer P.C.B. (A)
Procedure 1→4→7	 AC input terminal P.C.B. Tuner P.C.B. ■ Removal of the AC Input Terminal P.C.B. ● Remove the AC input terminal P.C.B. in the direction of arrow. ■ Removal of the tuner P.C.B. ● Remove the tuner P.C.B. in the direction of arrow.	Procedure 1→2→8	 Rib Claw Power transformer P.C.B. (A) 1. Remove the 2 screws (1, 2). 2. Release the claw. 3. Remove the 2 ribs. 4. Remove the power transformer P.C.B. (A) in the direction of arrow.
Ref. No. 9	Removal of the Power Transformer P.C.B. (B)	Ref. No. 10	Removal of the Power Transformer
Procedure 1→2→9	 Flat cable J703-1 J703-2 Claws Power transformer P.C.B. (B) 1. Remove the flat cable (J703-1, J703-2). 2. Release the 2 claws. 3. Remove the power transformer P.C.B. (B) in the direction of arrow.	Procedure 1→2→8→9→10	 Power transformer ● Remove the 4 screws (1~4).

Ref. No. 11	Removal of the Fan Ass'y	Ref. No. 12	Removal of the main P.C.B.
Procedure 1→11	 Fan ass'y JK351 1. Remove the connector (JK351). 2. Remove the 3 screws (1~3).	Procedure 1→2→4→6 →7→11→12	 Main P.C.B. Flat cable J703-1 J703-2 1. Remove the 4 screws (1~4). 2. Remove the flat cable (J703-1, J703-2). ■ NOTE ● Insert the projection on the angle into the hole of the bottom board ass'y and then install the Main P.C.B. [Bottom view]  Projection  Angle Main P.C.B. Rib 3. Remove the rib. 4. Remove the main P.C.B. in the direction of arrow.
Ref. No. 13	How to check the Main P.C.B.	 1. Remove the 4 screws (1~4). ↓  Main P.C.B. Rib 2. Remove the rib. 3. Remove the main P.C.B. in the direction of arrow.	
		 Input/output terminal P.C.B. Main P.C.B. Sheet G.N.D. terminal Lead wire Bottom board ass'y 4. Connect the G.N.D. terminal to the bottom board ass'y by the lead wire. 5. Reinstall the front panel ass'y to the input/output terminal P.C.B.	

Terminal

on of

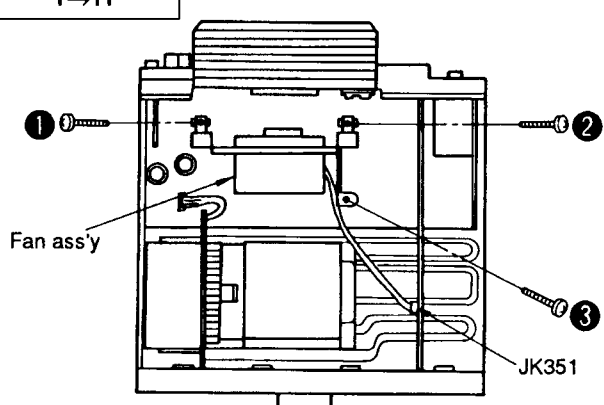
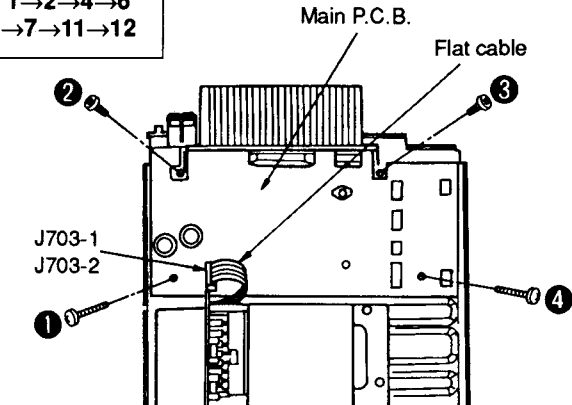
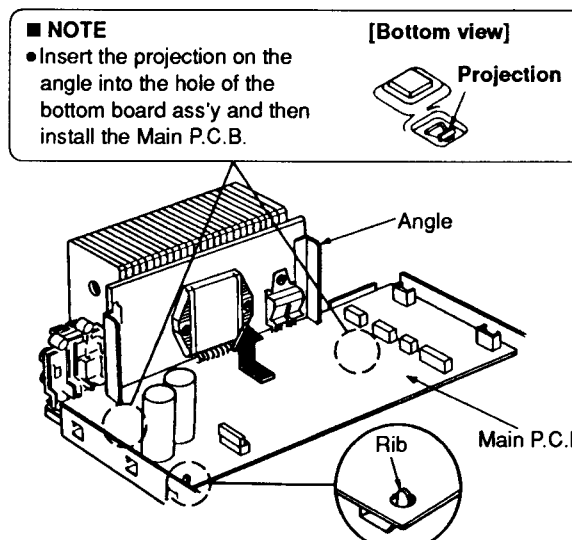
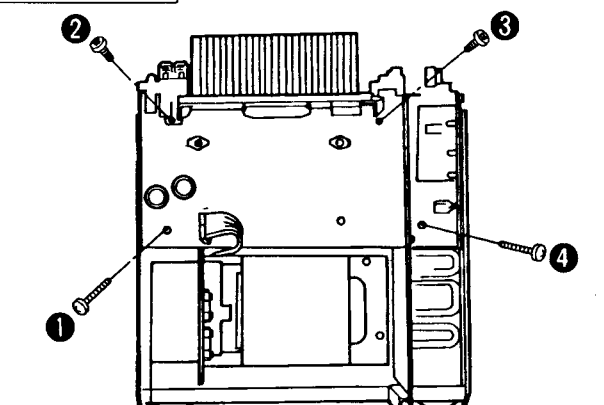
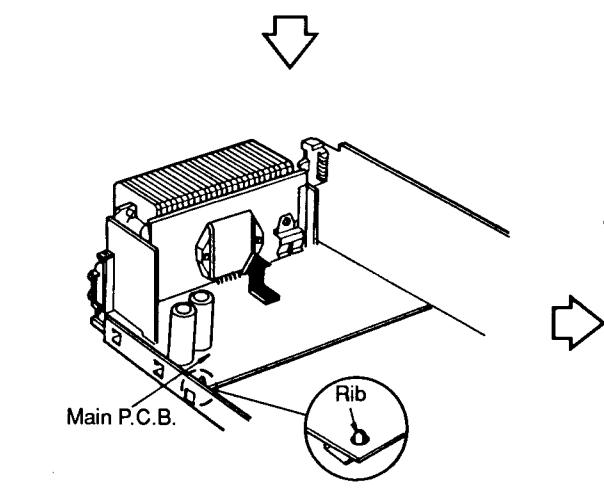
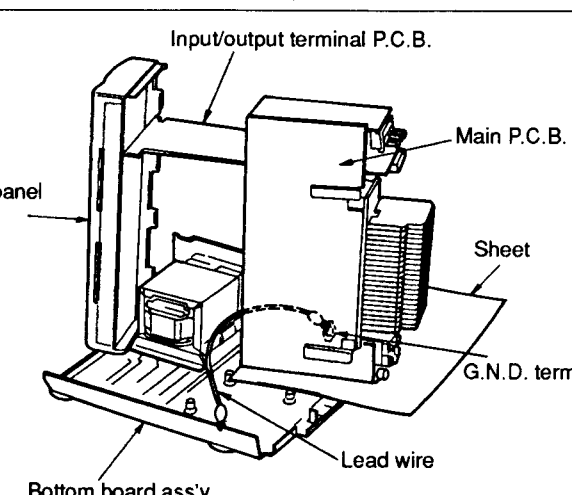
sformer

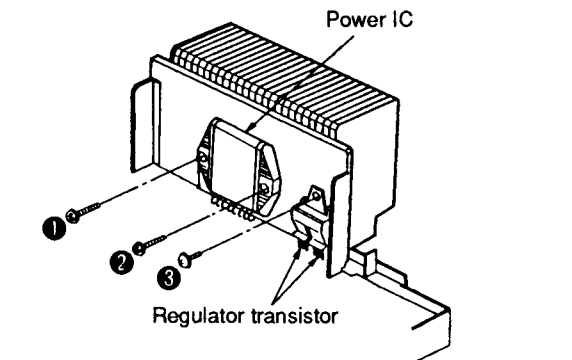
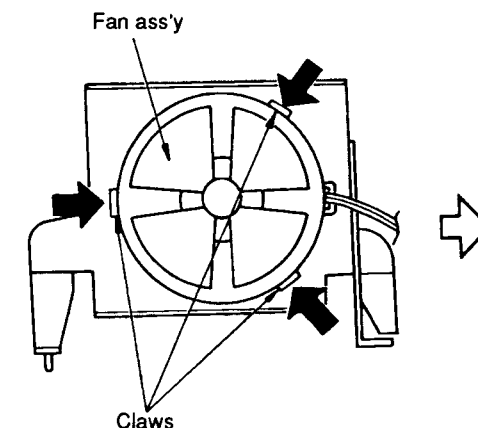
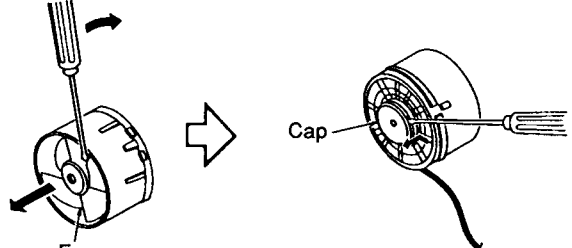
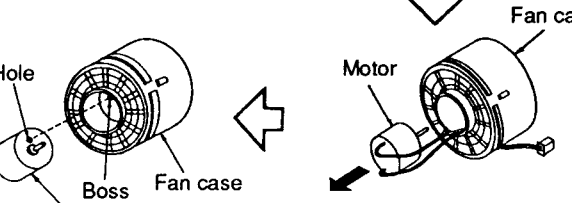
sformer

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sformer

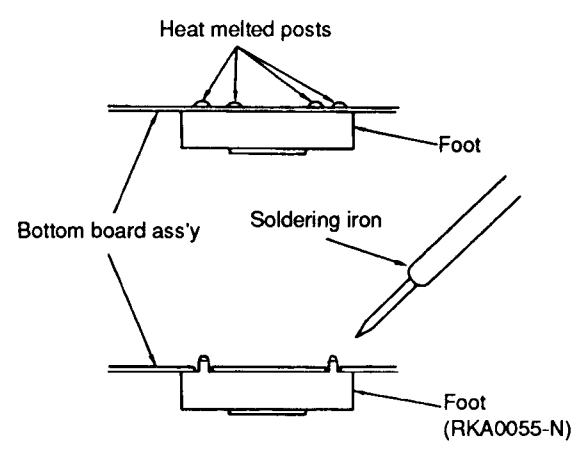
omer

Ref. No. 11	Removal of the Fan Ass'y	Ref. No. 12	Removal of the main P.C.B.
Procedure 1→11	 1. Remove the connector (JK351). 2. Remove the 3 screws (1~3).	 1. Remove the 4 screws (1~4). 2. Remove the flat cable (J703-1, J703-2).	NOTE ● Insert the projection on the angle into the hole of the bottom board ass'y and then install the Main P.C.B.  3. Remove the rib. 4. Remove the main P.C.B. in the direction of arrow.
Ref. No. 13	How to check the Main P.C.B.		
Procedure 1→2→4→11→13	● When checking the soldered surfaces of main P.C.B. and replacing the parts, do as shown below.  1. Remove the 4 screws (1~4).		
 2. Remove the rib. 3. Remove the main P.C.B. in the direction of arrow.		 4. Connect the G.N.D. terminal to the bottom board ass'y by the lead wire. 5. Reinstall the front panel ass'y to the input/output terminal P.C.B.	

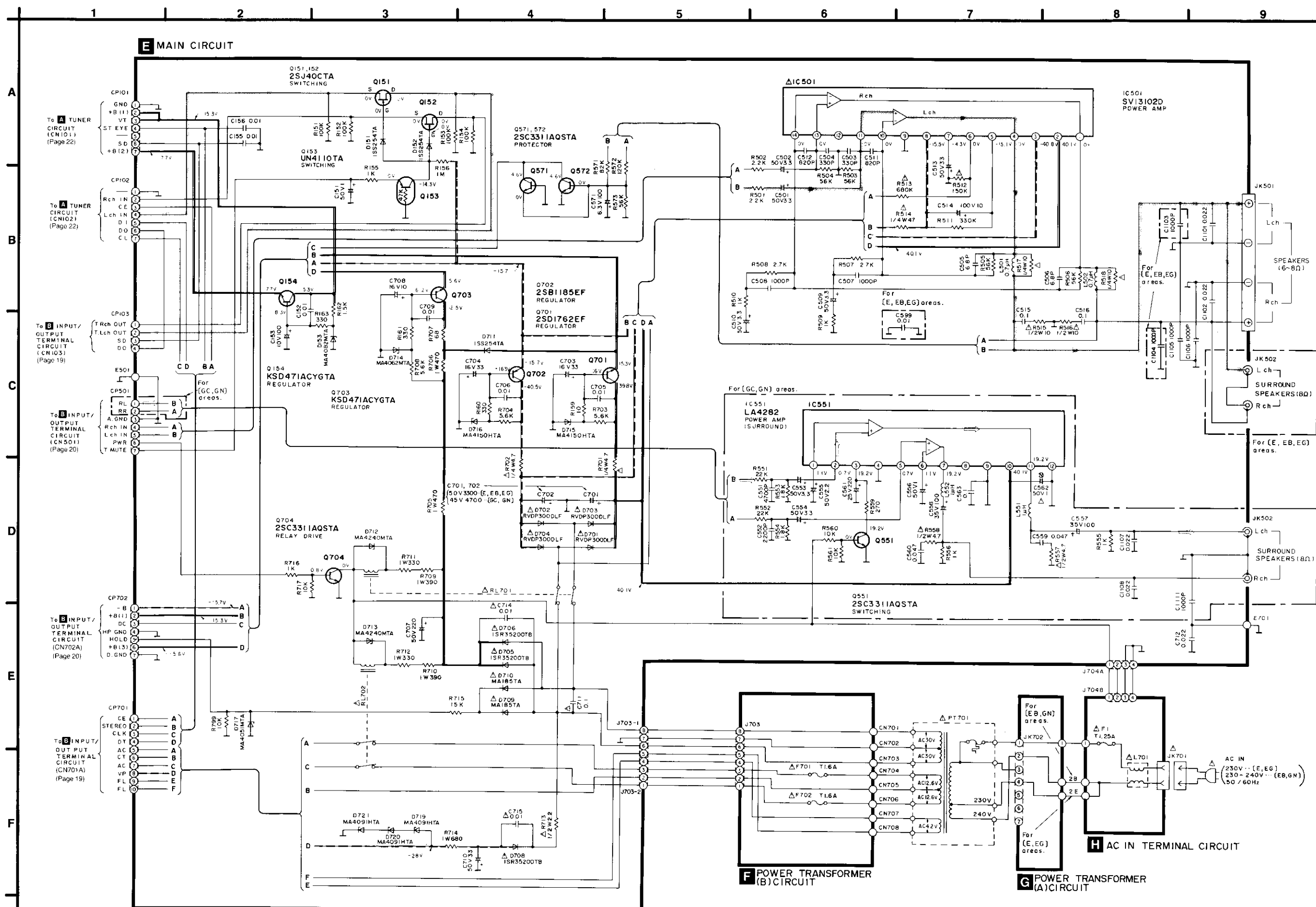
Ref. No. 14	Removal of the Power IC and Regulator Transistor	
Procedure 1→2→4→6→7→11→12→14	1. Unsolder the power IC or regulator transistors. 2. Remove the 3 screws (1~3). ● When mounting the power IC or regulator transistor, apply silicone compound (RFKX0002) to the rear side of power IC or regulator transistors.	
Ref. No. 15	Removal of the Fan Ass'y	
Procedure 1→11→15	 1. Release the 3 claws (shown in Fig. 1).	 2. Insert a screwdriver at the root of the fan (shown in Fig. 2). 3. Remove the cap (shown in Fig. 3).  4. Remove the motor from the fan case (shown in Fig. 4). 5. When mounting the motor, align the fan case projection with the hole of the motor (shown in Fig. 5).

● Replacement of the Foot

1. Remove the 4 heat melted posts on the Bottom board ass'y with a pair of nippers or similar tool.
2. To replace the foot (RKA0055-N) on the Bottom board ass'y, melt the 4 posts with a soldering iron.



SCHEMATIC DIAGRAM • MAIN, POWER TRANSFORMER (A)/(B) AND AC IN TERMINAL CIRCUIT (Parts list on pages 33~37.)



Notes:

- S601
- S602
- S603
- S604
- S605
- S606
- S607
- S608
- S609
- S610
- S611
- S612
- S613
- S614
- S615
- S616
- S617
- S618
- S619
- S620
- S701

•Indicated voltages are for chassis taken from the power supply. Therefore, the chassis ground is used. No mark: FM

•Important safety components are used. When components are used, the following are used. Wh

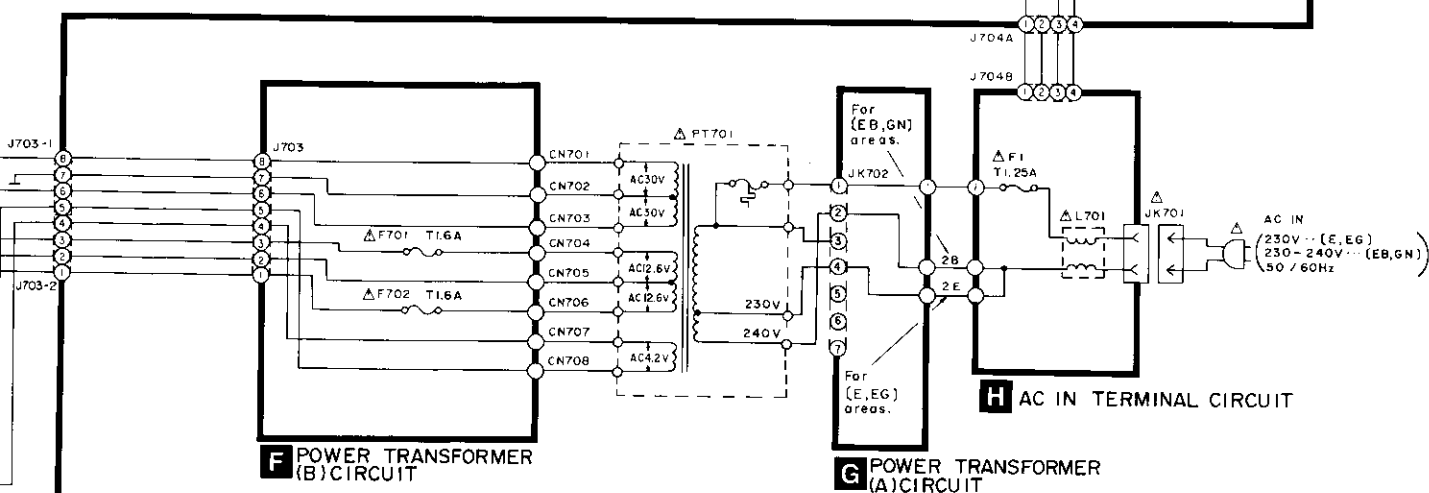
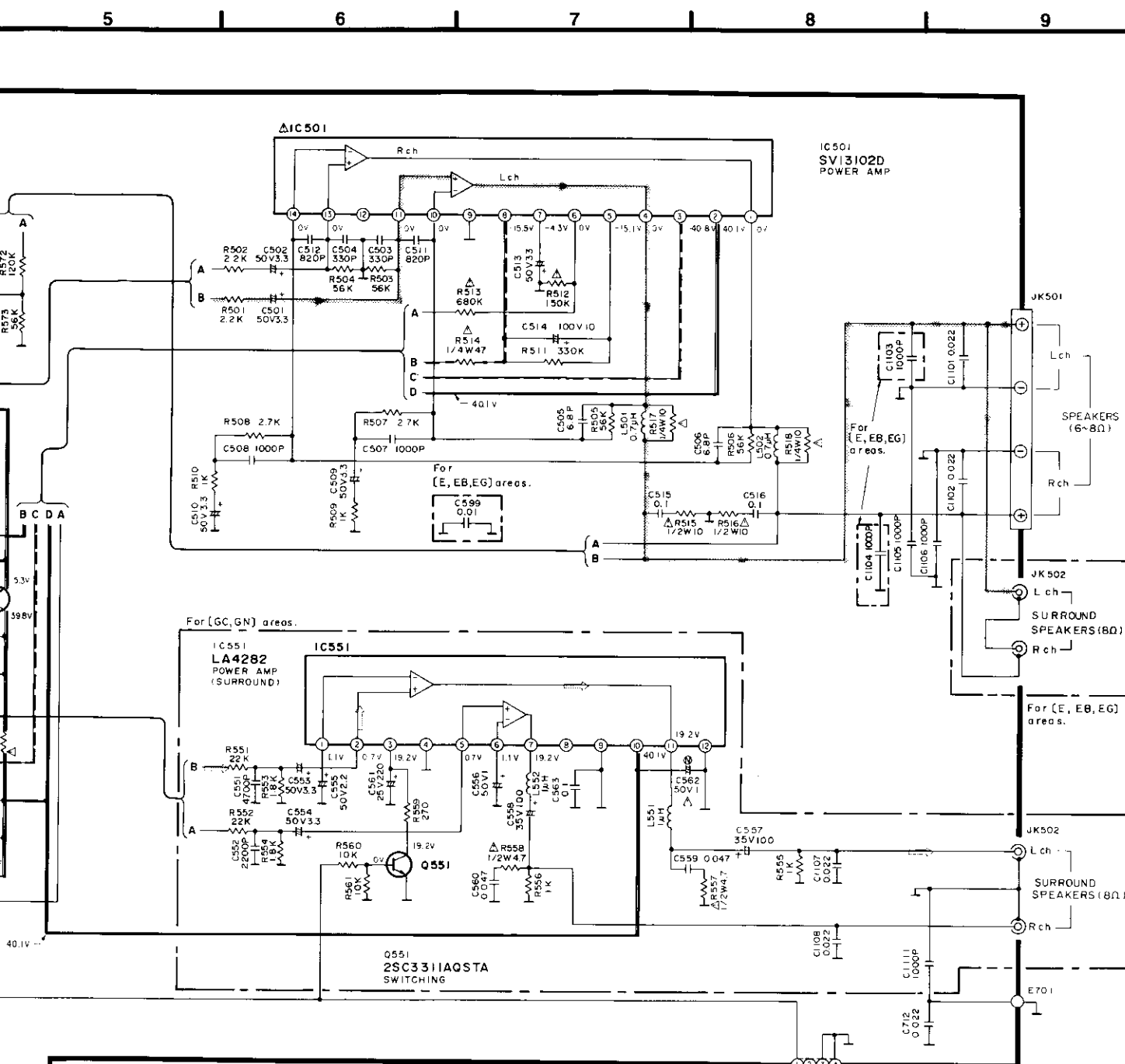
•Caution!
IC and LSI are used. Secondary transformer is used. Cover the parts with tape. Ground the secondary. Put a conductor. Do not touch.

•The supply part

Ref. No.	
IC202	
IC203	
IC301	
IC602	

•This schematic

C IN TERMINAL CIRCUIT (Parts list on pages 33~37.)



Notes:

- S601 : Power "STANDBY ϕ /ON" switch (POWER/STANDBY ϕ /ON)
- S602 : Timer recording switch (REC TIMER)
- S603 : Timer play switch (PLAY TIMER)
- S604 : Clock/timer switch (CLOCK/TIMER)
- S605 : Timer select switch (∇)
- S606 : Timer select switch (Δ)
- S607 : Setting switch (SET)
- S608 : Preset memory switch (MEMORY, -MANUAL, -AUTO)
- S609 : Preset tuning switch (∇)
- S610 : Preset tuning switch (Δ)
- S611 : Band select/allocation change switch (-BAND -ALLOCATION)
- S612 : Tuning switch (∇)
- S613 : Tuning switch (Δ)
- S614 : Input selector switch (TUNER)
- S615 : Input selector switch (CD)
- S616 : Input selector switch (TAPE)
- S617 : Input selector switch (PHONO)
- S618 : Input selector switch (DAT)
- S619 : Input selector switch (VDP)
- S620 : Input selector switch (VCR)
- S701 : VOLTAGE SELECTOR switch in "220 V" position (110 V/127 V/220 V/240 V) for (GC) area only

•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.

No mark: FM mode (): MW mode < >: LW mode

•Important safety notice:

Components identified by Δ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

•Caution!

IC and LSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

Cover the parts boxes made of plastics with aluminum foil.

Ground the soldering iron.

Put a conductive mat on the work table.

Do not touch the legs of IC or LSI with the fingers directly.

•The supply part number is described alone in the replacement parts list.

Ref. No.	Production Parts No.	Supply Parts No.
IC202	M5219FPTA	M5219FP
IC203	BA4558FT1	SVIBA4558F
IC301	M5218AL	M5218L
IC602	RCDHC-278-E	RCDHC-278

— : Positive voltage line

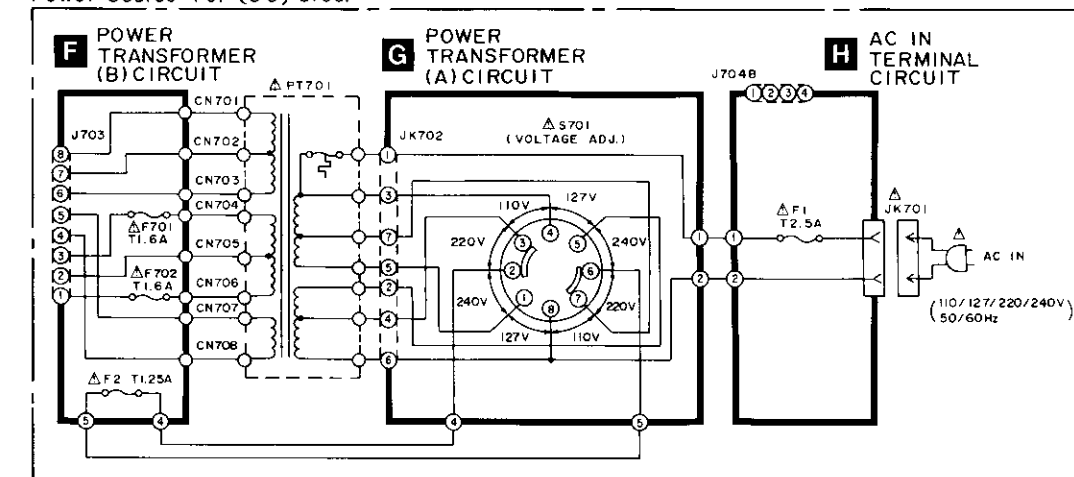
- - - : Negative voltage line

⋯ : AF signal line

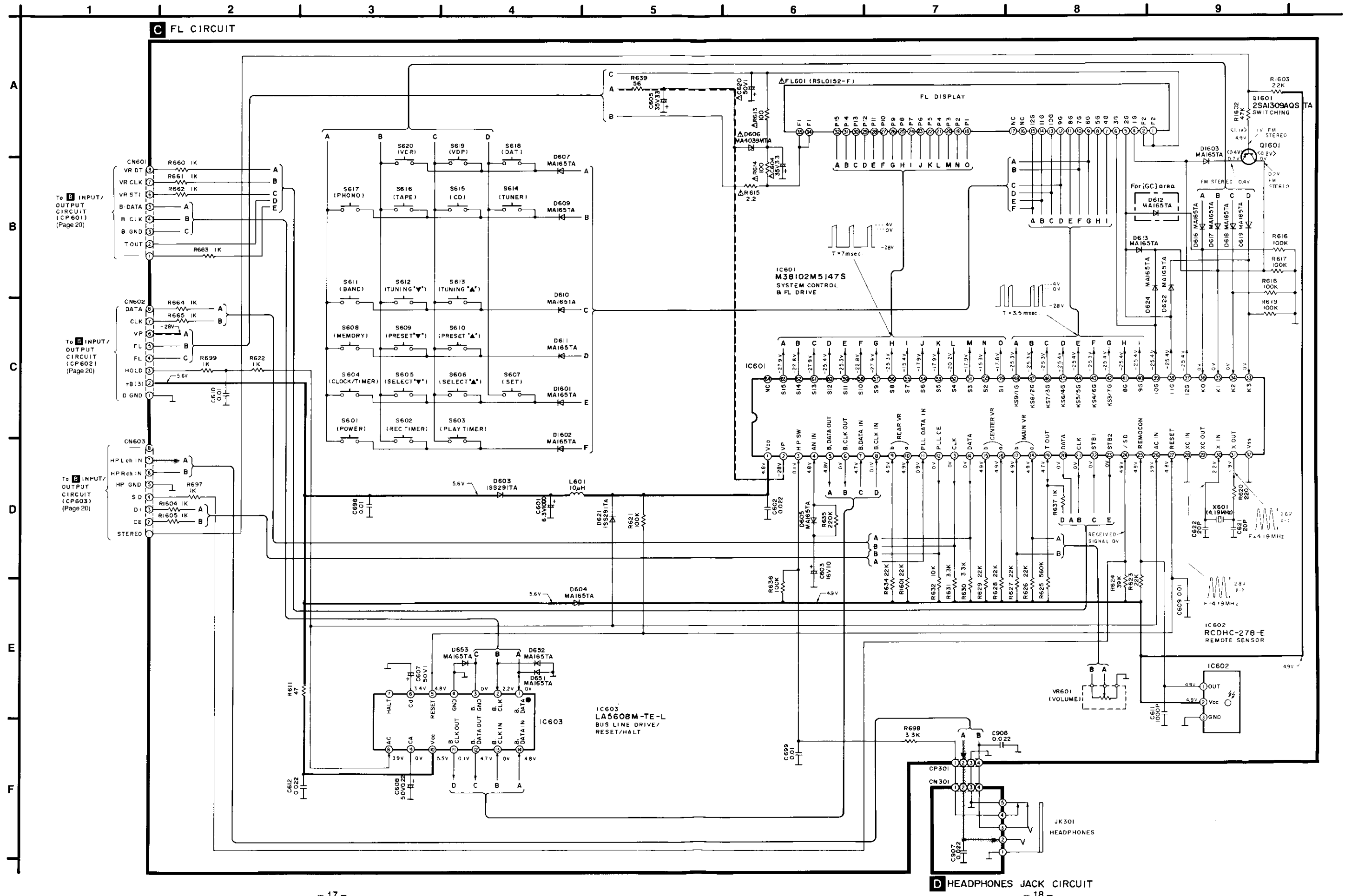
➡ : Surround SP. drive signal line

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

Power Source For (GC) area.



SCHEMATIC DIAGRAM • FL AND HEADPHONES CIRCUIT (Parts list on pages 33~37.)

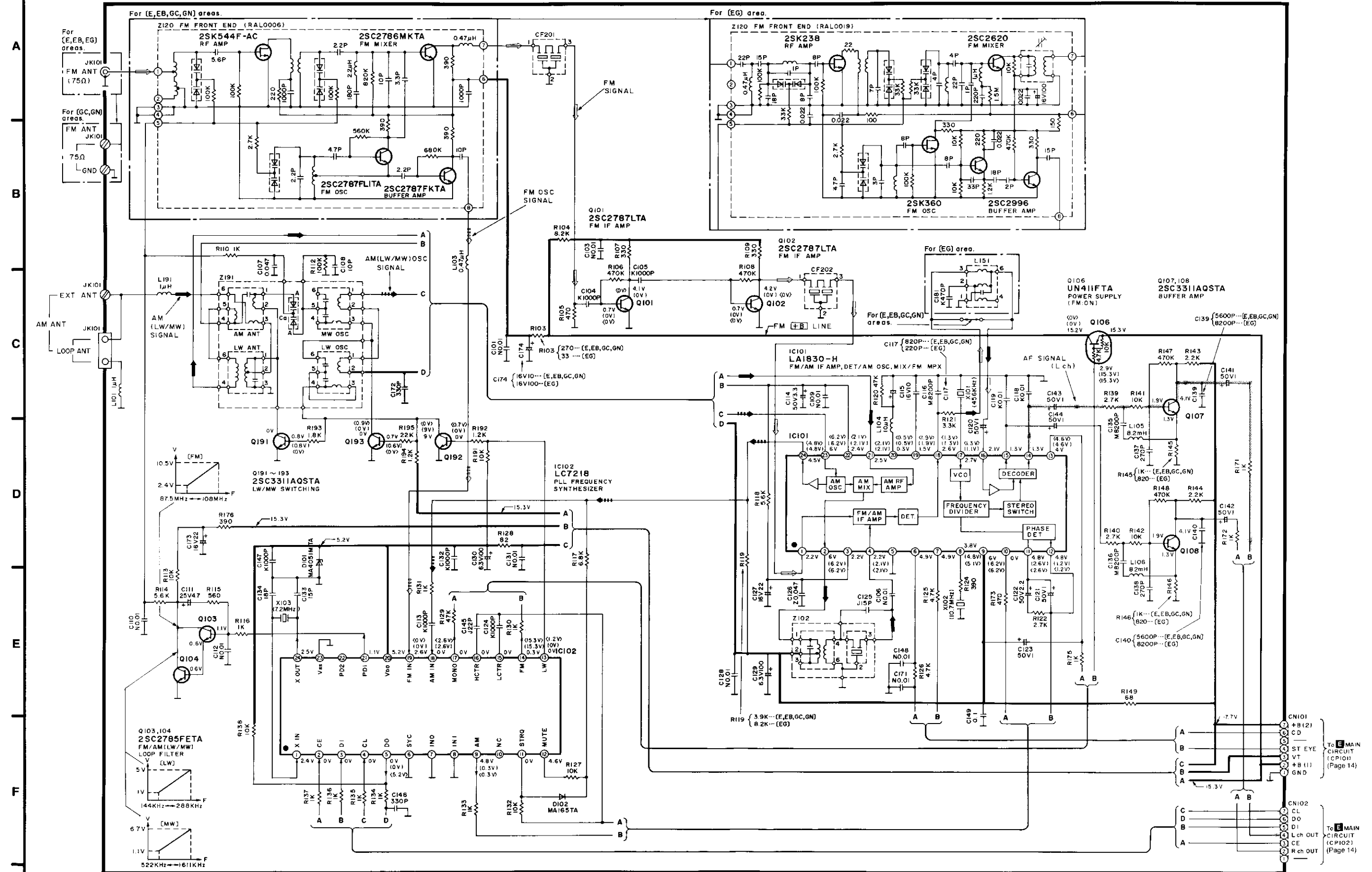


SCHEMATIC DIAGRAM • TUNER CIRCUIT (Parts list on pages 33~37.)

————— : AM (LW/MW) signal line
 ———— : AM (LW/MW) OSC signal line
 ————— : FM signal line
 ———— : FM OSC signal line

A TUNER CIRCUIT

• 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. No mark: FM mode (): MW mode < : LW mode

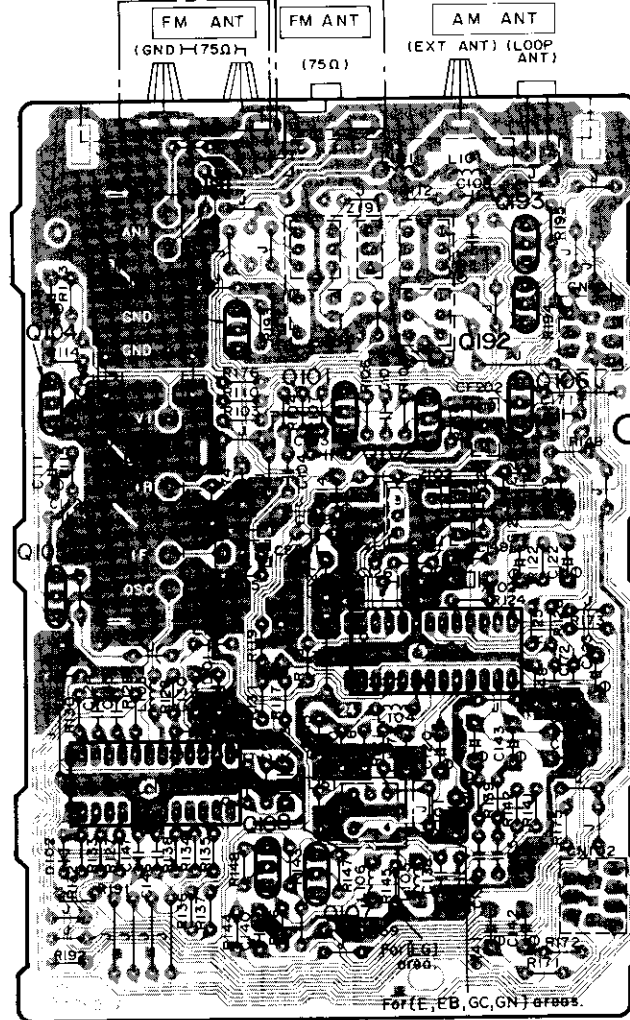


PRINTED CIRCUIT BOARD DIAGRAM

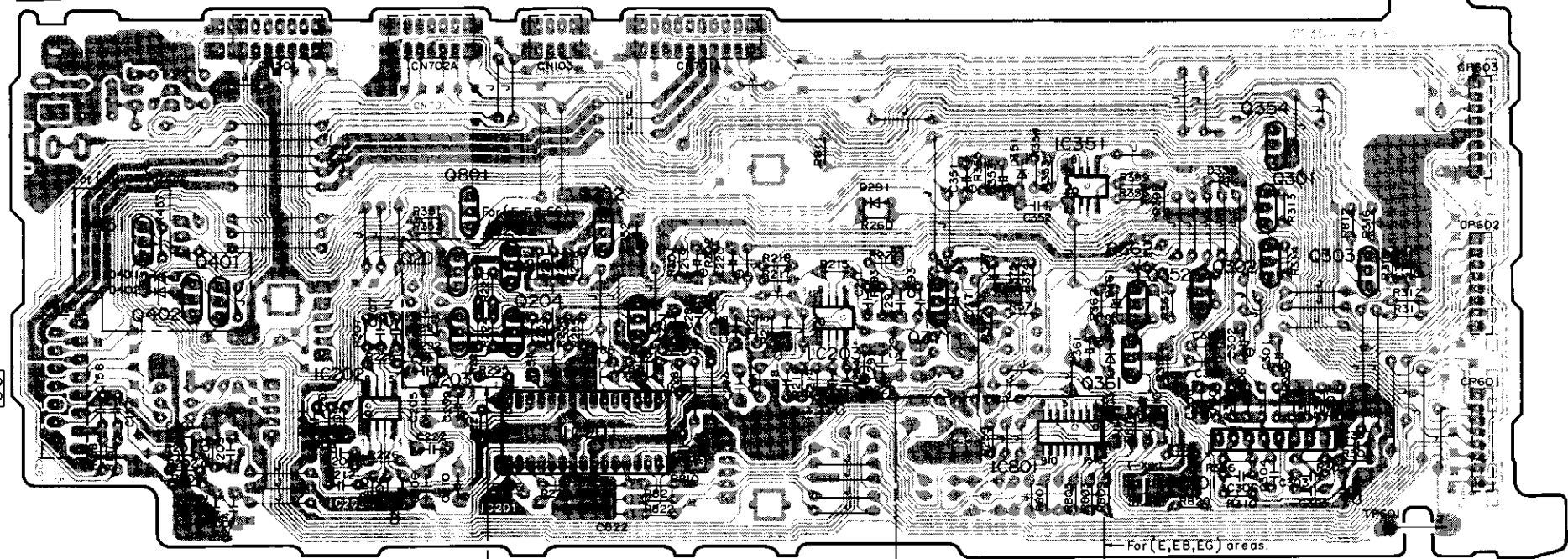
• This circuit board diagram may be modified at any time with the development of new technology.

A TUNER P.C.B. (REPI452C-T... (EG) REPI452D-T... (E,EB) REPI452E-T... (GC,GN))

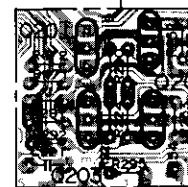
For (GC,GN) areas. For (E,EB,EG) areas.



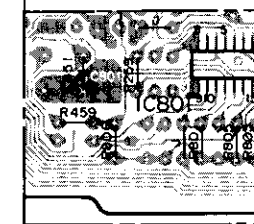
B INPUT/OUTPUT TERMINAL P.C.B. (REPI456C-T... (E,EB,EG) REPI456F-T... (GC,GN))



SH-CH750
SL-CH750



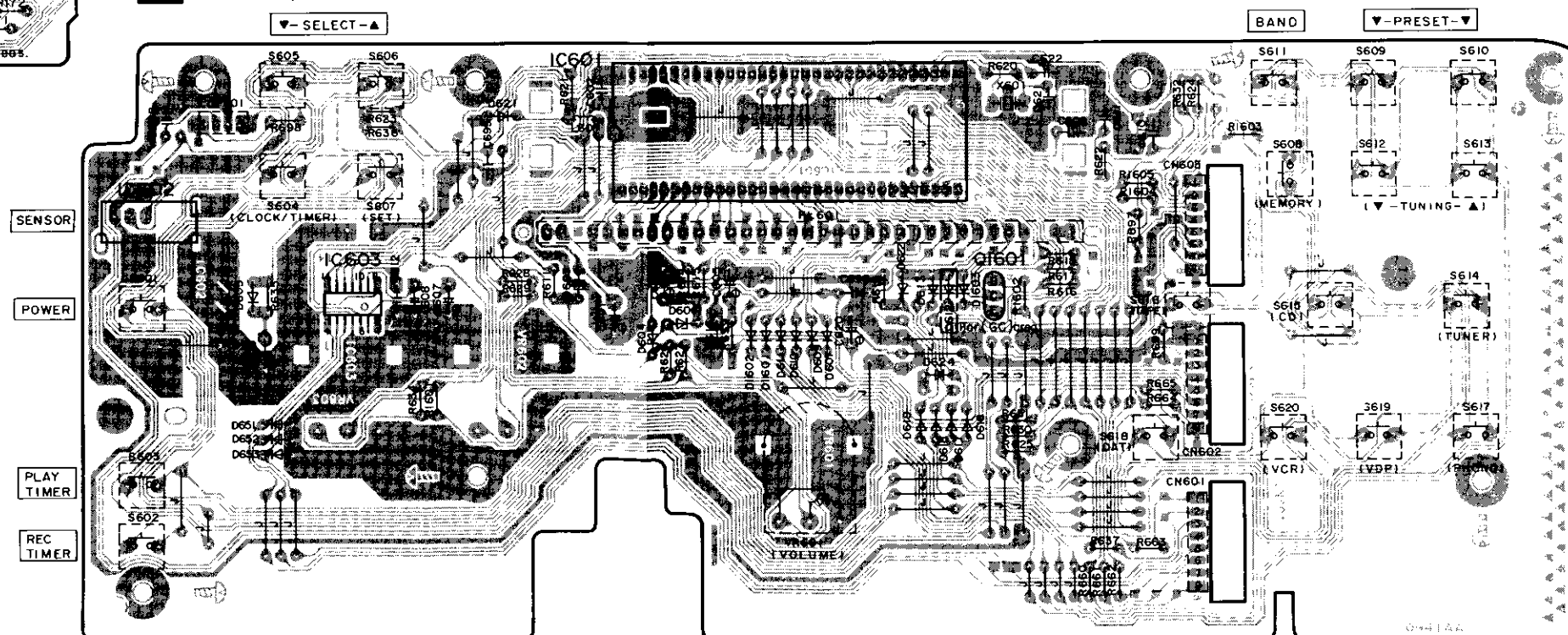
For (GC,GN) areas.



For (GC,GN) areas.

C FL P.C.B. (REPI481C-S... (GC) REPI481D-S... (E,EB,EG,GN))

▼ SELECT ▲



SENSOR

POWER

PLAY
TIMER

REC
TIMER

BAND

▼ PRESET ▼

(MEMORY)

(▼ TUNING ▲)

(TUNER)

(VCR)

(VCR)

(VOLUME)

(VOLUME)

(VOLUME)

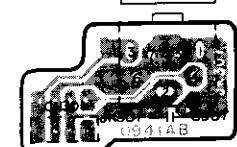
(VOLUME)

(VOLUME)

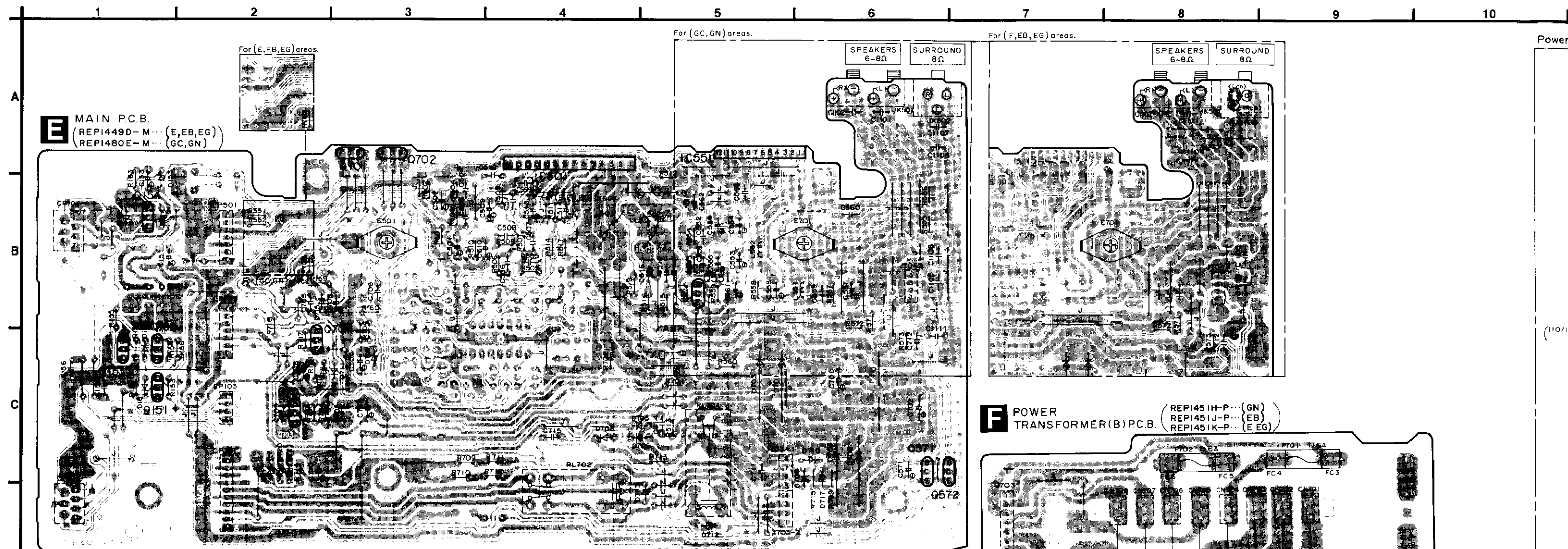
(VOLUME)

D HEADPHONES JACK P.C.B. (REPI481C-S... (GC) REPI481D-S... (E,EB,EG,GN))

PHONES

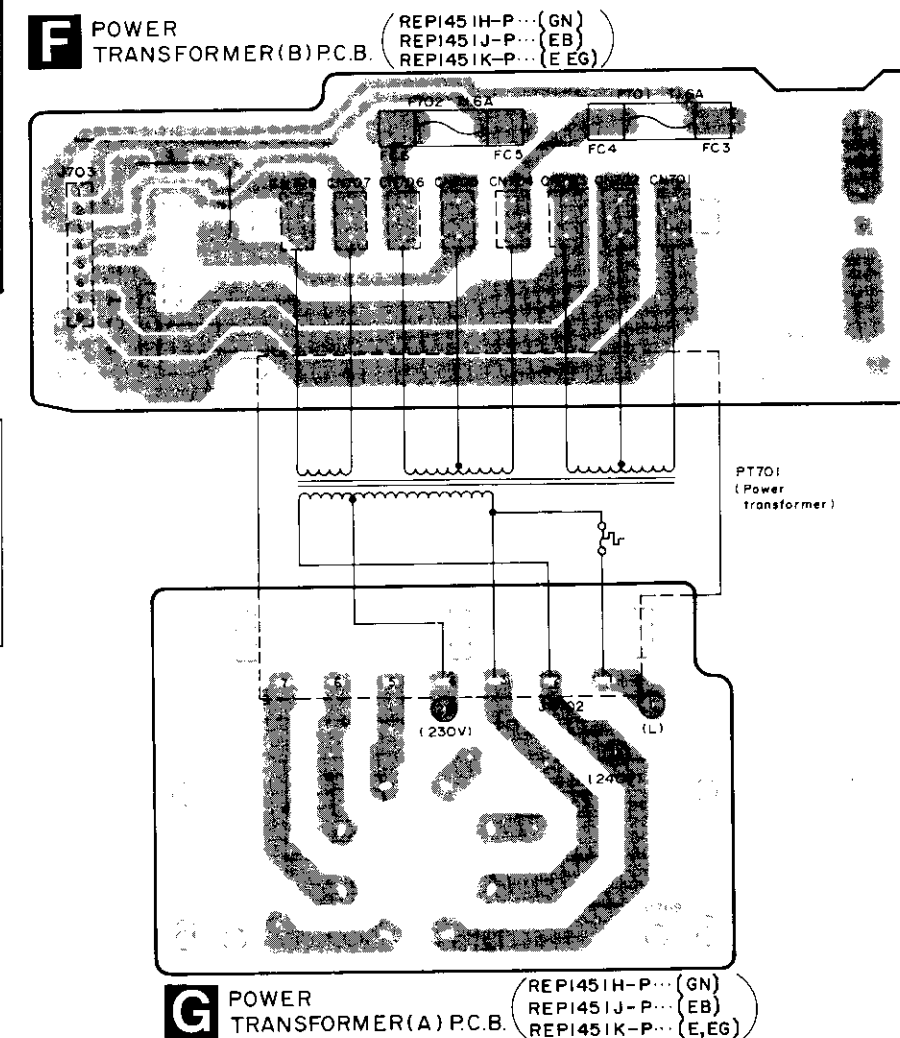


PRINTED CIRCUIT BOARD DIAGRAM

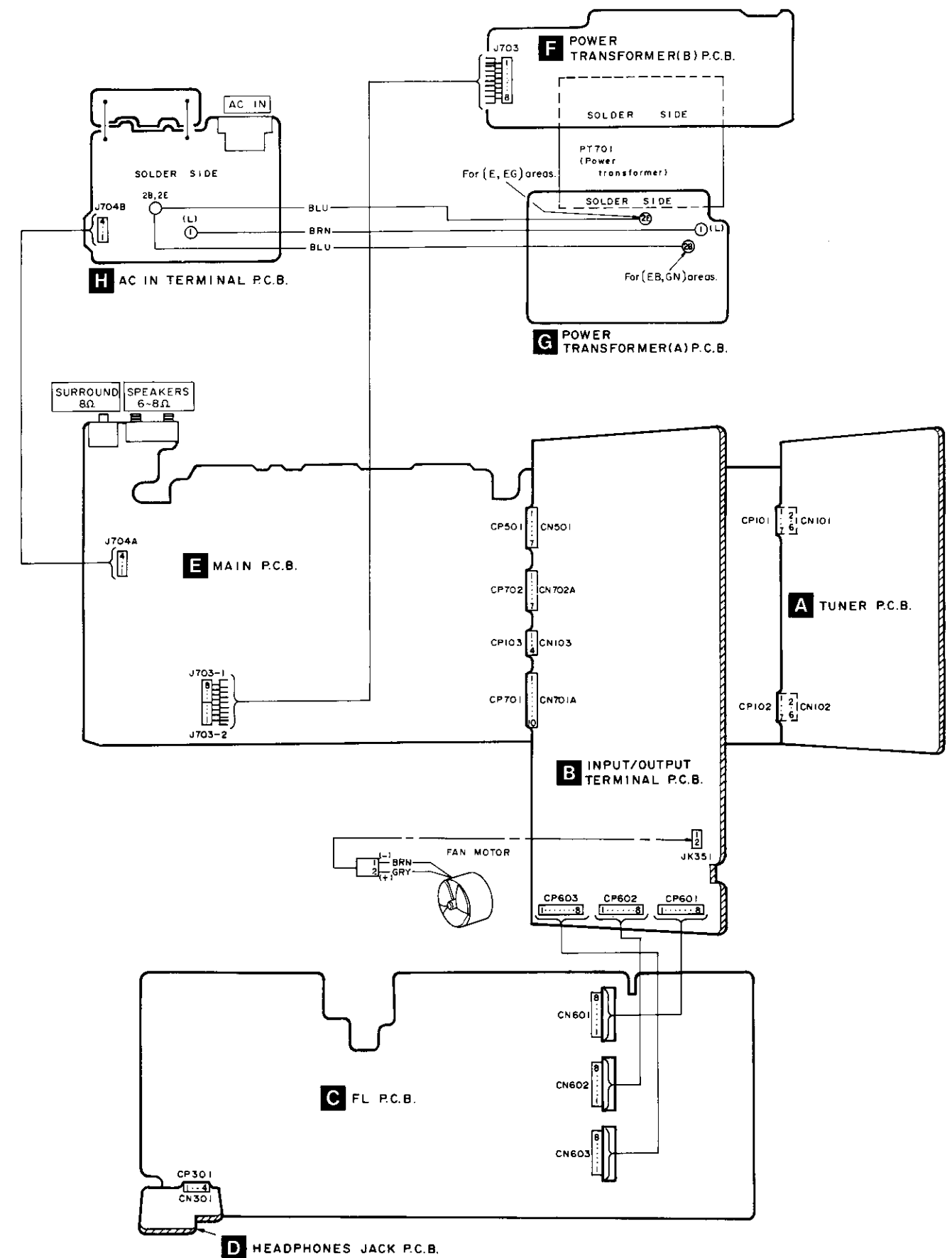
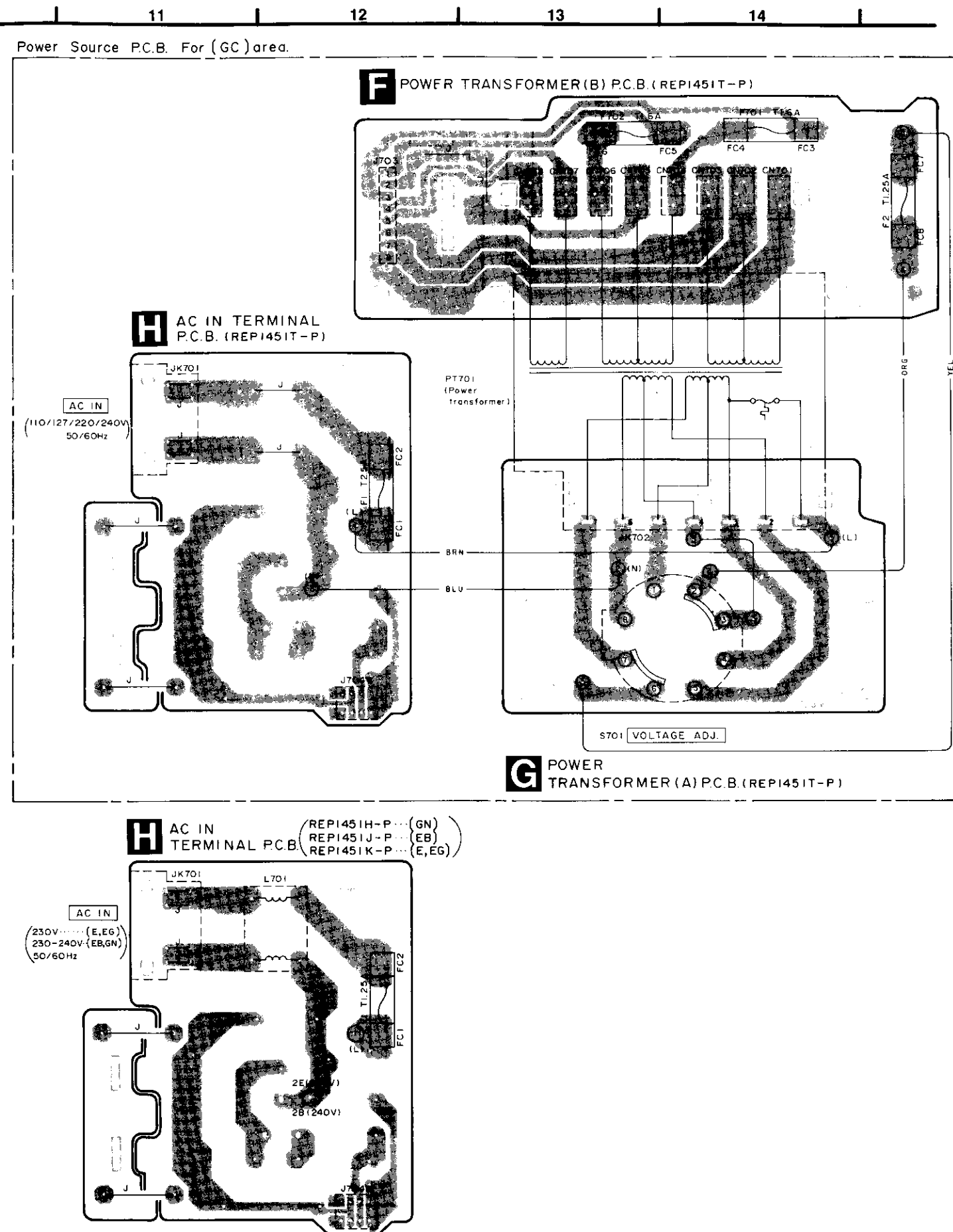


•Terminal guide of IC's, transistors and diodes

BA4558FT1 	LA5608M-TE-L 14Pin BU2040F-T2 16Pin M5219FPTA 8Pin	LA1830-H LC7218 	LC7536 	M38102M5147S 	M5218AL 	LA4282
SVI3102D 	RCDHC-278-E 	UN4111TA 2SC3327ABTP 	2SA1309AQSTA 2SC2785FETA 2SC2787LTA 2SC3311AQSTA 2SD1450STA UN411FTA UN4115TA UN4110TA	2SB1185EF 2SD1762EF 	KSD471ACYGTA 	2SJ40CTA 2SK381BCTA
 MA165TA MA185TA 1SS254TA 1SR35200TB	1SS291TA 	MA4150HTA MA4240MTA 	MA4039MTA MA4051MTA MA4062MTA MA4082MTA MA4091HTA MA4068MTA MA4091LTA	RVDP300DLF 		



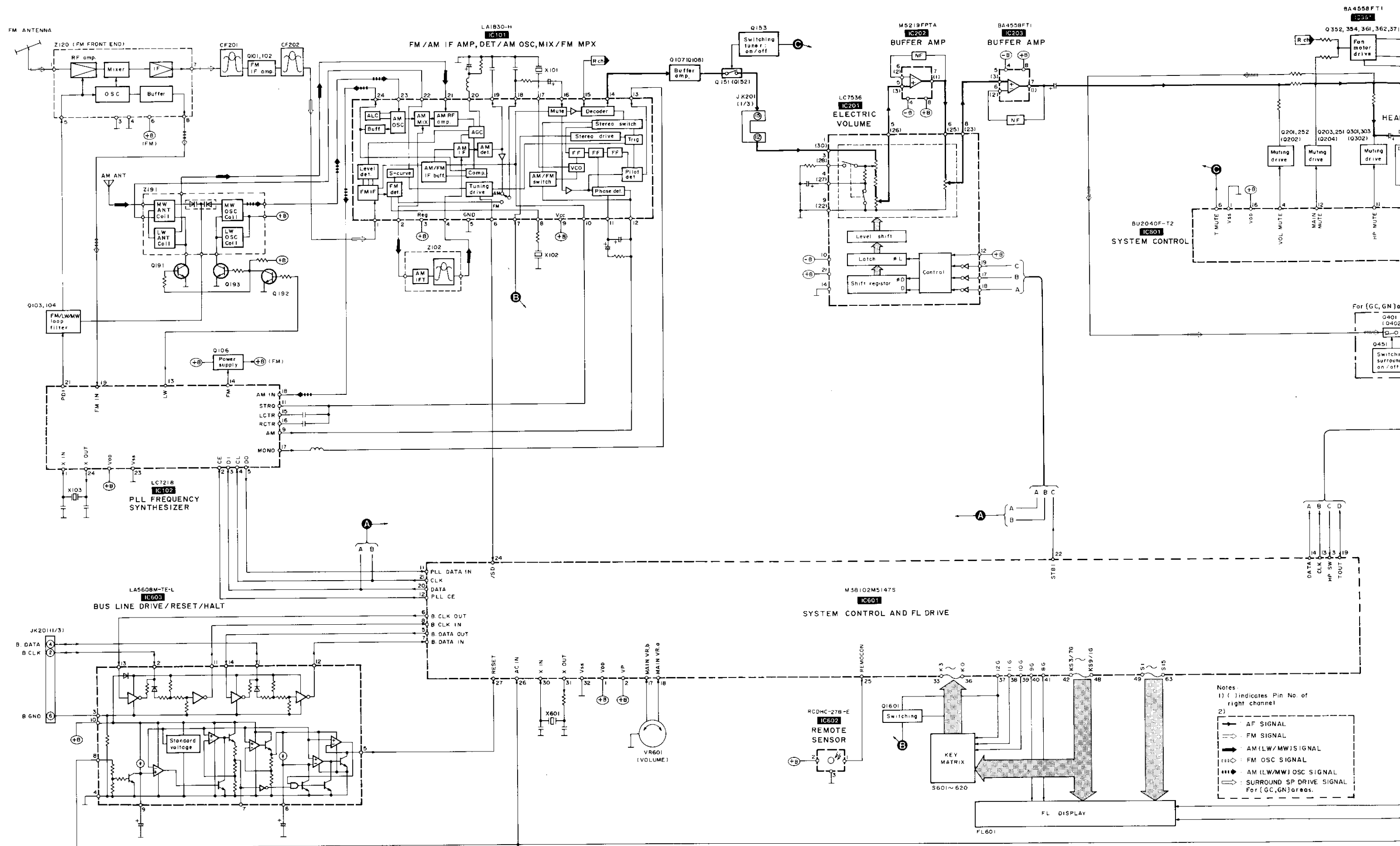
■ WIRING CONNECTION DIAGRAM



BLOCK DIAGRAM

SA-CH750

SA-CH750



REPLACEMENT PARTS LIST

Notes: *Important safety notice:

Components identified by Δ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)

Parts without these indications can be used for all areas.

*Remote Control Ass'y:

Supply period for three years from termination of production.

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)				DIODE (S)	
IC101	LA1830-H	I. C, FM/AM IF AMP. /AM OSC		D101	MA4051MTA	DIODE	
IC102	LC7218	I. C, PLL FREQ. SYNTHESIZER		D102	MA165	DIODE	
IC201	LC7536	I. C, ELECTRIC VOLUME		D151, 152	1SS254TA	DIODE	
IC202	M5219FP	I. C, BUFFER AMP.		D153	MA4082MTA	DIODE	
IC203	SVIBA4558F	I. C, BUFFER AMP.		D291	MA165	DIODE	
IC301	M5218L	I. C, HEADPHONE AMP.		D351	MA165	DIODE	
IC351	SVIBA4558F	I. C, SIGNAL DET.		D352	MA4068M	DIODE	
IC501	SV13102D	I. C, POWER AMP.	Δ	D361	MA40911TA	DIODE	
IC551	LA4282	I. C, POWER AMP. (SURROUND)	(GC, GN)	D362	MA165	DIODE	
IC601	M38102M5147S	I. C, FL. DRIVE/SYSTEM CONT.		D371	MA165	DIODE	
IC602	RCDHC-278	I. C, REMOTE SENSOR		D401, 402	MA165	DIODE	(GC, GN)
IC603	LA5608M-TE-L	I. C, BUS LINE/HALT/RESET		D603	1SS291TA	DIODE	
IC801	BU2040F-T2	I. C, SYSTEM CONT.		D604, 605	MA165	DIODE	
		TRANSISTOR(S)		D606	MA4039MTA	DIODE	Δ
				D607	MA165	DIODE	
				D609-611	MA165	DIODE	
Q101, 102	2SC2787L	TRANSISTOR		D612	MA165	DIODE	(GC)
Q103, 104	2SC2785FE	TRANSISTOR		D613	MA165	DIODE	
Q106	UN411FTA	TRANSISTOR		D616-619	MA165	DIODE	
Q107, 108	2SC3311A-Q	TRANSISTOR		D621	1SS291TA	DIODE	
Q151, 152	2SJ40CTA	TRANSISTOR		D622	MA165	DIODE	
Q153	UN4110TA	TRANSISTOR		D624	MA165	DIODE	
Q154	KSD471ACYGTA	TRANSISTOR		D651-653	MA165	DIODE	
Q191-193	2SC3311A-Q	TRANSISTOR		D701-704	RVDP300DLF	DIODE	Δ
Q201-204	2SD1450RTA	TRANSISTOR		D705, 706	1SR35200TB	DIODE	Δ
Q251, 252	UN4115	TRANSISTOR		D708	1SR35200TB	DIODE	Δ
Q301, 302	2SD1450RTA	TRANSISTOR		D709, 710	MA185TA	DIODE	Δ
Q303	UN4111	TRANSISTOR		D711	1SS254TA	DIODE	
Q352	KSD471ACYGTA	TRANSISTOR		D712, 713	MA4240H	DIODE	
Q354	2SC3311A-Q	TRANSISTOR		D714	MA4062MTA	DIODE	
Q361	KSD471ACYGTA	TRANSISTOR		D715, 716	MA4150M	DIODE	
Q362	2SC3327-A	TRANSISTOR		D717	MA4051MTA	DIODE	
Q371	2SC3311A-Q	TRANSISTOR		D719-721	MA4091HTA	DIODE	
Q401, 402	2SK381BCDTA	TRANSISTOR	(GC, GN)	D1601-1603	MA165	DIODE	
Q451	UN4110TA	TRANSISTOR	(GC, GN)				
Q551	2SC3311A-Q	TRANSISTOR	(GC, GN)			VARIABLE RESISTOR(S)	
Q571, 572	2SC3311A-Q	TRANSISTOR					
Q701	2SD1762EF	TRANSISTOR		VR601	EVQWVF2024B	V. R, MAIN VOLUME CONTROL	
Q702	2SB1185EF	TRANSISTOR					
Q703	KSD471ACYGTA	TRANSISTOR				COMPONENT COMBINATION(S)	
Q704	2SC3311A-Q	TRANSISTOR					
Q801	UN4111	TRANSISTOR		Z102	RL12Z006M-T	COMPONENT COMBINATION	
Q1601	2SA1309A-R	TRANSISTOR		Z120	RAL0006	TUNER PACK(FM FRONT END)	(E, EB, GC, GN)

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
Z120	RAL0019	TUNER PACK(FM FRONT END)	(EG)	S610	EVQ21405R	SW, PRESET(UP)	
Z191	RLA6Z005M-T	COMPONENT COMBINATION		S611	EVQ21405R	SW, BAND	
		COIL(S)		S612	EVQ21405R	SW, TUNING (DOWN)	
				S613	EVQ21405R	SW, TUNING (UP)	
L101	ELESN1R0MA	COIL		S614	EVQ21405R	SW, TUNER	
L103	ELEXTR47MA9	COIL		S615	EVQ21405R	SW, CD	
L104	ELEXT100KA9	COIL		S616	EVQ21405R	SW, TAPE	
L105, 106	RLQZB822KT-D	COIL		S617	EVQ21405R	SW, PHONO	
L151	SLM1B10M-1M	COIL	(EG)	S618	EVQ21405R	SW, DAT	
L191	ELESN1R0MA	COIL		S619	EVQ21405R	SW, VDP	
L501, 502	SLQY07G-40	COIL		S620	EVQ21405R	SW, VCR	
L551, 552	ELEV1R0KA	COIL	(GC, GN)	S701	ESE37263	SW, VOLTAGE SELECTOR	△ (GC)
L601	ELEXT100KA9	COIL				JACK(S)	
L701	RLQZ271M	COIL	△ (E, EB, EG, GN)				
		FILTER(S)		J703	RWJ1808110XX	FLAT CABLE (8P)	
				J703-1, 2	RJS1A6604	SOCKET (4P)	
CF201	RLFFETWND01M	FILTER	(E, EB, GC, GN)	J704A	RJT057W004-1	CONNECTOR (4P)	
CF201	RLFFETNGD01L	FILTER	(EG)	J704B	RJU057W004	SOCKET (4P)	
CF202	RLFFETWND01M	FILTER	(E, EB, GC, GN)	CN101, 102	RJU063W07T	SOCKET (7P)	
CF202	RLFFETMGD01L	FILTER	(EG)	CN103	RJU057W004	SOCKET (4P)	
		OSCILLATOR(S)		CN301	RJU057W004	SOCKET (4P)	
				CN501	RJU057W007	SOCKET (7P)	
X101	RSXZ456KM07M	OSCILLATOR (456KHz)		CN601-603	RJT003K008-1	CONNECTOR (8P)	
X102	RLFDFTD03M	OSCILLATOR (10. 7MHz)		CN701	RJS1A1101T1	SOCKET (1P)	
X103	SVQ49U722-S	OSCILLATOR (7. 2MHz)		CN701A	RJU057W010	SOCKET (10P)	
X601	RSXA4M19S03	OSCILLATOR (4. 19MHz)		CN702	RJS1A1101T1	SOCKET (1P)	
		DISPLAY (S)		CN702A	RJU057W007	SOCKET (7P)	
				CN703-708	RJS1A1101T1	SOCKET (1P)	
FL601	RSL0152-F	FL DISPLAY	△	CP101, 102	RJT063W07T	CONNECTOR (7P)	
		FUSE (S)		CP103	RJT057W004-1	CONNECTOR (4P)	
				CP301	RJT057W004-1	CONNECTOR (4P)	
F1	XBA2C12TB0S	FUSE 250V T1. 25A	△ (E, EB, EG, GN)	CP501	RJT057W007-1	CONNECTOR (7P)	
F1	XBA2C25TB0	FUSE 250V T2. 5A	△ (GC)	CP601-603	RJU003K008M1	SOCKET (8P)	
F2	XBA2C12TB0	FUSE 250V T1. 25A	△ (GC)	CP701	RJT057W010-1	CONNECTOR (10P)	
F701, 702	XBA2C16TB0	FUSE 250V T1. 6A	△	CP702	RJT057W007-1	CONNECTOR (7P)	
		SWITCH(ES)				EARTH TERMINAL (S)	
S601	EVQ21405R	SW, POWER		E501	SNE1004-1	GND PLATE	
S602	EVQ21405R	SW, TIMER REC		E701	SNE1004-1	GND PLATE	
S603	EVQ21405R	SW, TIMER PLAY				FUSE HOLDER(S)	
S604	EVQ21405R	SW, CLOCK/TIMER					
S605	EVQ21405R	SW, SELECT (DOWN)		FC1-6	EYF52BC	FUSE HOLDER	△
S606	EVQ21405R	SW, SELECT (UP)		FC7, 8	EYF52BC	FUSE HOLDER	△ (GC)
S607	EVQ21405R	SW, SET				RELAY(S)	
S608	EVQ21405R	SW, MEMORY					
S609	EVQ21405R	SW, PRESET (DOWN)		RL701, 702	RSY0013M-0	RELAY	△
						HOLDER(S)	

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
SH601	RMN0194	FL HOLDER				JACK(S)	
		TRANSFORMER(S)		JK101	RJH4202M	ANTENNA TERMINAL	(E, EB, EG)
PT701	RTP1N5B015	POWER TRANSFORMER	△ (E, EB, EG, GN)	JK101	RJH4405-1M	ANTENNA TERMINAL	(GC, GN)
PT701	RTP1N5G004	POWER TRANSFORMER	△ (GC)	JK201	RJT065K15	CONNECTOR (15P)	
				JK301	RJJD7S2XA-C	HEADPHONES JACK	
				JK351	SJT3213	CONNECTOR (2P)	
				JK501	RJR0054M	SPEAKER TERMINAL	
				JK502	SJF3068-6N	SURROUND SPEAKER TERMINAL	(E, EB, EG)
				JK502	SJF3068N	SURROUND SPEAKER TERMINAL	(GC, GN)
				JK701	SJS9236	AC INLET	△ (E, EB, EG, GC)
				JK701	SJSD16	AC INLET	△ (GN)
				JK702	SJS702-1	CONNECTOR (7P)	

Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM) , 1M=1,000k (OHM)

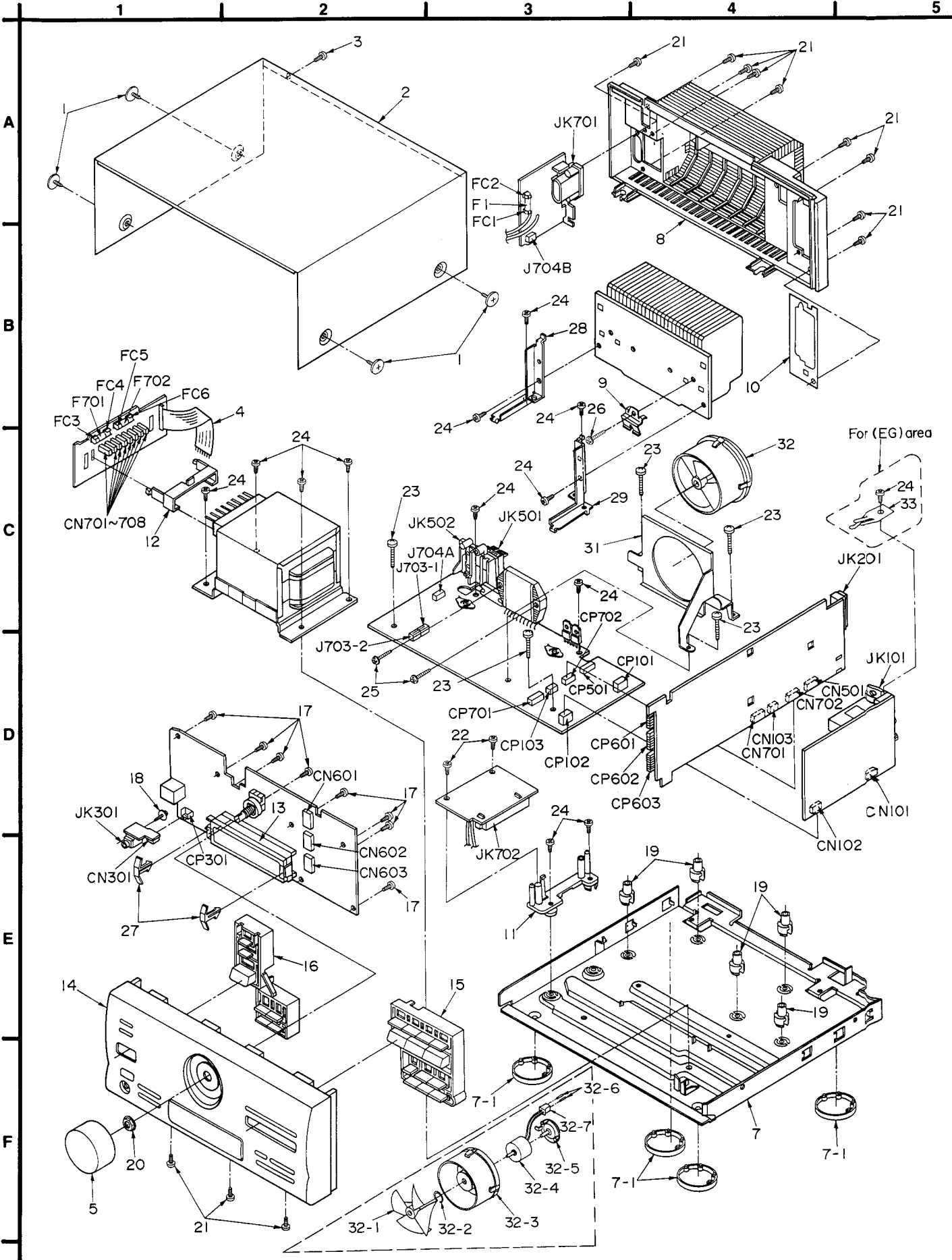
Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
		RESISTORS	R129	ERDS2TJ473	1/4W 47K	R195	ERDS2TJ223	1/4W 22K
			R130, 131	ERDS2TJ102	1/4W 1K	R201, 202	ERDS2TJ222	1/4W 2.2K
			R132	ERDS2TJ103	1/4W 10K	R203, 204	ERDAS3G223T	1/4W 22K
R103	ERDS2TJ271	1/4W 270 E, EB, GC, GN	R133-137	ERDS2TJ102	1/4W 1K	R205, 206	ERDS2TJ104	1/4W 100K
R103	ERDS2TJ330	1/4W 33 EG	R138	ERDS2TJ103	1/4W 10K	R207, 208	ERDAS3G562T	1/4W 5.6K
R104	ERDS2TJ822	1/4W 8.2K	R139, 140	ERDS2TJ272T	1/4W 2.7K	R209, 210	ERDAS3G332T	1/4W 3.3K
R105	ERDS2TJ471	1/4W 470	R141, 142	ERDS2TJ103	1/4W 10K	R211, 212	ERDS2TJ222	1/4W 2.2K
R106	ERDS2TJ474	1/4W 470K	R143, 144	ERDS2TJ222	1/4W 2.2K	R213, 214	ERDS2TJ204	1/4W 200K
R107	ERDS2TJ331	1/4W 330	R145, 146	ERDS2TJ102	1/4W 1K E, EB, GC, GN	R215, 216	ERDS2TJ474	1/4W 470K
R108	ERDS2TJ474	1/4W 470K	R145, 146	ERDS2TJ821	1/4W 820 EG	R217, 218	ERDS2TJ102	1/4W 1K
R109	ERDS2TJ331	1/4W 330	R147, 148	ERDS2TJ474	1/4W 470K	R219, 220	ERDS2TJ331	1/4W 330
R110	ERDS2TJ102	1/4W 1K	R149	ERDS2TJ680T	1/4W 68	R221, 222	ERDS2TJ105T	1/4W 1M
R112	ERDS2TJ104	1/4W 100K	R151-154	ERDS2TJ104	1/4W 100K	R223, 224	ERDS2TJ332	1/4W 3.3K E, EB, EG
R113	ERDS2TJ103	1/4W 10K	R155	ERDS2TJ102	1/4W 1K	R223, 224	ERDS2TJ222	1/4W 2.2K GC, GN
R114	ERDS2TJ562	1/4W 5.6K	R156	ERDS2TJ105T	1/4W 1M	R225, 226	ERDS2TJ104	1/4W 100K
R115	ERDS2TJ561	1/4W 560	R157, 158	ERDS2TJ102	1/4W 1K	R227, 228	ERDS2TJ332	1/4W 3.3K
R116	ERDS2TJ102	1/4W 1K	R159	ERDS2TJ160	1/4W 10	R251, 252	ERDS2TJ102	1/4W 1K
R117	ERDS2TJ682T	1/4W 6.8K	R160, 161	ERDS2TJ331	1/4W 330	R253, 254	ERDS2EJ121	1/4W 120
R118	ERDS2TJ562	1/4W 5.6K	R162	ERDS2TJ152	1/4W 1.5K	R255	ERDS2TJ154	1/4W 150K
R119	ERDS2TJ392T	1/4W 3.9K E, EB, GC, GN	R163	ERDS2TJ331	1/4W 330	R256	ERDS2TJ105T	1/4W 1M
R119	ERDS2TJ822	1/4W 8.2K EG	R171, 172	ERDS2TJ102	1/4W 1K	R257	ERDS2TJ334	1/4W 330K
R120	ERDS2TJ473	1/4W 47K	R173	ERDS2TJ471	1/4W 470	R258	ERDS2TJ105T	1/4W 1M
R121	ERDS2TJ332	1/4W 3.3K	R175	ERDS2TJ102	1/4W 1K	R259	ERDS2TJ561	1/4W 560
R122	ERDS2TJ272T	1/4W 2.7K	R176	ERDS2TJ391	1/4W 390	R260	ERDS2TJ392T	1/4W 3.9K
R124	ERDS2TJ391	1/4W 390	R191	ERDS2TJ103	1/4W 10K	R281	ERDS2TJ102	1/4W 1K
R125, 126	ERDS2TJ472	1/4W 4.7K	R192	ERDS2TJ122	1/4W 1.2K	R282	ERDS2TJ561	1/4W 560
R127	ERDS2TJ103	1/4W 10K	R193	ERDS2TJ182	1/4W 1.8K	R291, 292	ERDS2TJ104	1/4W 100K
R128	ERDS2TJ820	1/4W 82	R194	ERDS2TJ122	1/4W 1.2K	R293, 294	ERDAS3G123T	1/4W 12K

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
R295, 296	ERDAS3G622T	1/4W 6.2K	R621	ERDS2TJ104	1/4W 100K	C109, 110	ECBT1C103NS5	16V 0.01U
R301, 302	ERDS2TJ562	1/4W 5.6K	R622	ERDS2TJ102	1/4W 1K	C111	ECEA1EKA4R7B	25V 4.7U
R303-306	ERDS2TJ563	1/4W 56K	R623	ERDS2TJ223	1/4W 22K	C112	ECBT1C103NS5	16V 0.01U
R307, 308	ERDS2TJ562	1/4W 5.6K	R624	ERDS2TJ393	1/4W 39K	C113	ECBT1H102KB5	50V 1000P
R309-312	ERDS2EJ121	1/4W 120	R625	ERDS2TJ564	1/4W 560K	C114	ECEA1HKA3R3B	50V 3.3U
R313, 314	ERDS2TJ102	1/4W 1K	R626-629	ERDS2TJ223	1/4W 22K	C115	ECEA1CKA100B	16V 10U
R315	ERDS2TJ334	1/4W 330K	R630, 631	ERDS2TJ332	1/4W 3.3K	C116	ECBT1C822MS5	16V 8200P
R316	ERDS2TJ105T	1/4W 1M	R632	ERDS2TJ103	1/4W 10K	C117	ECQB1H821JF3	50V 820P E, EB, GC, GN
R351	ERDS2TJ563	1/4W 56K	R634	ERDS2TJ223	1/4W 22K	C117	ECQP2A221JZT	100V 220P EG
R352	ERDS2TJ184T	1/4W 180K	R635	ERDS2TJ224T	1/4W 220K	C118, 119	ECFRIE103KR	25V 0.01U
R353	ERDS2TJ274	1/4W 270K	R636	ERDS2TJ104	1/4W 100K	C120, 121	ECEA1HKA010B	50V 1U
R354	ERDS2TJ102	1/4W 1K	R637	ERDS2TJ102	1/4W 1K	C122	ECEA1HKA2R2B	50V 2.2U
R355	ERDS2TJ103	1/4W 10K	R639	ERDS2TJ560T	1/4W 56	C123	ECEA1HKA010B	50V 1U
R356	ERDS2TJ332	1/4W 3.3K	R660-665	ERDS2TJ102	1/4W 1K	C124	ECBT1H102KB5	50V 1000P
R357	ERDS1FVJ390T	1/2W 39 △	R697	ERDS2TJ102	1/4W 1K	C125	ECBT1H150JC5	50V 15P
R358	ERDS2TJ220T	1/4W 22	R698	ERDS2TJ332	1/4W 3.3K	C126	ECBT1H473ZF5	50V 0.047U
R361	ERDS2TJ474	1/4W 470K	R699	ERDS2TJ102	1/4W 1K	C127	ECEA1CKA220B	16V 22U
R362	ERDS2TJ102	1/4W 1K	R701, 702	ERD2FCVJ4R7T	1/4W 4.7 △	C128	ECBT1C103NS5	16V 0.01U
R371	ERDS2TJ103	1/4W 10K	R703, 704	ERDS2TJ562	1/4W 5.6K	C129, 130	ECEA0JKA101B	6.3V 100U
R372	ERDS2TJ823T	1/4W 82K	R705, 706	ERG1SJ471E	1W 470	C131	ECBT1C103NS5	16V 0.01U
R373	ERDS2TJ222	1/4W 2.2K	R707	ERDS2TJ680T	1/4W 68	C132	ECBT1H102KB5	50V 1000P
R374	ERDS2TJ823T	1/4W 82K	R708	ERDS2TJ562	1/4W 5.6K	C133	ECBT1H150JC5	50V 15P
R375	ERDS2TJ153	1/4W 15K	R709, 710	ERG1SJ391E	1W 390	C134	ECBT1H180JC5	50V 18P
R398	ERDS2TJ332	1/4W 3.3K	R711, 712	ERG1SJ331E	1W 330	C135, 136	ECBT1C822MS5	16V 8200P
R399	ERDS2TJ154	1/4W 150K	R713	ERDS1FVJ2R2T	1/2W 2.2 △	C137, 138	ECBT1H271KB5	50V 270P
R457	ERDS2TJ105T	1/4W 1M GC, GN	R714	ERG1SJ681E	1W 680	C139, 140	ECFRIE562KR	25V 5600P E, EB, GC, GN
R459	ERDS2TJ272T	1/4W 2.7K GC, GN	R715	ERDS2TJ153	1/4W 15K	C139, 140	ECFRIE822KR	25V 8200P EG
R471, 472	ERDS2TJ121	1/4W 120 GC, GN	R716	ERDS2TJ102	1/4W 1K	C141-144	ECEA1HKA010B	50V 1U
R501, 502	ERDS2TJ222	1/4W 2.2K	R717	ERDS2TJ103	1/4W 10K	C145	ECBT1H220JC5	50V 22P
R503-506	ERDS2TJ563	1/4W 56K	R799	ERDS2TJ103	1/4W 10K	C146	ECBT1H331KB5	50V 330P
R507, 508	ERDS2TJ272T	1/4W 2.7K	R801	ERDS2TJ102	1/4W 1K	C147	ECBT1H102KB5	50V 1000P
R509, 510	ERDS2TJ102	1/4W 1K	R803	ERDS2TJ103	1/4W 10K	C148	ECBT1C103NS5	16V 0.01U
R511	ERDS2TJ334	1/4W 330K	R805	ERDS2TJ562	1/4W 5.6K	C149	ECBT1H104ZF5	50V 0.1U
R512	ERDS2TJ154	1/4W 150K △	R806	ERDS2TJ392T	1/4W 3.9K GC, GN	C151	ECEA1HKA010B	50V 1U
R513	ERDS2TJ684	1/4W 680K △	R808	ERDS2TJ392T	1/4W 3.9K	C152	ECKR1H103ZF5	50V 0.01U
R514	ERD25FJ470	1/4W 47 △	R809, 810	ERDS2TJ272T	1/4W 2.7K	C153	ECEA1AKA101B	10V 100U
R515, 516	ERDS1FVJ100T	1/2W 10 △	R811	ERDS2TJ221	1/4W 220	C155, 156	ECBT1E103ZF	25V 0.01U
R517, 518	ERD25FVJ100T	1/4W 10 △	R812	ERDS2TJ332	1/4W 3.3K	C157, 158	ECBT1H101KB5	50V 100P
R551, 552	ERDS2TJ223	1/4W 22K GC, GN	R820-822	ERDS2TJ272T	1/4W 2.7K	C171	ECBT1C103NS5	16V 0.01U
R553, 554	ERDS2TJ182	1/4W 1.8K GC, GN	R1601	ERDS2TJ223	1/4W 22K	C172	ECBT1H331KB5	50V 330P
R555, 556	ERDS2TJ102	1/4W 1K GC, GN	R1602	ERDS2TJ473	1/4W 47K	C173	ECEA1CKA220B	16V 22U
R557, 558	ERDS1FVJ4R7T	1/2W 4.7 △ GC, GN	R1603	ERDS2TJ223	1/4W 22K	C174	ECEA1CKA100B	16V 10U E, EB, GC, GN
R559	ERDS2TJ271	1/4W 270 GC, GN	R1604, 1605	ERDS2TJ102	1/4W 1K	C174	ECEA1CKA101B	16V 100U EG
R560, 561	ERDS2TJ103	1/4W 10K GC, GN				C181	ECBT1H471KB5	50V 470P EG
R571	ERDS2TJ823T	1/4W 82K			CAPACITORS	C201, 202	ECBT1H101KB5	50V 100P
R572	ERDS2TJ124T	1/4W 120K				C203, 204	ECQB1H393JF3	50V 0.039U
R573	ERDS2TJ563	1/4W 56K	C101	ECBT1C103NS5	16V 0.01U	C205, 206	ECQB1H333JF3	50V 0.033U
R611	ERDS2TJ470	1/4W 47	C103	ECBT1C103NS5	16V 0.01U	C207, 208	ECBT1H471KB5	50V 470P
R613, 614	ERDS2TJ101	1/4W 100 △	C104, 105	ECBT1H102KB5	50V 1000P	C209, 210	ECEA1HKA3R3B	50V 3.3U
R615	ERDS2TJ2R2T	1/4W 2.2 △	C106	ECBT1C103NS5	16V 0.01U	C211, 212	ECBT1H101KB5	50V 100P
R616-619	ERDS2TJ104	1/4W 100K	C107	ECBT1H473ZF5	50V 0.047U	C213, 214	ECQB1H822JF3	50V 8200P E, EB, EG
R620	ERDS2TJ221	1/4W 220	C108	ECBT1H100JC5	50V 10P	C213, 214	ECQB1H103JF3	50V 0.01U GC, GN

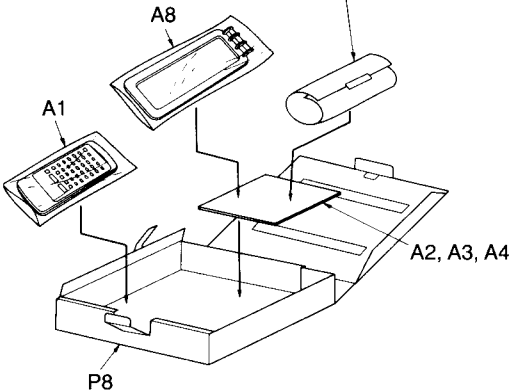
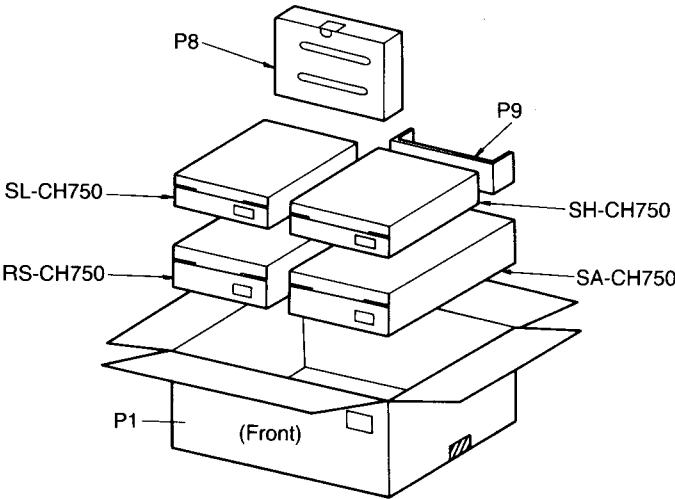
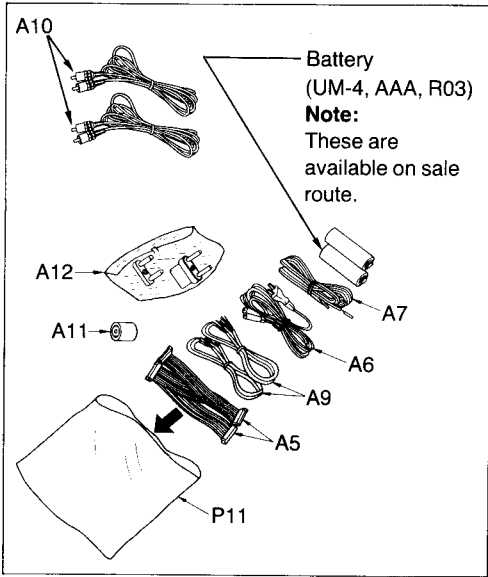
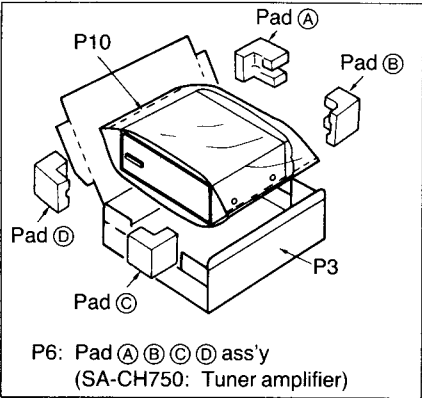
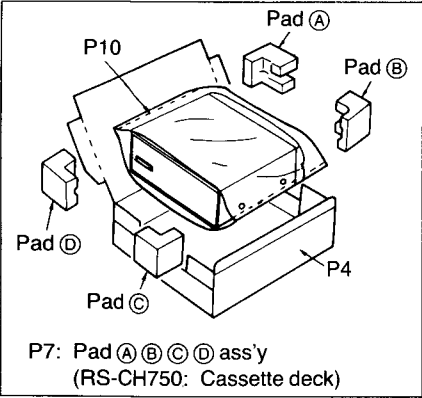
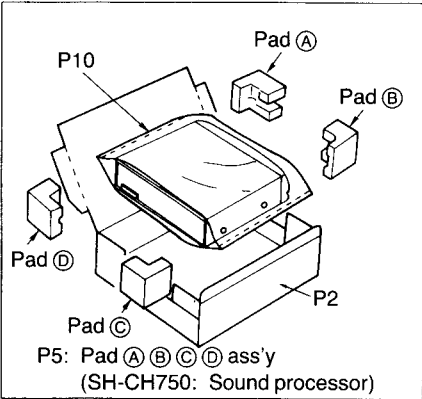
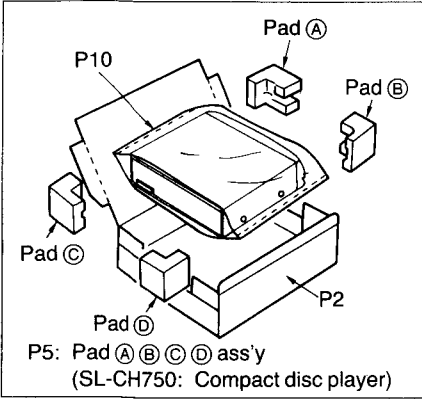
Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
C215, 216	ECBT1H101KB5	50V 100P	C612	ECBT1E223ZF	25V 0.022U
C217, 218	ECBT1H151KB5	50V 150P	C620	ECEA1HKS010	50V 1U △
C219, 220	ECEA1CKA100B	16V 10U	C621, 622	ECBT1H200JC5	50V 20P
C221, 222	ECQB1H333JF3	50V 0.033U	C698, 699	ECBT1E103ZF	25V 0.01U
C251	ECEAOJA221B	6.3V 220U	C701, 702	ECA1HM332B	50V 3300U E, EB, EG
C252	ECEA1CKA100B	16V 10U	C701, 702	ECEA45V472YB	45V 4700U GC, GN
C281-287	ECBT1E103ZF	25V 0.01U	C703, 704	ECEA1CKA330B	16V 33U
C291, 292	ECQB1H223JF3	50V 0.022U	C705, 706	ECKR1H103ZF5	50V 0.01U
C293, 294	ECBT1H101KB5	50V 100P	C707	ECA1HM221B	50V 220U
C301, 302	ECEA1HKA3R3B	50V 3.3U	C708	ECEA1CKA100B	16V 10U
C303, 304	ECBT1H101KB5	50V 100P	C709	ECBT1E103ZF	25V 0.01U
C305, 306	ECBT1H330J5	50V 33P	C710	ECA1HAP330B	50V 33U
C307, 308	ECEA1HKA3R3B	50V 3.3U	C711	ECQE1104KF3	100V 0.1U △
C309	ECEA1HKA010B	50V 1U	C712	ECBT1E223ZF	25V 0.022U
C351	ECEA1CKA100B	16V 10U	C714, 715	ECKR1H103ZF5	50V 0.01U △
C352	ECBT1E223ZF	25V 0.022U	C801, 802	ECBT1H470J5	50V 47P
C353	ECEA1HKA2R2B	50V 2.2U	C803	ECBT1H104ZF5	50V 0.1U
C361	ECEA1CM470SB	16V 47U △	C810	ECBT1H470J5	50V 47P
C371	ECEAOJA221B	6.3V 220U	C811	ECBT1E103ZF	25V 0.01U
C381, 382	ECBT1E103ZF	25V 0.01U	C821, 822	ECBT1H220J5	50V 22P
C397, 398	ECBT1E103ZF	25V 0.01U	C905, 906	ECBT1H101KB5	50V 100P
C451	ECEA1CKA100B	16V 10U GC, GN	C907, 908	ECBT1E223ZF	25V 0.022U
C501, 502	ECA1HAP3R3B	50V 3.3U	C911	ECKR1H102ZF5	50V 1000P △
C503, 504	ECBT1H331KB5	50V 330P	C1101, 1102	ECBT1E223ZF	25V 0.022U
C505, 506	ECBT1H6R8K5	50V 6.8P	C1103, 1104	ECBT1H102KB5	50V 1000P E, EB, EG
C507, 508	ECBT1H102KB5	50V 1000P	C1105, 1106	ECBT1H102KB5	50V 1000P
C509, 510	ECA1HAP3R3B	50V 3.3U	C1107, 1108	ECBT1E223ZF	25V 0.022U GC, GN
C511, 512	ECBT1H821KB5	50V 820P	C1111	ECBT1H102KB5	50V 1000P GC, GN
C513	ECA1HAP330B	50V 33U			
C514	ECA2AAP100B	100V 10U			
C515, 516	ECBT1H104ZF5	50V 0.1U			
C551	ECBT1C472KR5	16V 4700P GC, GN			
C552	ECBT1C222KR5	16V 2200P GC, GN			
C553, 554	ECEA1HKA3R3B	50V 3.3U GC, GN			
C555	ECEA1HKA2R2B	50V 2.2U GC, GN			
C556	ECEA1HKA010B	50V 1U GC, GN			
C557, 558	ECA1VM101B	35V 100U GC, GN			
C559, 560	ECQV1H473JM3	50V 0.047U GC, GN			
C561	ECA1EM21B	25V 220U GC, GN			
C562	ECEA1HMO10B	50V 1U △GC, GN			
C563	ECQV1H104JM3	50V 0.1U GC, GN			
C571	ECEAOJA101B	6.3V 100U			
C599	ECBT1C103MS5	16V 0.01U E, EB, EG			
C601	ECEAOJU102	6.3V 1000U			
C602	ECBT1E223ZF	25V 0.022U			
C603	ECEA1CS100L	16V 10U			
C604	ECEA1VKA330B	35V 33U △			
C605	ECEA1VKA330B	35V 33U			
C607	ECEA1HKS010	50V 1U			
C608	ECEA1HKA22B	50V 0.22U			
C609, 610	ECBT1E103ZF	25V 0.01U			
C611	ECBT1H102KB5	50V 1000P			

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS				PACKING MATERIALS	
1	RHD30007	SCREW		P1	RPG1410	PACKING CASE (SYSTEM)	(E, EG)
2	RKM0202A-1K	CABINET		P1	RPG1411	PACKING CASE (SYSTEM)	(EB)
3	XTBS3+8JFZ1	SCREW		P1	RPG1454	PACKING CASE (SYSTEM)	(GC)
4	RWJ1808110XX	FLAT CABLE (8P)		P1	RPG1412	PACKING CASE (SYSTEM)	(GN)
5	RGW0157-K	KNOB, MAIN VOLUME		P2	RPG1314	PACKING CASE (CD/PROCESSOR)	
7	RFKJACH550PK	BOTTOM BOARD ASS'Y	(E, EB, EG, GN)	P3	RPG1312	PACKING CASE (AMPLIFIER)	
7	RFKJACH550GC	BOTTOM BOARD ASS'Y	(GC)	P4	RPG1313	PACKING CASE (DECK)	
7-1	RKA0055-N	FOOT		P5	RPN0627	PAD (CD/PROCESSOR)	
8	RFKHACH750EK	REAR GRILL ASS'Y	(E)	P6	RPN0625	PAD (AMPLIFIER)	
8	RFKHACH750EB	REAR GRILL ASS'Y	(EB)	P7	RPN0626	PAD (DECK)	
8	RFKHACH750EG	REAR GRILL ASS'Y	(EG)	P8	RPQF0047	ACCESSORY BOX	
8	RFKHACH750GC	REAR GRILL ASS'Y	(GC)	P9	RPQ0244	SPACER	
8	RFKHACH750GN	REAR GRILL ASS'Y	(GN)	P10	XZB45X50A01Z	PROTECTION COVER	
9	RMCO158	TRANSISTOR HOLDER		P11	XZB22X20C03	PROTECTION COVER	
10	RMCO182	EARTH PLATE				ACCESSORIES	
11	RMNO190	HOLDER (A)		A1	RAK-SC709WH	REMOTE CONTROL TRANSMITTER	
12	RMNO191-1	HOLDER (B)		A1-1	RKK0020-K	BATTERY COVER	
13	RMNO194	FL HOLDER		A2	RFKSACH950EK	INSTRUCTIONS MANUAL	(E)
14	RFKGACH750EK	FRONT PANEL ASS'Y		A2	RFKSACH950EB	INSTRUCTIONS MANUAL	(EB)
15	RGU0796-K	BUTTON, INPUT SELECTOR etc.		A2	RFKSACH950EG	INSTRUCTIONS MANUAL	(EG)
16	RGU0797-K	BUTTON, POWER etc		A2	RFKSACH950GC	INSTRUCTIONS MANUAL	(GC)
17	XTBS26+8J	SCREW		A2	RFKSACH950GN	INSTRUCTIONS MANUAL	(GN)
18	XTWS3+10T	SCREW		A3	RQA0013	WARRANTY CARD	(E, EB, EG)
19	SHE187-2	P. C. B. SPACER		A3	RQX7433ZA	WARRANTY CARD	(GN)
20	SNE4021-1	NUT		A4	RQCB0169	SERVICE CENTER LIST	
21	XTBS3+8JFZ1	SCREW		A5	REX0462	FLAT CABLE (15P)	
22	XTB3+12JFZ	SCREW		A6	RJA0019-2K	AC POWER SUPPLY CORD	△ (E, EG, GC)
23	XTB3+20JFZ	SCREW		A6	VJA0733	AC POWER SUPPLY CORD	△ (EB)
24	XTB3+8JFZ	SCREW		A6	SJA173	AC POWER SUPPLY CORD	△ (GN)
25	XTW3+15T	SCREW		A7	RSA0007	FM INDOOR ANTENNA	(E, EB, EG)
26	XTW3+8T	SCREW		A7	RSA0006	FM INDOOR ANTENNA	(GC, GN)
27	RMNO195	FL SPACER		A8	SPB1163T	LW/MW LOOP ANTENNA	
28	RMQ0260	HOLDER (L)		A8-1	SMA233-1M	ANTENNA HOLDER	
29	RMQ0261	HOLDER (R)		A8-2	XTN3+10AFZ	SCREW	
31	RMNO215	FAN ANGLE		A9	SWXS257M	SPEAKER CORD	
32	SYE1128-2	FAN ASS'Y		A10	RJLIP001B25	SURROUND SPEAKER CORD	(GC, GN)
32-1	SHE232	FAN		A11	SJP9009	ATTACHMENT PLUG	△ (EB)
32-2	SUS271	SPRING		A12	SJP5213-2	POWER PLUG ADAPTOR	△ (GC)
32-3	SHE233-1	FAN CASE					
32-4	MDN-4RB4MRC	MOTOR					
32-5	SHE234	CAP					
32-6	SJT783	TERMINAL					
32-7	SJS5215	CONNECTOR (2P)					
33	RMCO197	EARTH PLATE	(EG)				

■ CABINET PARTS LOCATION



PACKAGING



Service Manual

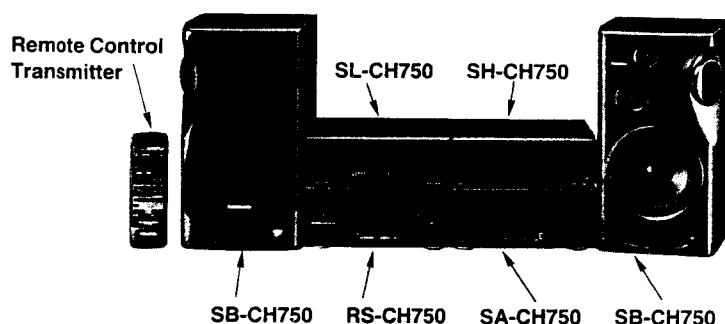
3-Way/Surround 4 Speakers System

Speaker System

SB-CH750

Colour

(K) Black Type



Area

Suffix for Model No.	Area	Colour
(GC)	Asia, Latin America, Middle Near East, Africa and Oceania	(K)

System: SC-CH750

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

SPECIFICATIONS

Type Speaker(s)	3 way/surround, 4 speakers, bass-reflex Woofer 17 cm cone type Midrange 2.5 cm dome type Tweeter dome type Surround 7 cm cone type
Impedance	
MAIN	6Ω
SURROUND	8Ω
Input power	
MAIN	120 W (music), 60 W (DIN)
SURROUND	10 W (music), 5 W (DIN)
Output sound pressure level	86 dB/W (1.0 m)
Cross over frequency	1.8 kHz, 6 kHz
Frequency range	33 Hz–22 kHz (–16 dB)

General

Dimensions (W×H×D)

240×416×293 mm

Weight

5.5 kg

Notes:

- Specifications are subject to change without notice.
- Weight and dimensions are approximate.

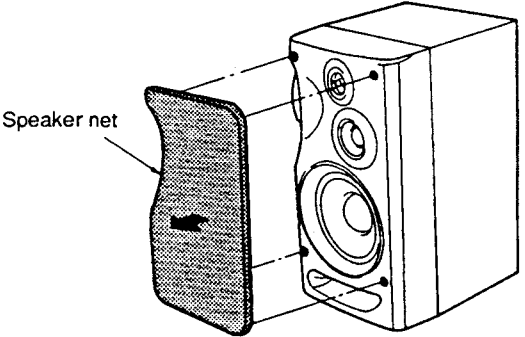
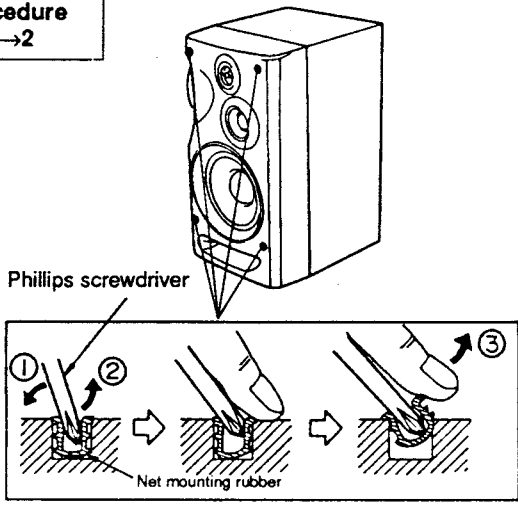
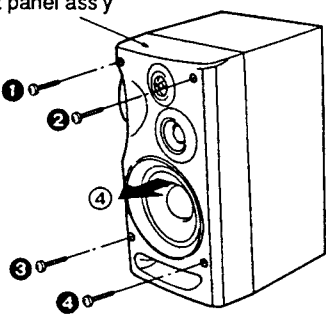
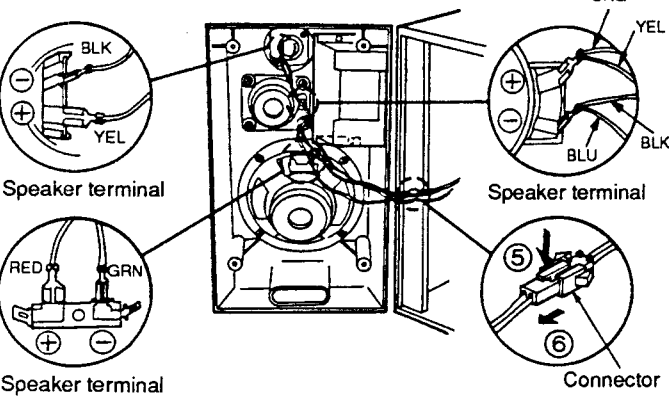
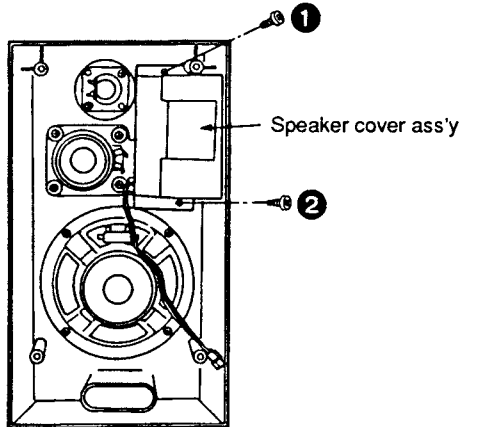
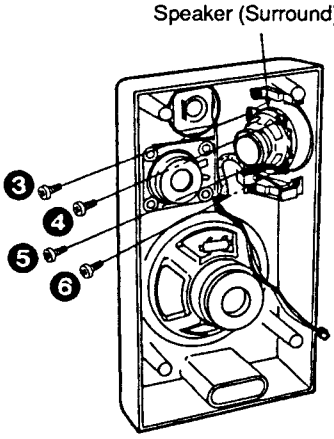
NOTES:

Refer to the service manual for Model No. SA-CH750 (Order No. AD9211379C8) for information on "ACCESSORIES", "STACKING THE COMPONENTS" and "CONNECTIONS".

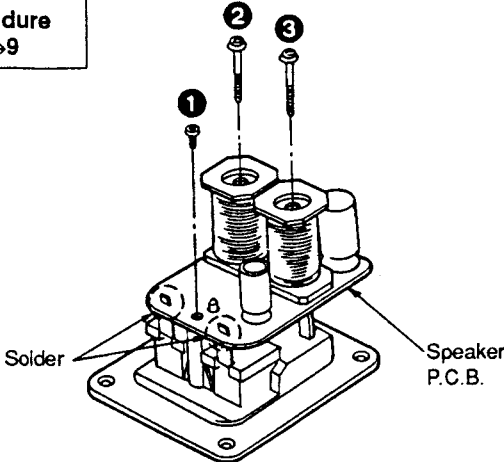
System	Sound processor	Tuner amplifier	Compact disc player	Cassette deck	Speakers
SC-CH750	SH-CH750	SA-CH750	SL-CH750	RS-CH750	SB-CH750

Technics

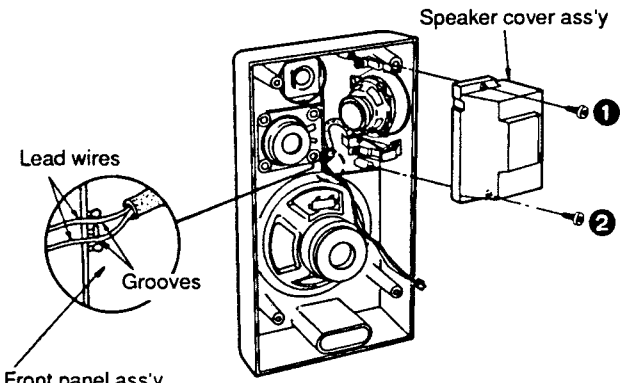
■ DISASSEMBLY INSTRUCTIONS

Ref. No. 1	Removal of the Speaker Net	Ref. No. 2	Removal of the Front Panel Ass'y
Procedure 1	 • Remove the speaker net in the direction of arrow.	Procedure 1→2	 1. Insert a phillips screwdriver or similar tool into the net mounting rubber, push in slightly in the direction of arrow ① to avoid scratching the front panel and lift in the direction of arrow ②. 2. After lifting the net mounting rubber, grasp it with your finger and remove in the direction of arrow ③.  3. Remove the 4 screws (①-④). 4. Remove the front panel ass'y in the direction of arrow ④.
Note BLK : Black, YEL : Yellow, ORG : Orange, BLU : Blue, GRN : Green  5. Detach the 6 speaker terminals from the speaker. 6. After pushing in the direction of arrow ⑤, disconnect the connector in the direction of arrow ⑥.	Speaker terminal Speaker terminal Connector		
Ref. No. 3	Removal of the Speaker (Surround)		
Procedure 1→2→3	 1. Remove the 2 screws (①, ②). 2. Remove the speaker cover ass'y.		 3. Remove the 4 screws (③-⑥).

Ref. No. 4	Removal of the Speaker (Tweeter)	Ref. No. 5	Removal of the Speaker (Midrange)
Procedure 1→2→4	• Remove the 2 screws (1, 2).	• Remove the 4 screws (1~4).	
Ref. No. 6	Removal of the Speaker (Woofer)	Ref. No. 7	Removal of the Surround Speaker Ornament
Procedure 1→2→6	• Remove the 4 screws (1~4).	Procedure 1→2→3→7 1. Remove the 4 screws (1~4).	
Ref. No. 8	Removal of the Terminal Block	2. Remove the surround speaker holder and the surround speaker holder ass'y. 3. Remove the screw 5 and the spring plate.	
Procedure 8	• Remove the 4 screws (1~4).		

Ref. No. 9	Removal of the Speaker P.C.B.
Procedure 8→9	 1. Remove the 3 screws (1~3). 2. Unsolder at the 2 locations shown.

■ Note for the Attachment of the Speaker Cover Ass'y

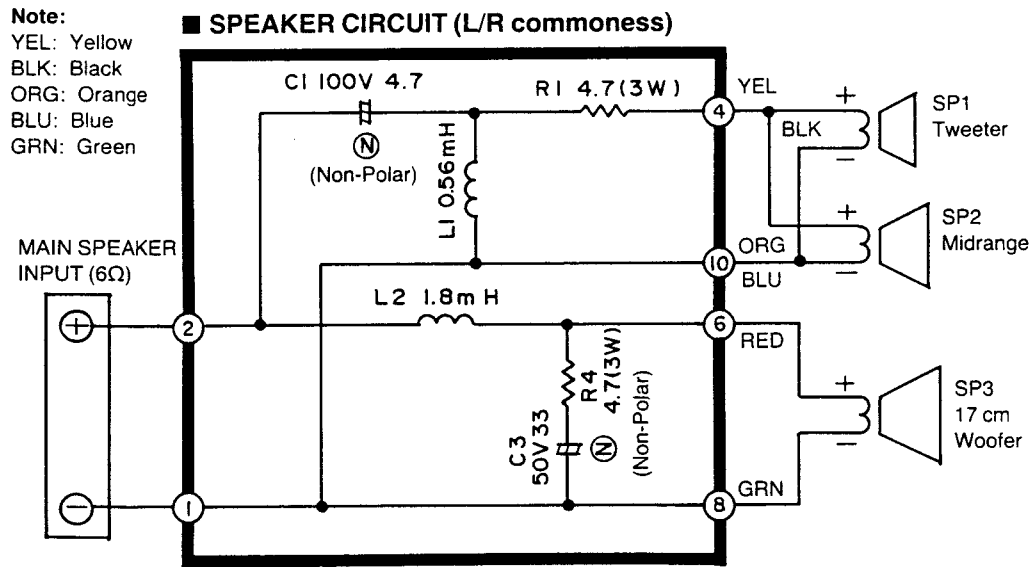


1. Put the 2 lead wires connected to the speaker terminal into the 2 grooves on the front panel ass'y and attach the speaker cover ass'y.

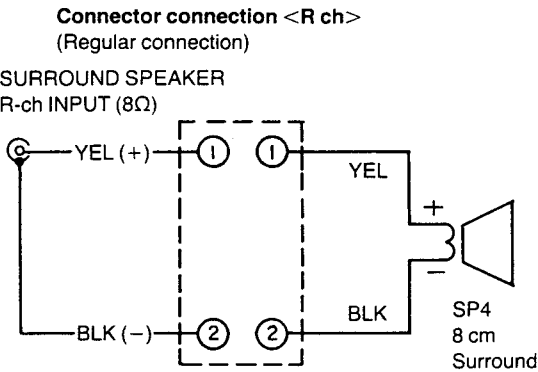
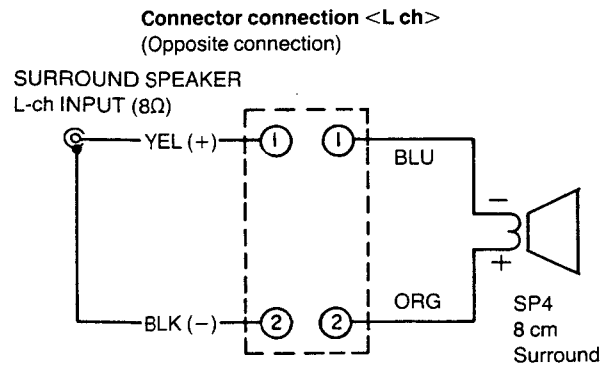
2. Fix the speaker cover ass'y with the 2 screws (1, 2).

■ SCHEMATIC DIAGRAM

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

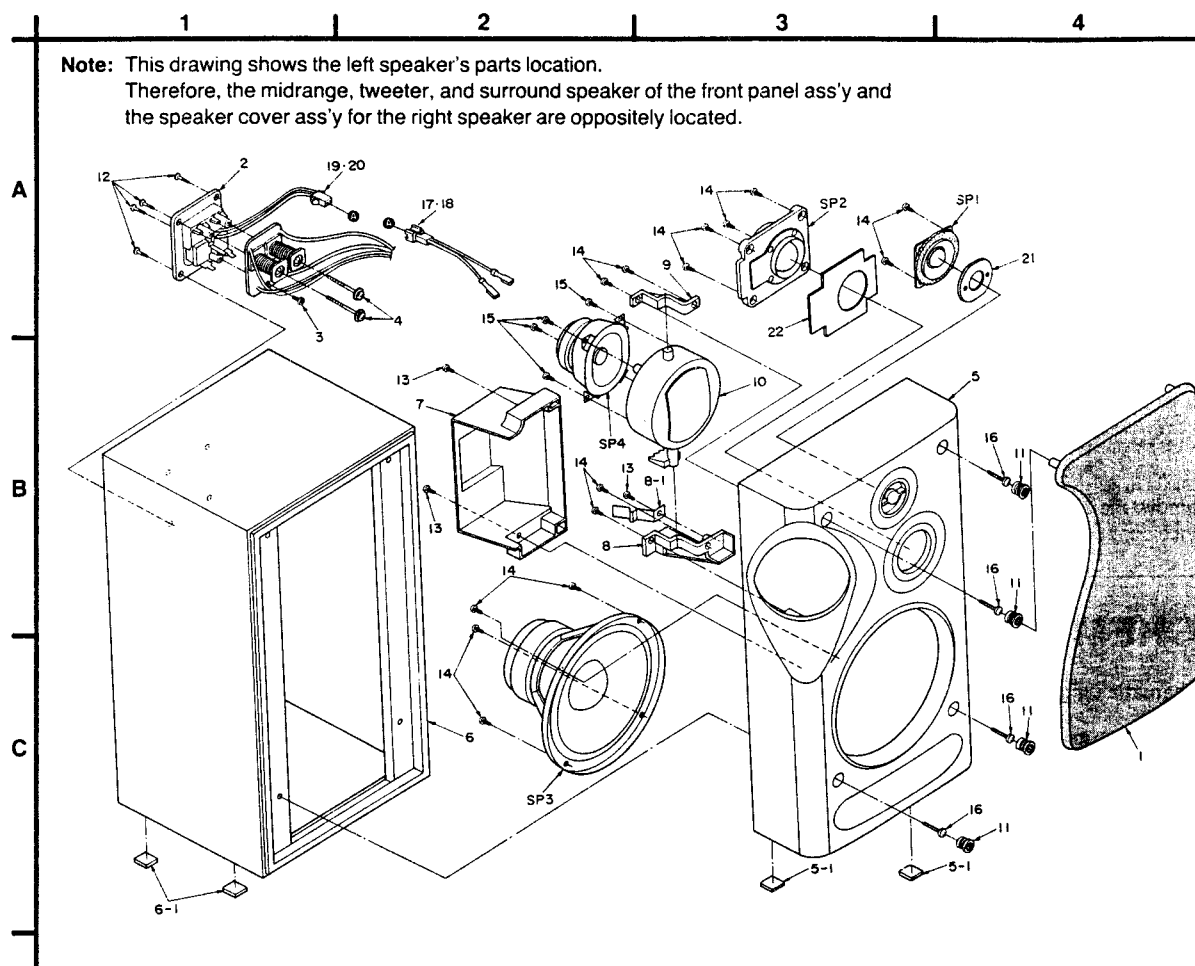


■ WIRING CONNECTION DIAGRAM <Surround section>
(The connection of the L channel and the R channel are different.)

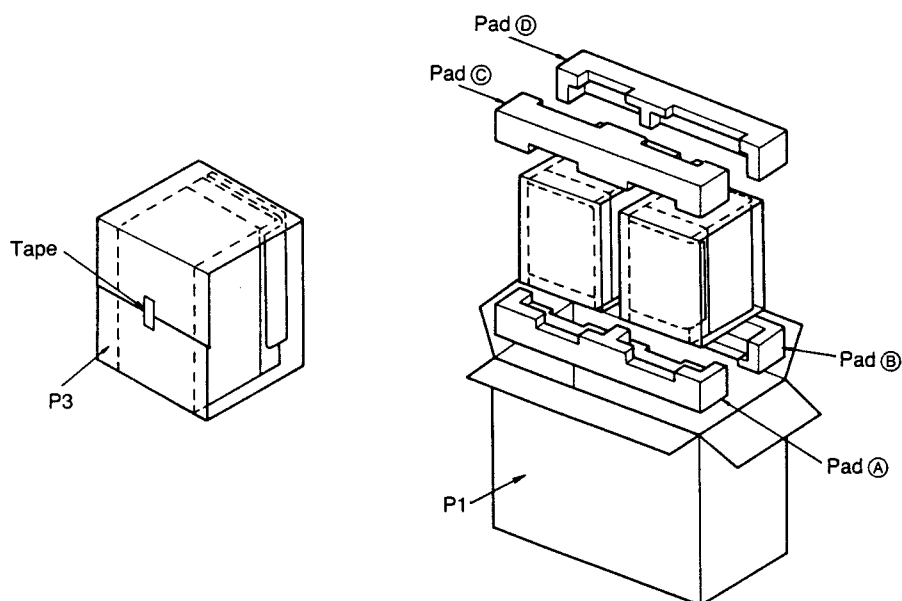


■ CABINET PARTS LOCATION

Note: This drawing shows the left speaker's parts location.
Therefore, the midrange, tweeter, and surround speaker of the front panel ass'y and the speaker cover ass'y for the right speaker are oppositely located.



■ PACKAGING



P2: Pad (A) (B) (C) (D) Ass'y

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		COIL (S)		21	RMQ0362	SPEAKER GASKET (TWEETER)	
				22	RMQ0365	SPEAKER GASKET (MIDRANGE)	
						PACKING MATERIALS	
L1	RLCV561J1-E	COIL 0.56mH		P1	RPG1431	PACKING CASE	
L2	RLCV182J1-E	COIL 1.8mH		P2	RPN0656	PAD	
		SPEAKER (S)		P3	RPH0096	PROTECTION SHEET	
SP1	EAS5FP13B	SPEAKER (TWEETER)					
SP2	EAS25KH45A	SPEAKER (MIDRANGE)					
SP3	EAS17PL06E	SPEAKER (WOOFER)					
SP4	EAS7D10G	SPEAKER (SURROUND)					
		RESISTOR (S)					
R1.4	ERX3SJ4R7P	RESISTOR 3W 4.7					
		CAPACITOR (S)					
C1	QCEA100Y4R7C	CAPACITOR 100V 4.7uF					
C3	ECEA50Y33K	CAPACITOR 50V 33uF					
		CABINET PARTS					
1	RYB0060	SPEAKER NET (L)					
1	RYB0060A	SPEAKER NET (R)					
2	RJH8301N	TERMINAL BLOCK					
3	XTB3+8J	SCREW					
4	XTW3+45P	SCREW					
5	RFKGBCH950GA	FRONT PANEL ASS'Y (L)					
5	RFKGBCH950GB	FRONT PANEL ASS'Y (R)					
5-1	SHG1654	CUSHION					
6	RFKKBCH750GA	CABINET ASS'Y (L)					
6	RFKKBCH750GB	CABINET ASS'Y (R)					
6-1	SHG1654	CUSHION					
7	RFKNBCH750NA	SPEAKER COVER ASS'Y (L)					
7	RFKNBCH750NB	SPEAKER COVER ASS'Y (R)					
8	RFKNBCH750NC	SURROUND SP. HOLDER ASS'Y (L)					
8	RFKNBCH750ND	SURROUND SP. HOLDER ASS'Y (R)					
8-1	RMCO209	SPRING PLATE					
9	RMRO664-K	SURROUND SP. HOLDER (UPPER)					
10	RYQ0100-K	SURROUND SPEAKER ORNAMENT					
11	SHGS9044	NET MOUNTING RUBBER					
12	XMM31+D16FZ	SCREW					
13	XTB3+8J	SCREW					
14	XTB4+10G	SCREW					
15	XTB4+8G	SCREW					
16	XTNSS43+20F	SCREW					
17	SJS50268SM	PLUG (2P)					
18	SJT792	TERMINAL					
19	SJS50269SM	SOCKET (2P)					
20	SJT779	TERMINAL					