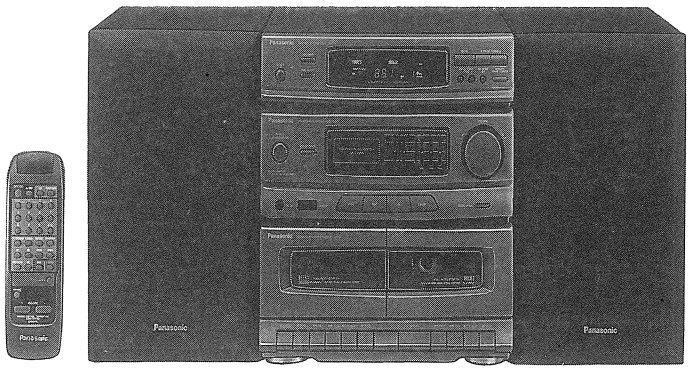
ORDER NO. MD9310145C3

Service Manual

Double Cassette Receiver

Compact Audio System

SA-CH46



REMOTE CONTROL TRANSMITTER | SB-CH46 | SA-CH46 | SB-CH46

Colour

(K) . . . Black Type

Area

Suffix for Model No.	Area	Colour
(GC)	Asia, Latin America, Middle Near East and Africa	(K)
(GC1)	Thailand	

System Name	Unit
SC-CH46 (GC)	SA-CH46 (GC) Music Center
	SB-CH46 (G) Speakers

TAPE DECK : SG-20W MECHANISM SERIES

■ SPECIFICATIONS

■ AMPLIFIER SECTION

1 kHz continuous power output both channels driven	2 x 43 W (THD 0.9%, 6Ω)
MPO	2 x 125W (THD 10%, 6 Ω)
PMPO	500W (THD 10%, 6Ω)
Total harmonic distortion half power at 1 kHz	0.1% (6Ω)
Frequency response AUX	50Hz - 20kHz (–3 dB)
Input sensitivity and impedance AUX	250 mV/22kΩ
Graphic equalizer	± 10dB (100 Hz, 1 kHz, 10 kHz)
Load impedance	6Ω

■ FM TUNER SECTION

Frequency range	87.50 - 108.00 MHz (0.05 MHz step)
Sensitivity	23.3 dBf (4.0 µV, IHF'58)
S/N 26 dB	5.0 µV (40 kHz mod., 6Ω)
Total harmonic distortion MONO	0.3%
STEREO	0.5%
S/N MONO	65 dB (70 dB, IHF)
Frequency response	50 Hz - 15 kHz (+0.5 dB, -2 dB)
Image rejection at 98 MHz	35 dB
Stereo separation at 1 kHz	35 dB
Antenna terminal(s)	75Ω (unbalanced)

Notes :

1. Specifications are subject to change without notice
   Weights and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

■ AM TUNER SECTION

Frequency range MW	531 - 1602 kHz (9 kHz steps) 530 - 1600 kHz (10 kHz steps)
SW1	3.2 - 7.300 MHz
SW2	9.5 - 21.850 MHz
Sensitivity (for 500 mW) MW (at 999 kHz, 1000 kHz)	250 µV/m
SW1 (at 4 MHz)	12.6 µV
SW2 (at 12 MHz)	40 µV

■ CASSETTE DECK SECTION

Track system	4 track, 2 channel
Heads Playback	Solid permalloy
Record/Playback	Solid permalloy
Erasure	Double gap ferrite head
Motor	DC servo motor
Recording system	AC bias, 101 kHz
Erase system	AC erase, 101 kHz
Tape speed	4.8 cm/sec.
Frequency response NORMAL	50Hz - 12kHz (+3, –3 dB)
Wow and Flutter	0.15% (WRMS)
Fast forward and rewind time	Approx. 120 seconds with C-60 cassette tape

■ GENERAL

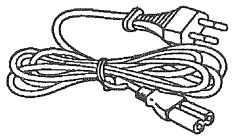
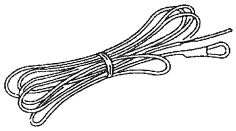
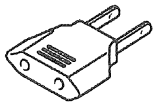
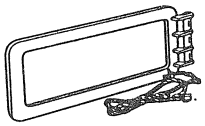
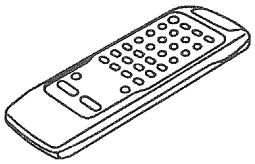
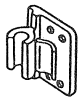
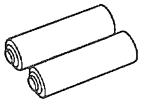
Power consumption	160W
Power supply	AC 50/60 Hz, 110 V/127 V/220 V/240 V
Dimensions(WxHxD)	270 x 279 x 356 mm
Weight	6.8 kg

Panasonic

CONTENTS

	PAGE
• ACCESSORIES	2
• BEFORE REPAIR AND ADJUSTMENT	3
• PROTECTION CIRCUITRY	3
• CONNECTIONS	3
• FRONT PANEL CONTROLS AND FUNCTIONS	4 ~ 6
• REMOTE CONTROL UNIT CONTROLS AND FUNCTIONS	7 & 8
• DISASSEMBLY INSTRUCTIONS	9 ~ 12
• GENERAL INSPECTION	13
• MEASUREMENTS AND ADJUSTMENTS	14 ~ 16
• FUNCTION OF IC TERMINALS	17 & 18
• TERMINAL GUIDE OF IC'S ,TRANSISTORS & DIODES	18
• BLOCK DIAGRAM	19 ~ 22
• SCHEMATIC DIAGRAM	23 ~ 35
• PRINTED CIRCUIT BOARD DIAGRAM	36 ~ 41
• WIRE CONNECTION DIAGRAM	42
• MECHANISM PARTS LOCATION	43 & 44
• MECHANISM PARTS LIST	45 & 46
• CABINET PARTS LOCATION	47 & 58
• REPLACEMENT PARTS LIST	49 ~ 53
• RESISTORS & CAPACITORS	54 ~ 58
• PACKAGING	59

ACCESSORIES

 AC power supply cord. . . . . 1 pc.	 FM indoor antenna. . . . . 1 pc.
 Power plug adaptor . . . . . 1 pc.	 AM loop antenna . . . . . 1 pc.
 Remote control transmitter. . . . . 1 pc.	 Antenna holder . . . . . 1 pc.
 Remote control batteries UM-4, AAA, R03. . . . . 2 pcs.	 Mounting screws. . . . . 2 pcs.

■ BEFORE REPAIR AND ADJUSTMENT

Disconnect AC power, discharge both Power Supply Capacitors C541 and C542 through a 10W, 5W resistor to ground.
DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.
After repairs are completed, restore power gradually using a variac, to avoid overcurrent.
Current consumption at NO SIGNAL mode should be within the following range :

110V	350 ~ 480 mA
127V	300 ~ 420 mA
220V	170 ~ 240 mA
240V	140 ~ 200 mA

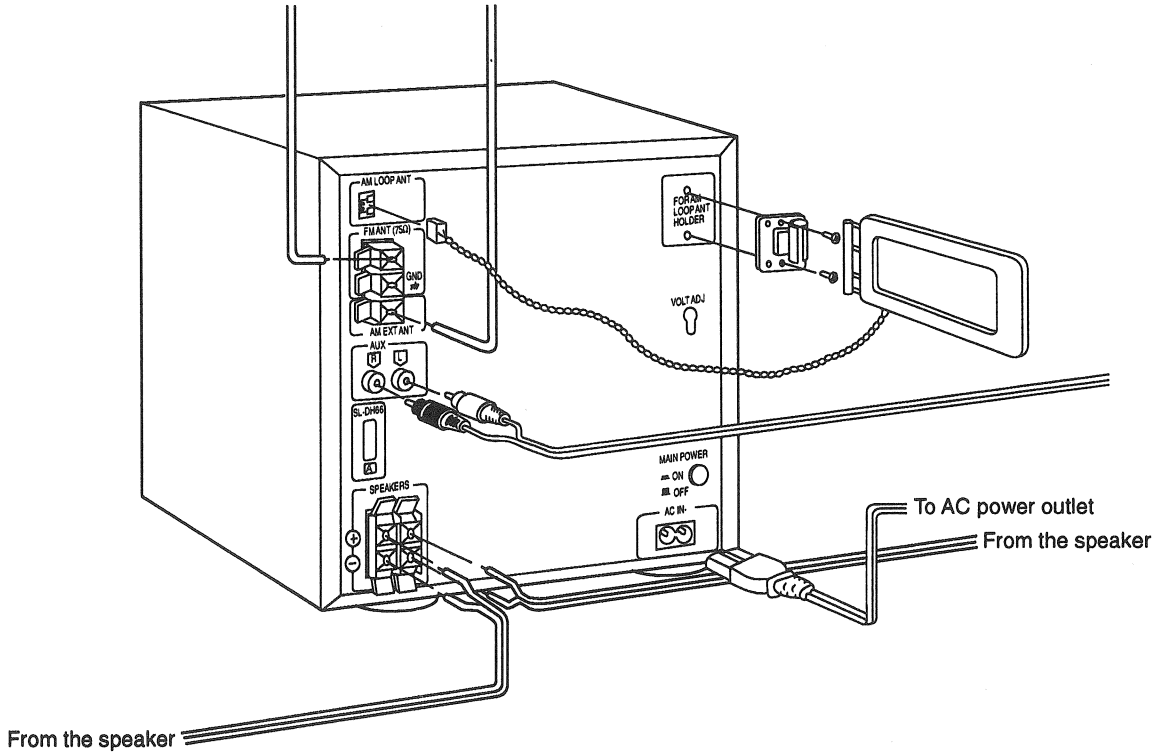
■ PROTECTION CIRCUITRY

The protection circuitry may have operated if either of the following conditions are noticed :
- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.
If this occurs, follow the procedure outlines below :
1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

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

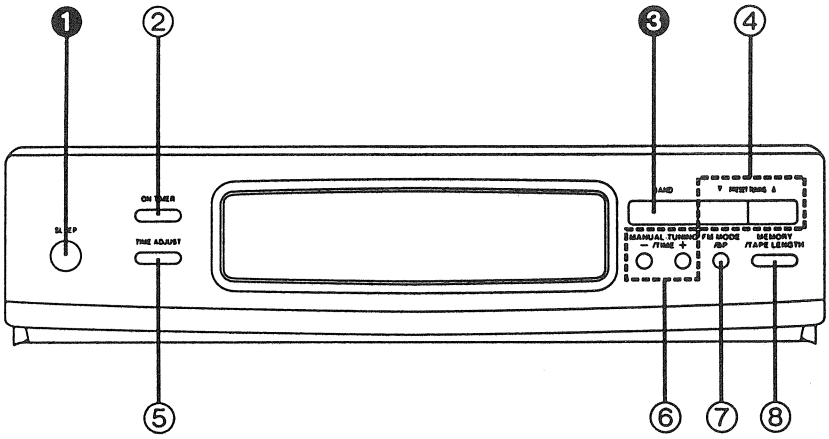
■ CONNECTIONS



■ FRONT PANEL CONTROLS AND FUNCTIONS

Tuner section

The functions indicated by the numbers with black background (for example ❶) can also be activated from the remote control transmitter.
(See pages 7-8).



❶ Sleep timer button (SLEEP)
Press when you want the system to turn itself off.

② Timer on button (ON TIMER)
Use for timer play or recording (when you want to set the system to operate automatically at a preset time.)

❸ Band select button (BAND)
Press to select the AM or FM radio band.

④ Preset tuning buttons (▼ PRESET TUNING ▲)
Press to program broadcast frequencies into the units memory, and also to recall the programmed stations.

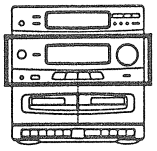
⑤ Time adjustment button (TIME ADJUST)
Use to adjust the clock.

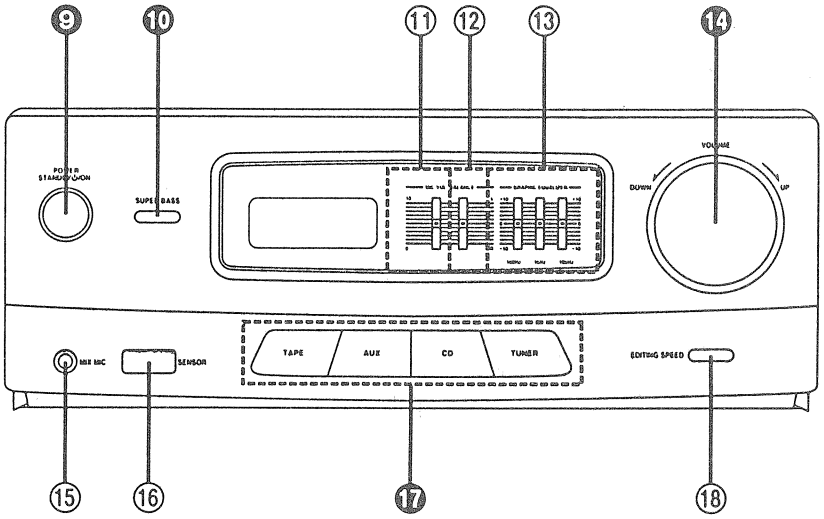
⑥ Tuning/time set buttons [MANUAL TUNING (—, +)/TIME (—, +)]
Press to tune to the desired station or set the time.

⑦ FM mode/beat proof button (FM MODE/BP)
Press to select the FM listening mode (stereo or monaural) during FM broadcasts or to reduce the unwanted beat signals (whistle) during recording of AM broadcast.

⑧ Memory/tape length button (MEMORY/TAPE LENGTH)
Press to program a broadcasting station or to set the tape length when edit-recording.

Amplifier section





9 Power "STANDBY ⏻ /ON" switch (POWER, STANDBY ⏻ /ON)

Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

10 Super bass button (SUPER BASS)

Press to boost the dynamic low-frequency ranges.

11 Microphone volume level control (MIC VOL)

Slide to adjust the microphone volume level.

12 Balance control (BALANCE)

This control can be used to adjust the balance of sound heard from the left and right speaker systems.

13 Equalizer controls (GRAPHIC EQUALIZER)

Use to adjust the equalization level.
These controls are for compensation of tonal quality. By sliding the controls at each of the indicated frequencies in the "+" direction, the tonal quality is increased, and by sliding them in the "—" direction, the tonal quality is decreased.

14 Volume level control (VOLUME)

Turn to adjust the volume level.
When turning the control, the alpha-numeric display shows the volume level.
Note that — — dB is the lowest volume setting and 0 dB is the highest.

15 Microphone jack (MIX MIC)

Plug microphone cord into this jack.

16 Remote control signal sensor (SENSOR)

Receives the signals from the remote control.

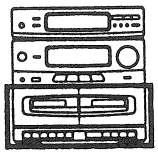
17 Input select buttons (TAPE, AUX, CD, TUNER)

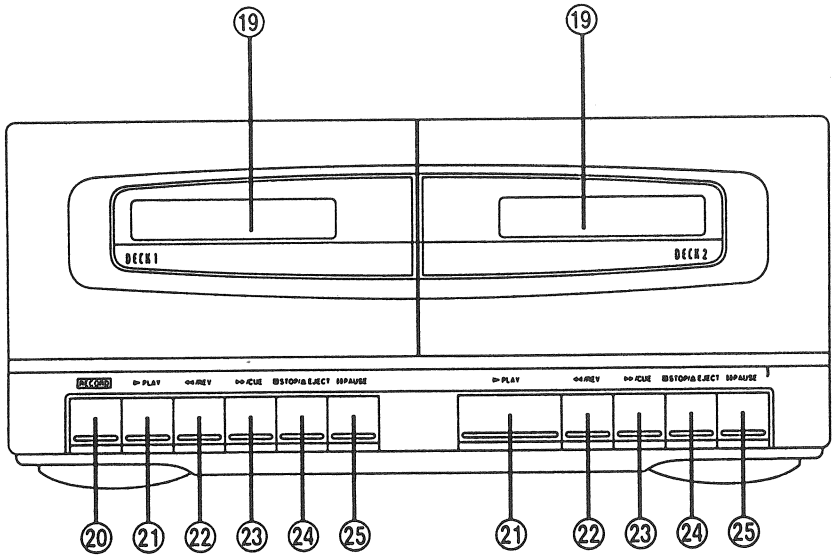
Press to select the sound source.

18 Tape-to-tape recording speed selector (EDITING SPEED)

Press to select the recording speed when a tape-to-tape recording is made.

Cassette deck section





⑲ Cassette holders

⑳ Record button (RECORD)
Press to make a recording (tape deck 1 only).

㉑ Playback buttons (▶ PLAY)
Press to playback a tape.

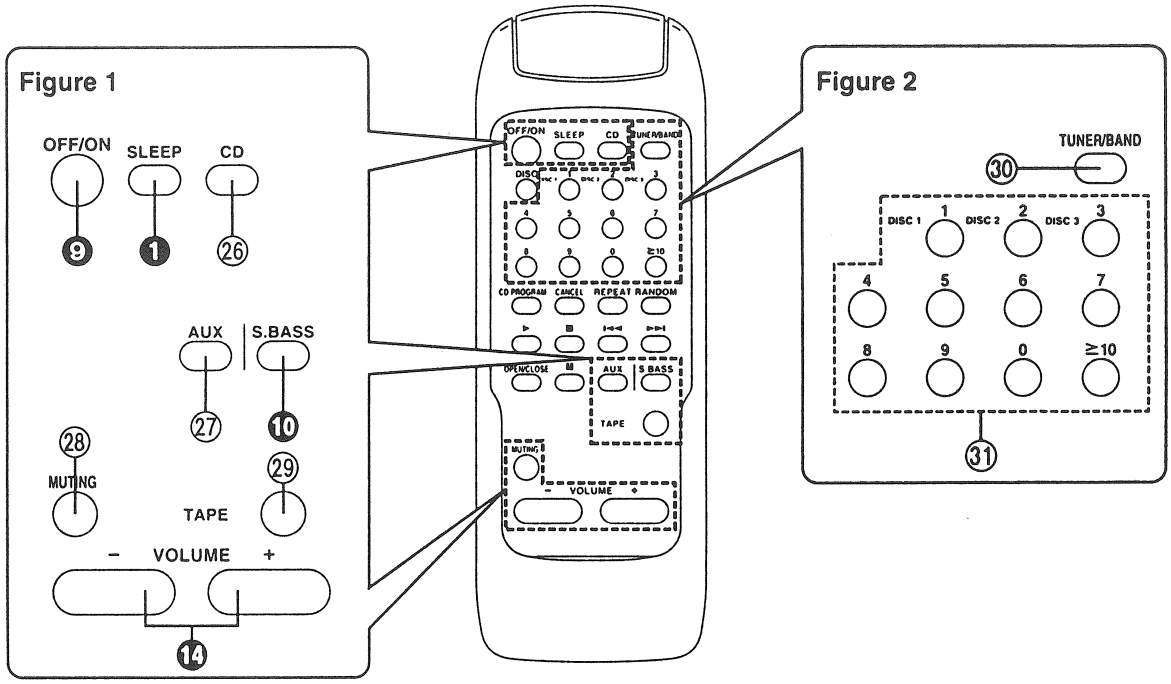
㉒ Rewind/review buttons (◀◀ /REV)
Press to rewind the tape.
Press and hold during playback to review the contents at high speed.

㉓ Fast forward/cue buttons (▶▶ /CUE)
Press to advance the tape.
Press and hold during playback to cue the contents at high speed.

㉔ Stop/eject buttons (■ STOP/ ⏏ EJECT)
Press to open the cassette holder, or to stop the tape.

㉕ Pause buttons (⏸ PAUSE)
Press to temporarily stop the tape playback or recording (deck 1 only).

■ REMOTE CONTROL UNIT CONTROLS AND FUNCTIONS



Common operation controls (Figure 1)

The functions of buttons ❶,❾,⑩ and ⑭ are identical to those described under "Tuner section"on page 4 and "Amplifier section" on page 5.

㉖ CD input select button (CD)
Press to select the CD source.

㉗ AUX input select button (AUX)
Press to select the external source.

㉘ Muting button (MUTING)
Press to temporarily attenuate (mute) the volume level.

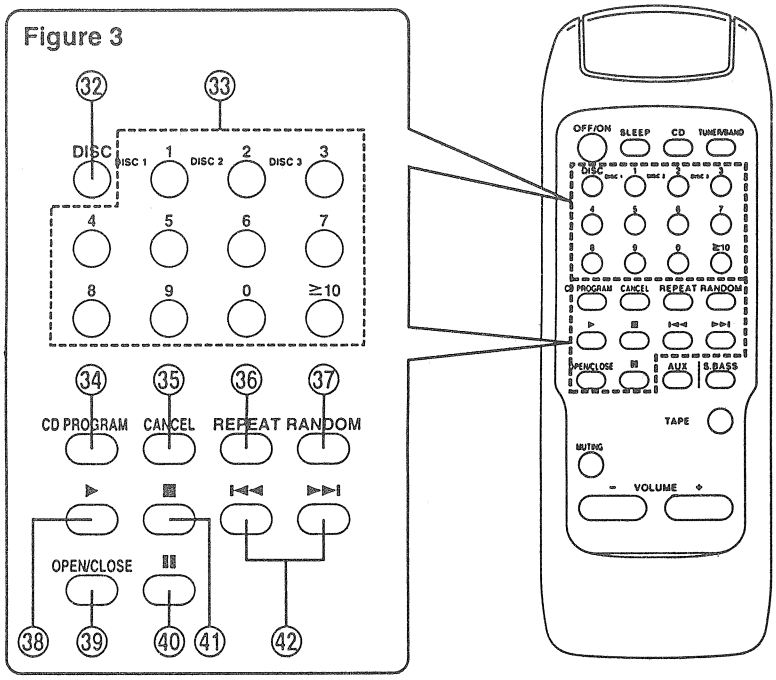
㉙ Tape input select button (TAPE)
Press to select the tape source.

Tuner controls (Figure 2)

㉚ Tuner input/band select button (TUNER/BAND)
Use to select tuner source and desired band (FM or AM).

㉛ Preset-tuning buttons
Use to tune to broadcast stations which have been preset in the unit's memory.

Compact disc controls (Figure 3)



These buttons work for the compact disc changer of SL-DH66.

(32) Disc button (DISC)
Press this button before selecting the disc number (1-3) on the numeric buttons.

(33) Numeric buttons
Use to specify the compact disc's track or the disc number.

(34) Program button (CD PROGRAM)
Press to activate the program play mode. You can then enter specific tracks using the numeric buttons.

(35) Cancel button (CANCEL)
Press to cancel the programmed track.

(36) Repeat button (REPEAT)
Press to activate the repeat mode.

(37) Random play button (RANDOM)
Press to play the disc's tracks in random order.

(38) Play button (▶)
Press to start disc play.

(39) Loading drawer open/close button (OPEN/CLOSE)
Press to open or close the loading drawer.

(40) Pause button (▮▮)
Press to stop the disc play temporarily.

(41) Stop button (■)
Press to stop the disc play.

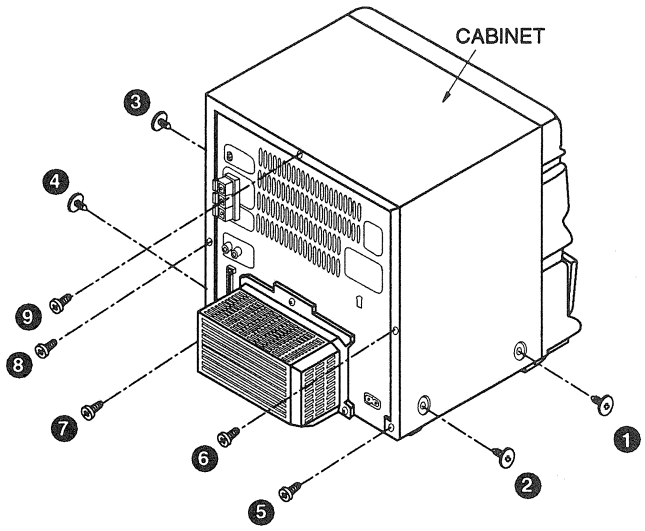
(42) Skip buttons (|◀◀ • ▶▶|)
Press to move forward or backward through the tracks on a disc.

■ DISASSEMBLY INSTRUCTIONS

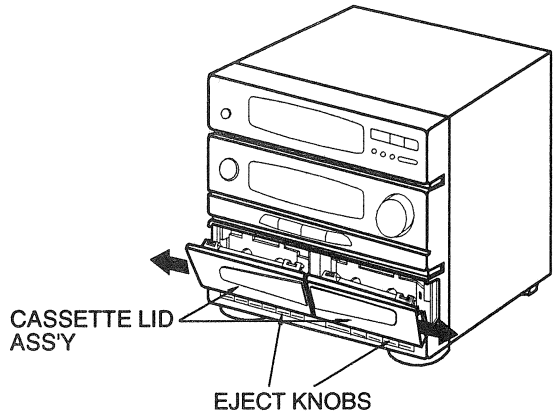
"ATTENTION SERVICER"
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1	Removal of the Cabinet
Procedure 1	

• Remove 9 screws (❶~❾)

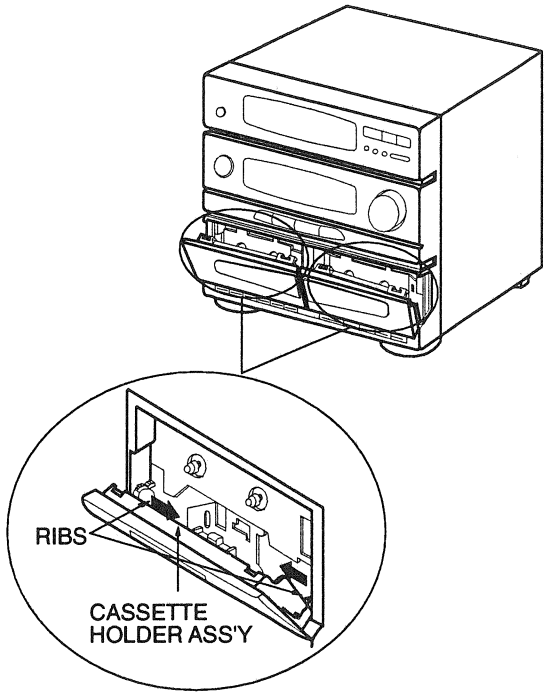


Ref. No. 2	Removal of the Cassette Lid Ass'y
Procedure 2	



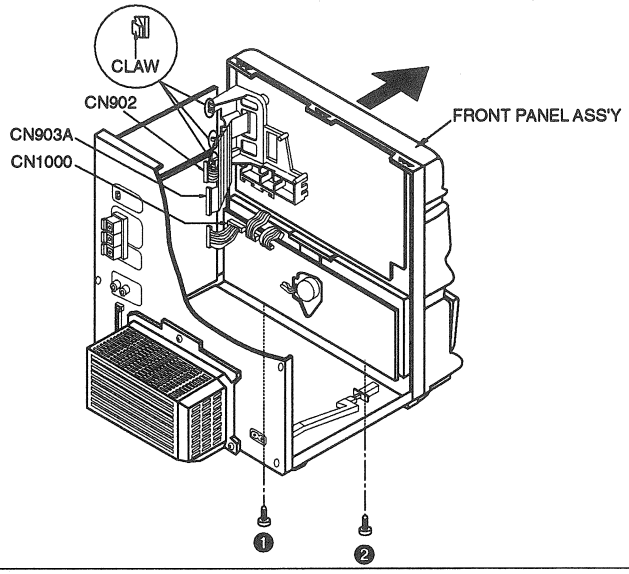
1. Press the Eject Knobs on both Deck 1 and 2.
2. Slide out the Cassette Lid Ass'y in the direction of arrows.

Ref. No. 3	Removal of the Cassette Holder Ass'y
Procedure 3	



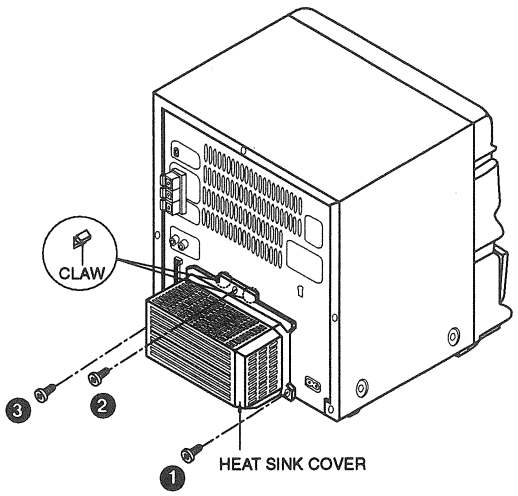
1. Release the ribs of the Cassette Holder Ass'y in the direction of arrows.
2. Pull out the Cassette Holder Ass'y.

Ref. No. 4	Removal of the Front Panel Ass'y
Procedure 1 ➡ 4	



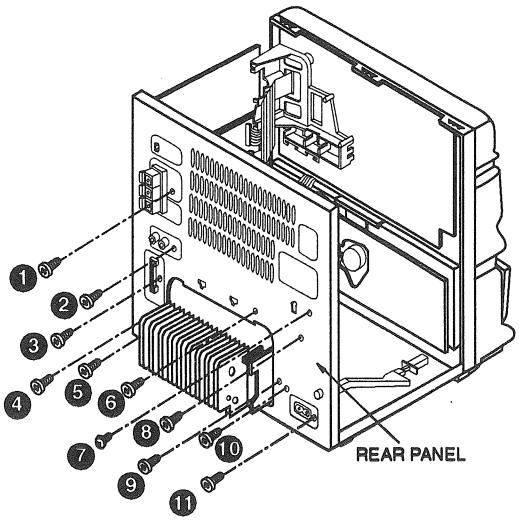
1. Release flat cables from the connectors (CN902, CN903A & CN1000).
2. Remove 2 screws (❶ &❷).
3. Release 3 claws.
4. Remove the Front Panel Ass'y in the direction of arrow.

Ref. No. 5	Removal of the Heat Sink Cover
Procedure 5	



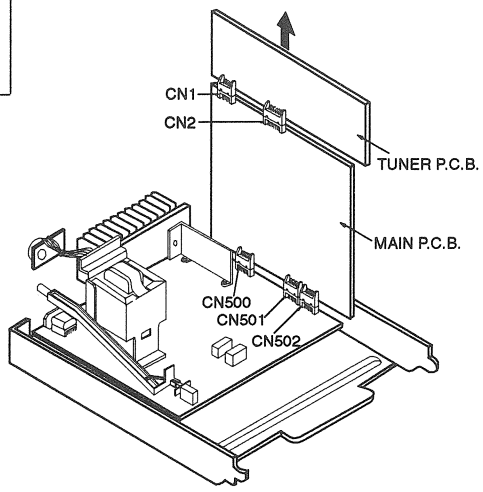
1. Remove 3 screws (❶ ~ ❸).
2. Remove 2 claws.

Ref. No. 6	Removal of the Rear Panel
Procedure 1 ➡ 5 ➡ 6	



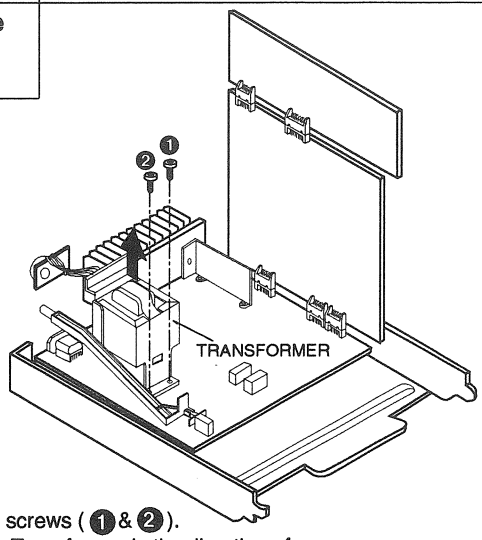
• Remove 11 screws (❶ ~ ⓫).

Ref. No. 7	Removal of the Main & Tuner P.C.B.
Procedure 1 ➡ 5 ➡ 6 ➡ 7	



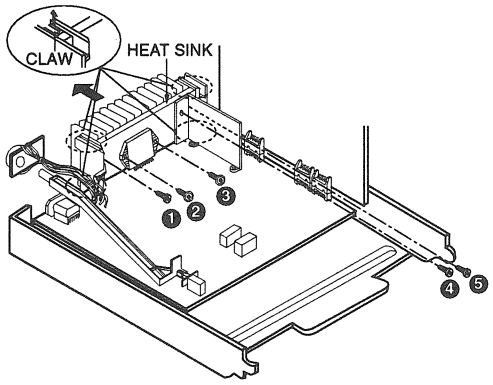
1. Pull out the Tuner P.C.B. from connectors (CN1 & CN2).
2. Pull out the Main P.C.B. from connectors (CN500, CN501 & CN502).

Ref. No. 8	Removal of the Transformer
Procedure 1 ➡ 5 ➡ 6 ➡ 8	



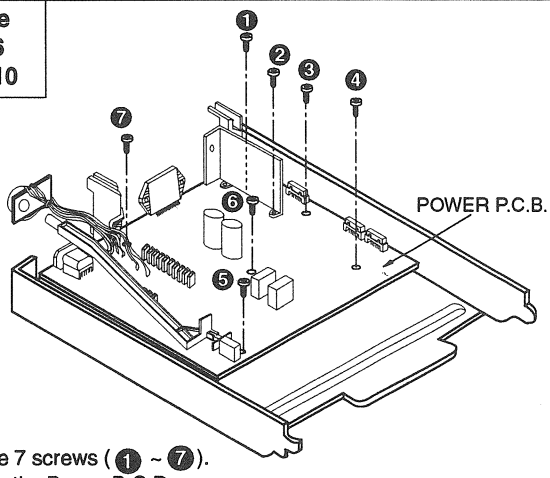
1. Remove 2 screws (❶ & ❷).
2. Pull out the Transformer in the direction of arrow.

Ref. No. 9	Removal of the Heat Sink
Procedure 1 ➡ 5 ➡ 6 ➡ 8 ➡ 9	



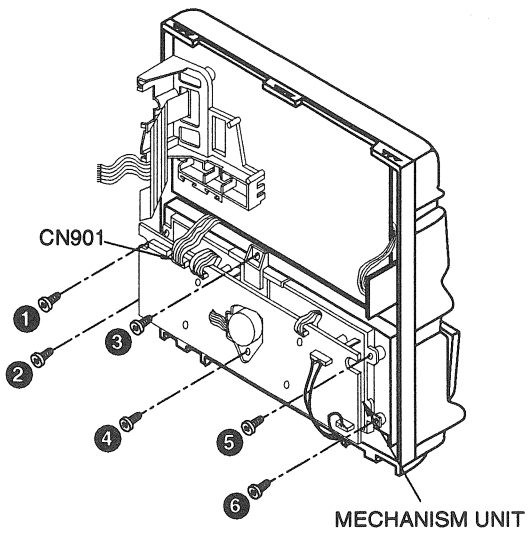
1. Remove 5 screws (❶ ~ ❺).
2. Release 4 claws.
3. Remove the Heat Sink in the direction of arrow.

Ref. No. 10	Removal of the Power P.C.B.
Procedure 1 ➡ 5 ➡ 6 ➡ 8 ➡ 10	



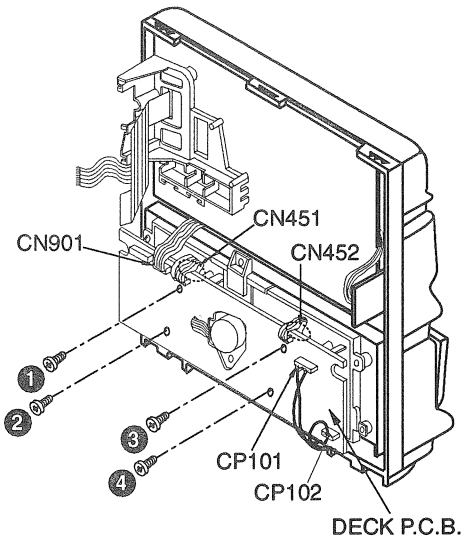
1. Remove 7 screws (❶ ~ ❼).
2. Remove the Power P.C.B.

Ref. No. 11	Removal of the Mechanism Unit
Procedure 1 ➡ 4 ➡ 11	



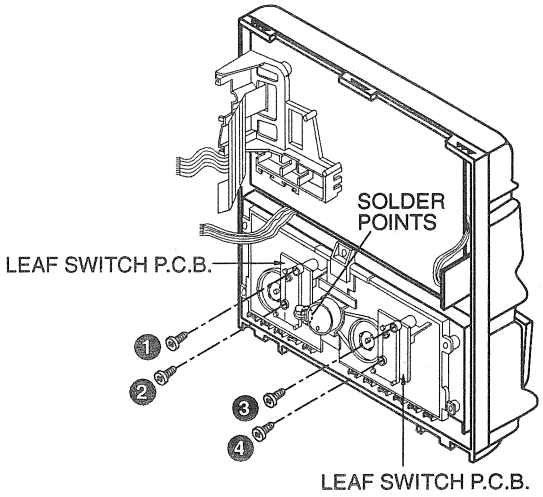
1. Remove 6 screws (❶ ~ ❻).
2. Release flat cable from connector (CN901).
3. Remove the Mechanism Unit.

Ref. No. 12	Removal of the Deck P.C.B.
Procedure 1 ⇒ 4 ⇒12	



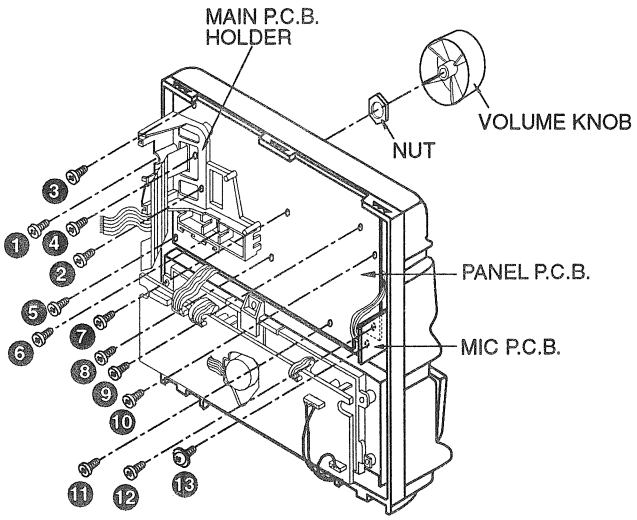
1. Remove 4 screws (❶ ~ ❹).
2. Release the wire ass'y from connectors (CP101 & CP102).
3. Release flat cables from connectors (CN451, CN452 & CN901).
4. Remove the Deck P.C.B.

Ref. No. 13	Removal of the Leaf Switch P.C.B.
Procedure 1 ⇒ 4 ⇒12 ⇒13	



1. Remove 4 screws (❶ ~ ❹)
2. Desolder 4 solder points on the motor.
3. Remove the Leaf Switch P.C.B.

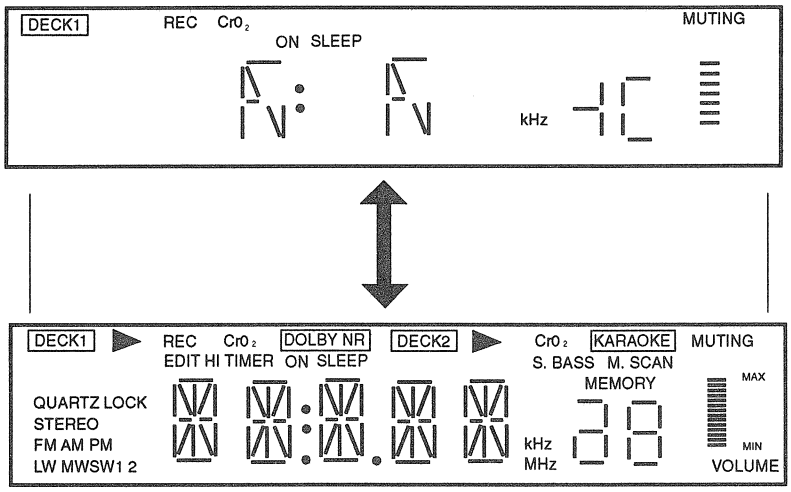
Ref. No. 14	Removal of the Main P.C.B. Holder, Panel & MIC P.C.B.
Procedure 1 ⇒ 4 ⇒14	



1. Remove 2 screws (❶ & ❷)
2. Remove the Main P.C.B. Holder.
3. Remove 11 screws (❸ ~ ⓭).
4. Pull out the Volume Knob.
5. Remove 1 Nut.
6. Remove the Panel & MIC P.C.B.

GENERAL INSPECTION

FUNCTION	CHECKING	REMARKS
1. To enter TEST MODE.	• Press the "TAPE" key on the center unit, then simultaneously press the (4) key followed by (7) key on the Remote Control Unit.	• FL Display will show "----" when the TEST MODE is entered.
2. FL Display TEST 1	• Press the "1" key on the Remote Control Transmitter. • The Display below will toggle between each other.	
3. To check for all connection and FL Display connection.	• Press the "2" key on the Remote Control Transmitter. • Press every key on the center unit one by one. • The chart below summarizes the Display segment corresponding to each key pressed.	• FL Display will black out. • FL Display will have its segment lighted up one by one.
4. To exit from TEST MODE.	• Press the Power key on the center unit, or pull out the Power Supply Plug. • Pull out the Power Supply Plug to set the "COLD START" from the above TEST MODE. (The memory will be set to the initial condition on the next AC power on.)	



SEGMENT LIGHT UP	KEY PRESSED (From Center unit)	SEGMENT LIGHT UP	KEY PRESSED (From Center Unit)
STEREO	TAPE	DECK 1	BAND
AM	AUX	▶	MANUAL TUNE/TIME+
PM	CD	Cro2	MANUAL TUNE/TIME-
FM	TUNER	EDIT. HI	PRESET TUNING ▼
LW	S. BASS	REC	PRESET TUNING ▲
MW	SLEEP	TIMER	MEMORY/TAPE LENGTH
SW	ON TIMER	ON	FM MODE/BP
1	TIME/ADJ	DECK 2	EDITING SPEED

■ MEASUREMENTS AND ADJUSTMENTS

■ TUNER SECTION

NOTE : AM RF BLOCK (Z1 : RLA2Z001M-T) has already been preset, so no alignment necessary and not to touch this coil.

Control positions and equipments used

- FM signal generator (AM and FM-SG)
- Oscilloscope
- L.P.F (19 kHz)
- Coil (100 µH)
- Distortion analyzer
- Dummy antenna (75Ω unbalanced)
- AC and DC electronic voltmeter (EVM)
- Digital frequency counter
- Capacitor (50V 1 µF)
- Resistor (330 kΩ)

Measurement condition

- Volume control. . . . . maximum
- Equalizer control. . . . . center

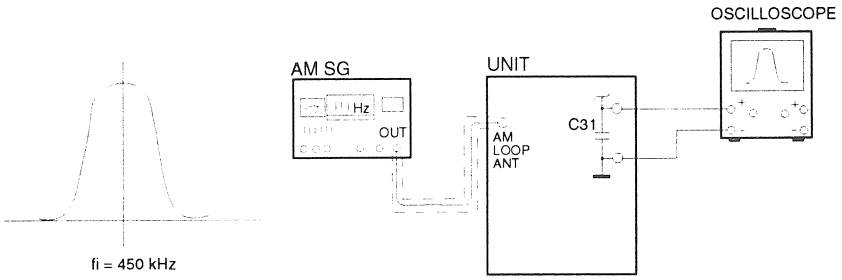
Please refer to Fig. 1 for adjustment points.

When doing Tuner section adjustment, please refer to Tuner circuit & P.C.B for testpoints.

• AM IF ADJUSTMENT

1. Test equipment connection is shown in figure.
2. Set the unit to "**MW**" mode.
3. Set the radio frequency display and signal generator to **999 kHz**.
4. Adjust **T3** to obtain the undistorted waveform as shown in below.

AM SIGNAL GENERATOR CONDITION
Modulation. 30%
Modulation frequency. 400Hz
Output level. 74dB/m



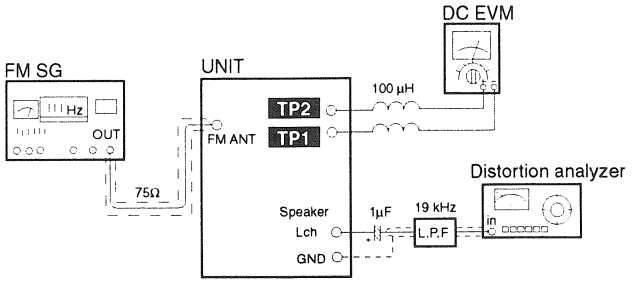
• FM IF ADJUSTMENT

1. Test equipment connection is shown in figure.
2. Set the unit to "**FM** " mode.
3. Set the radio frequency display and signal generator to **98.1MHz** (with modulation OFF).
4. Adjust **T1** so that the voltage measured in signal mode is **0mV (0 ± 30 mV)** in 300 mV range.
5. Input a modulated MONO signal to the unit.
6. Adjust **T2** to obtain minimum distortion. Distortion should be less than 1 %.
7. Repeat steps 4 — 6.

NOTE : The adjusting screwdriver used should be made of resin.

FM SIGNAL GENERATOR CONDITION (ZERO VOLTAGE)
Modulation. . . . . OFF
Output level. 60dB

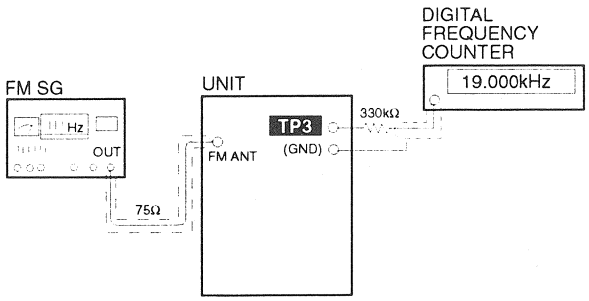
FM SIGNAL GENERATOR CONDITION (DISTORTION)
Modulation. 100%
Modulation frequency. 1kHz
Output level. 60dB



• FM STEREO ADJUSTMENT (FREE RUN)

1. Test equipment connection is shown in figure.
2. Set the unit to "**FM AUTO**" mode.
3. Set the radio display and signal generator setting to **98.1 MHz** (with modulation OFF).
4. Adjust **VR1** for **19 kHz ± 50Hz** on frequency counter reading.
5. Tune to a stereo broadcast and confirm the frequency stays at **19 kHz**.

FM SIGNAL GENERATOR CONDITION
Modulation. . . . . .OFF
Output level. 60dB



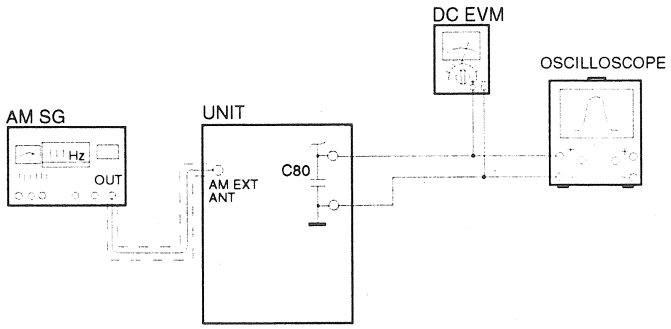
• SW1 RF ADJUSTMENT

1. Test equipment connection is shown in figure.
2. Set the unit to "**SW1**" mode.
3. Set the radio display and signal generator setting to **3.2MHz**.
4. Adjust **L11 (OSC)** for **1.5V ~ 2.5V** on electronic voltmeter.
5. Adjust **L9 (ANT)** for maximum amplitude on oscilloscope.

AM SIGNAL GENERATOR CONDITION
Modulation. 30%
Modulation Frequency 400Hz
Output level. 60dB

• SW2 RF ADJUSTMENT

1. Test equipment connection is shown in figure.
2. Set the unit to "**SW2**" mode.
3. Set the radio display and signal generator setting to **9.5MHz**.
4. Adjust **L12 (OSC)** for **1.3V ~ 2.3V** on electronic voltmeter.
5. Adjust **L10 (ANT)** for maximum amplitude on oscilloscope.



■ CASSETTE DECK SECTION

NOTE : Cassette deck mechanism using Aztec head, so no HEAD AZIMUTH ADJUSTMENT necessary.

Measuring Instruments

- Electronic voltmeter (AC EVM)
- Oscilloscope
- Digital frequency counter
- Resistor (1 kΩ, 1MΩ)

Test tapes

- Tape speed adjustment (3 kHz, - 10 dB) : QZZCWAT
- Normal reference blank tape : QZZCRA

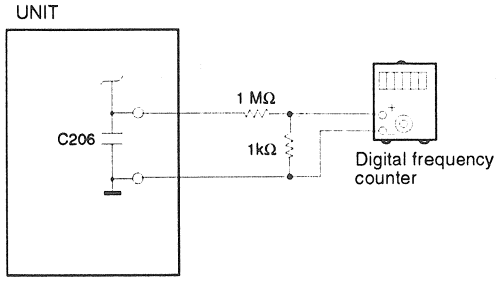
Measurement condition

- Make sure the heads are clean.
- Make sure the capstan and pressure roller are clean.

Please refer to Fig. 2 for adjustment points.

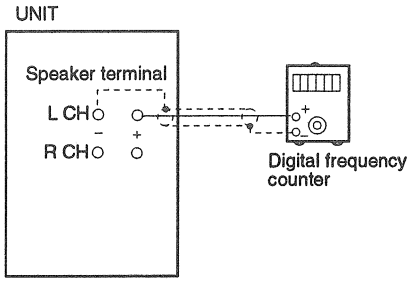
• BIAS OSC FREQUENCY ADJUSTMENT (DECK 1 & 2)

1. Test equipment connection is shown in figure.
2. Set the unit to "**TAPE**" mode.
3. Place the reference blank tape(QZZCRA) in deck 1.
4. Set deck 1 to REC mode.
5. Adjust **T201** for **101 ± 7 kHz** on frequency counter reading.



• TAPE SPEED ADJUSTMENT (DECK 1, 2)

Normal speed (Standard Value : 3100 ± 90 Hz ... Deck 1)
(Standard Value : Deck 1 ± 50 Hz ... Deck 2)
High speed (Standard Value : 5100 Hz ~)



1. Test equipment connection is shown in figure.
2. Set the unit to "**TAPE**" mode.
3. Playback the middle part of the test tape (QZZCWAT) in deck 1.
4. Adjust **VR451** for the output value shown below.
5. Playback the middle part of the test tape (QZZCWAT) in deck 2.
6. Repeat step 4.
7. Place the reference blank tape(QZZCRA) in deck 1.
8. Set deck 2 to **PLAY** mode and deck 1 to **REC** mode.
9. Set "**EDITING SPEED**" switch to "**HIGH**" position.
10. Repeat step 4.

Note :
The normal speed adjustment must be done before the high speed adjustment.

Adjustment Target : 3000 ± 90 Hz	... Normal speed (Deck 1)
Adjustment Target : Deck 1 ± 50 Hz	... Normal speed (Deck 2)
Adjustment Target : 5100 Hz ~	... High speed

■ Adjustment points

<Tuner section>

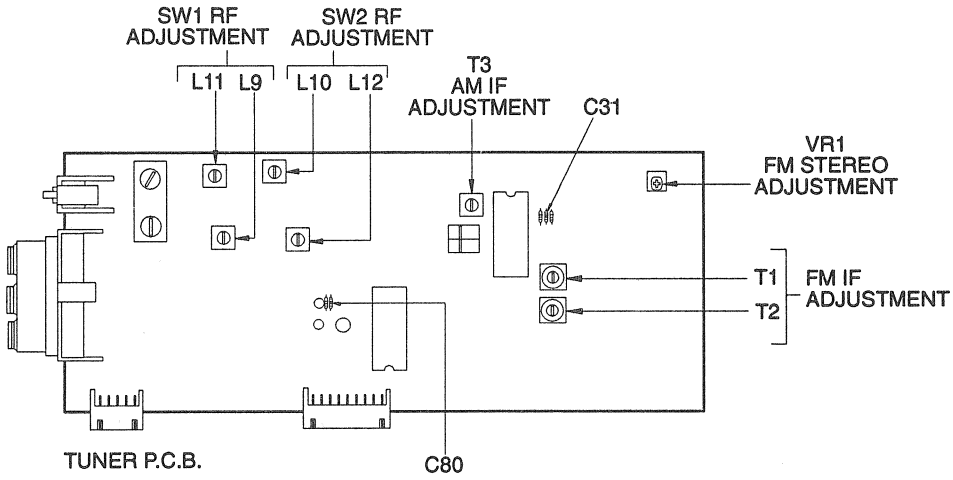


Fig. 1

<Cassette deck section>

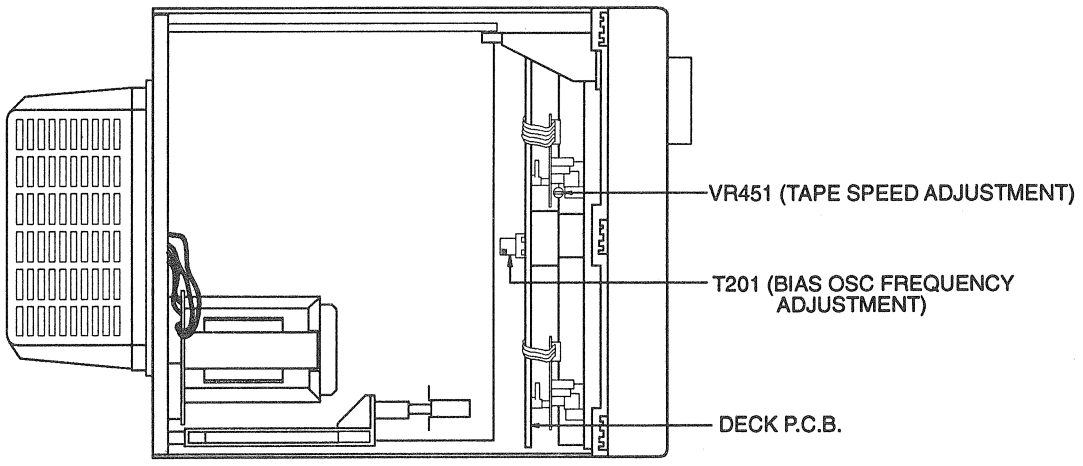


Fig. 2

■ FUNCTION OF IC TERMINALS

• IC106 (BU2040F-E2) : I/O EXPANDER

Pin No.	Mark	I/O Division	Function
1	GND	—	GND
2	DATA	I	Audio control Data input
3	CLK	I	Audio control Clock Input
4	MOTOR	O	MOTOR ON="L", MOTOR OFF="H"
5	REC	O	Recording control signal
6	TAPE	—	TAPE select signal (Not used)
7	MUTE D	O	Deck muting control signal
8	MUTE C	O	PLAY CUE/REW MUTE="H", NORMAL="L"

Pin No.	Mark	I/O Division	Function
9	D2	O	DECK 2="H", DECK 1="L"
10	HI SP	O	High speed editing control
11	T1 SEL	—	Dolby timer select signal (Not used)
12	T2 SEL	—	Dolby timer select signal (Not used)
13	DOLBY	—	Dolby drive signal (Not used)
14	BP1	O	Beatproof 1 control signal
15	BP2	—	Beatproof 2 control signal (Not used)
16	VCC	I	+5V

• IC901 (M38172M4077F) : MICRO-COMPUTER

Pin No.	Mark	I/O Division	Function
1	KEY2	I	AD converter input (Operation switches).
2.	KEY1	I	AD converter input (Operation switches).
3	JOGB	I	JOG dial signal input.
4	JOGA	I	JOG dial signal input.
5	ST	I	STEREO signal input.
6	SD	I	Tuner signal detect input.
7	MONO	I	MONO signal input.
8	ATLS	O	Automatic tape level select output
9	PLL DA	O	Data output for PLL tuner setting.
10	PLL CK	O	Clock output for PLL tuner setting.
11	PLL CE	O	Strobe output for PLL tuner setting.
12	VR ATT	O	Volume attenuator signal output.
13	MUTE A	O	Muting control signal output.
14	S BASS	O	Super bass control signal output.
15	MDL	I	Karaoke control signal input. "H"=Not used.
16	R3	I	Region select input .
17	R2	I	Region select input.
18	VR	I/O	Volume control
19	R1	I	Region select input.
20	BDAO	O	CD communication data output.
21	BCLO	O	CD communication clock output.
22	BDAI	I	CD communication data input.
23	BCLI	I	CD communication clock input.
24	RMT	I	Remote control pulse signal input.
25	PW DET	I	Power on detection signal input.
26	AC DET	I	AC supply(Standby) detection signal input.
27	RESET	I	Micro-computer reset input.
28	XC IN	I	Crystal oscillator input (32 kHz).
29	XCOUT	O	Crystal oscillator output (32 kHz).
30	X IN	I	Ceramic oscillator input (4.19 MHz).
31	X OUT	O	Ceramic oscillator input (4.19 MHz).
32	VSS	—	GND

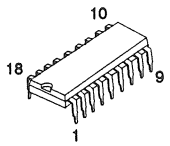
Pin No.	Mark	I/O Division	Function
33	MBP1	O	Micro-computer beatproof output 1.
34	MBP2	O	Micro-computer beatproof output 2.
35	MKCL	O	Deck circuit clock control output.
36	MKDA	O	Deck circuit data control output.
37	RLY	O	Relay drive output.
38	LOUD	—	Not used.
39	SEL B	O	Function select signal output.
40	SEL A	O	Function select signal output.
41	NC	—	No connection.
42	S BASS2	—	No connection.
43	D13	O	
44	D12	O	
45	D11	O	
46	D10	O	
47	D9	O	
48	D8	O	
49	D7	O	
50	D6	O	
51	D5	O	
52	D4	O	
53	S19	O	FL display segment drive signal output
54	S18	O	
55	S17	O	
56	S16	O	
57	S15	O	
58	S14	O	
59	S13	O	
60	S12	O	
61	S11	O	
62	S10	O	
63	S9	O	
64	S8	O	

Pin No.	Mark	I/O Division	Function
65	S7	O	FL display segment drive signal output.
66	S6	O	
67	S5	O	
68	S4	O	
69	REC1	O	Recording signal output.
70	MUTE B	O	Muting control signal output.
71	KARA2	—	Not used.
72	KARA1	—	Not used.

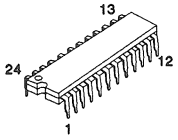
Pin No.	Mark	I/O Division	Function
73	VCC	I	+5V.
74	VEE	I	Pull down voltage supply.
75	AVSS	—	GND
76	VREF	O	Output reference voltage for AD conversion.
77	CRT	I/O	Timer control during standby mode.
78	DECK2	I/O	Cassette deck 2 control terminal.
79	DECK1	I/O	Cassette deck 1 control terminal.
80	KEY3	I	AD converter input (Operation switches).

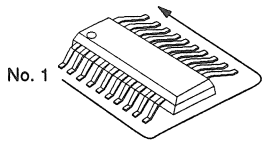
■ TERMINAL GUIDE OF ICs, TRANSISTORS & DIODES

AN7273W



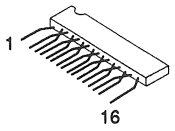
AN7345K



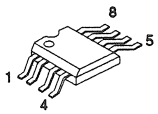


BU2040F-E2	16Pin
LA5608M-TE-L	14Pin
M5226FPE2	16Pin

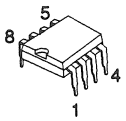
RVIBA1332L



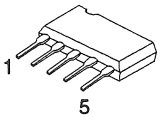
BA4558FDXE2



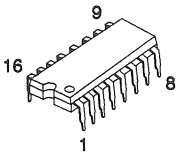
BA4558DX



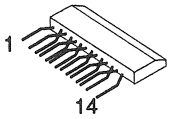
BA7755



LM7001

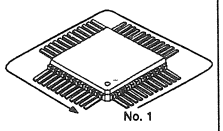


M51131L-702

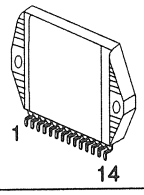


M38172M4077F

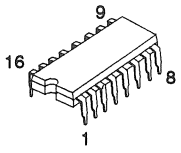
80Pin



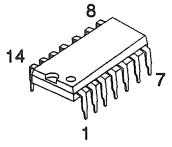
SVI3102D

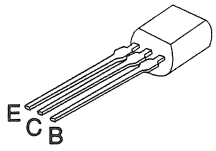


TC4052BP



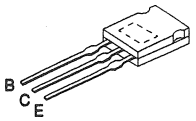
TC74HC00AP

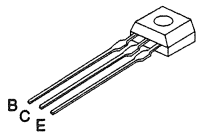




2SA564RTA
2SA952LTA
2SB621ARTA
2SC1685RTA
2SC2001KTA
2SC2001L1TA
2SD965RTA
2SK381CDTA

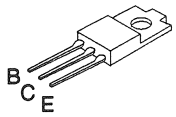
2SD2037ETA



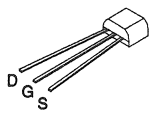


2SC2785FTA
2SC2786MTA
2SC2787FL1TA
2SC2787LTA
2SD1020HTA
BA1A4ZTA
BN1L3NTA

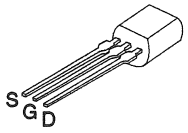
2SB1185E
2SD1273P
2SD1762EF



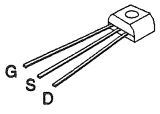
2SJ40CDTA

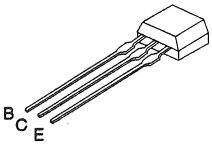


2SK301QTA

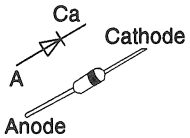


2SK544F-AC



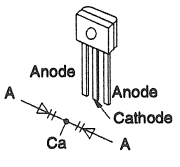


2SA933SSTA
2SC1740SLNST
2SC1740SRTA
2SC1740SSTA
RVTDTA114EST
RVTDTC124EST

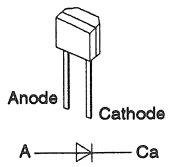


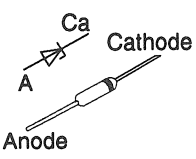
1SR35200TB
1SS291TA
MA165TA
MA29WATA
RVD1SS133TA

SVC211SPA-AL



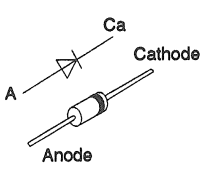
RVDSVC321





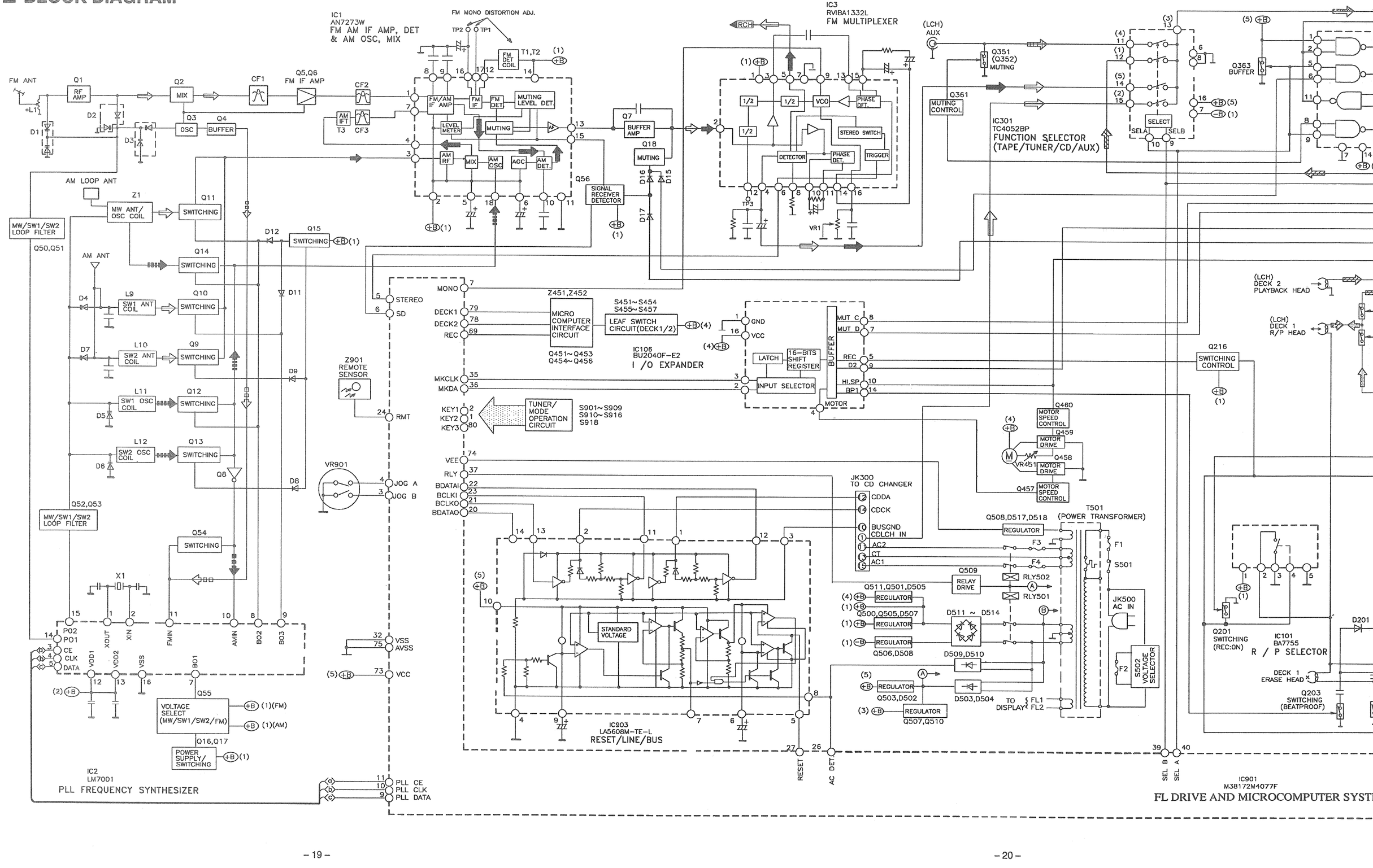
RVDMTZ15CTA
RVDMTZ4R7BTA
RVDMTZ5R1BTA
RVDMTZ5R6BTA
RVDMTZ5R6CTA
RVDMTZ6R2ATA
RVDMTZ6R2BTA

RVDMTZ6R2CTA
RVDMTZ6R8ATA
RVDMTZJ27CTA



1D3E
1N5402BM21
RL154M11

■ BLOCK DIAGRAM



IC360
TC74HC00AP
MODE SELECT

Q363
BUFFER

IC302
BA4558DX
OP AMP (BUFFER AMP)

Q355
(Q356)
MUTING

Q362
MUTING CONTROL

Q367
MUTING DRIVE

RC EQ.

IC304
BA4558DX
OP AMP
(BUFFER AMP)

D623

Q621
MIC AMP

VR659
(MIC)

JK601
MICROPHONE

IC603
BA4558BFDXE2
OP AMP
(MIC SWITCHING)

VR657
(BALANCE)

RCH

IC601
M5226FPE2
G.E.Q AMP

IC602
M5226FPE2
G.E.Q AMP

BPF

VR655-1
VR653-1
VR651-1
VR653-2
VR651-2
VR655-2

Q111
(Q112)
MUTING

Q113
(Q114)
MUTING

NF

PLAY AMP

(LCH)
DECK 2
PLAYBACK HEAD

(LCH)
DECK 1
R/P HEAD

Q105
(Q106)
HEAD SELECT
(PLAY:ON)

A/B CNTL

EQ CNTL

Q101
(Q102)
HEAD SELECT
(REC:ON)

IC102
AN7345K
REC / PLAY AMP

R101,C103
(R102,C104)
REC EQ

REC AMP

ALC CNTL

RIPPLE FILTER

R129,C125
(R130,C126)
REC EQ

ALC CONTROL

Q118

Q121(Q122)
BUFFER

Q216
SWITCHING CONTROL

Q201
SWITCHING
(REC:ON)

IC101
BA7755
R / P SELECTOR

D201

D202

T201

Q205,
Q206
BIAS OSC

Q208
BIAS OSC CONTROL

DECK 1
ERASE HEAD

Q203
SWITCHING
(BEATPROOF)

Q204
SWITCHING
(REC:ON)

IC801
M51131L-702
ATTENUATOR
(VCA)

VCA

VCA CONT.

R809,C805
(R810,C806)
RC EQ.

Q801
(Q802)
S.BASS AMP

IC802
BA4558DX
OP AMP

VCC VEE

C507,R507
NF

Q512,
Q513
PROTECTOR

DETECTION

POWER ON / OFF

BIAS

MUTING

IC501
SVI3102D
POWER AMP

JK302
(LCH)
SPEAKERS OUT

IC902
BA4558FDXE2
OP AMP
(ACTIVE FILTER)

Q807
(Q808)
MUTING

Q822
MUTING DRIVE

Q805
(Q806)
MUTING DRIVE

Q820
S.BASS CONTROL

Q803
(Q804)
MUTING DRIVE

Q821
VR.ATT CONTROL

Q366
REGULATOR

Z902
FL DISPLAY
(RSL0149-F)

FL1

FL2

TO
(T501)

Q902
SWITCHING

X902

Q901
SWITCHING

X901

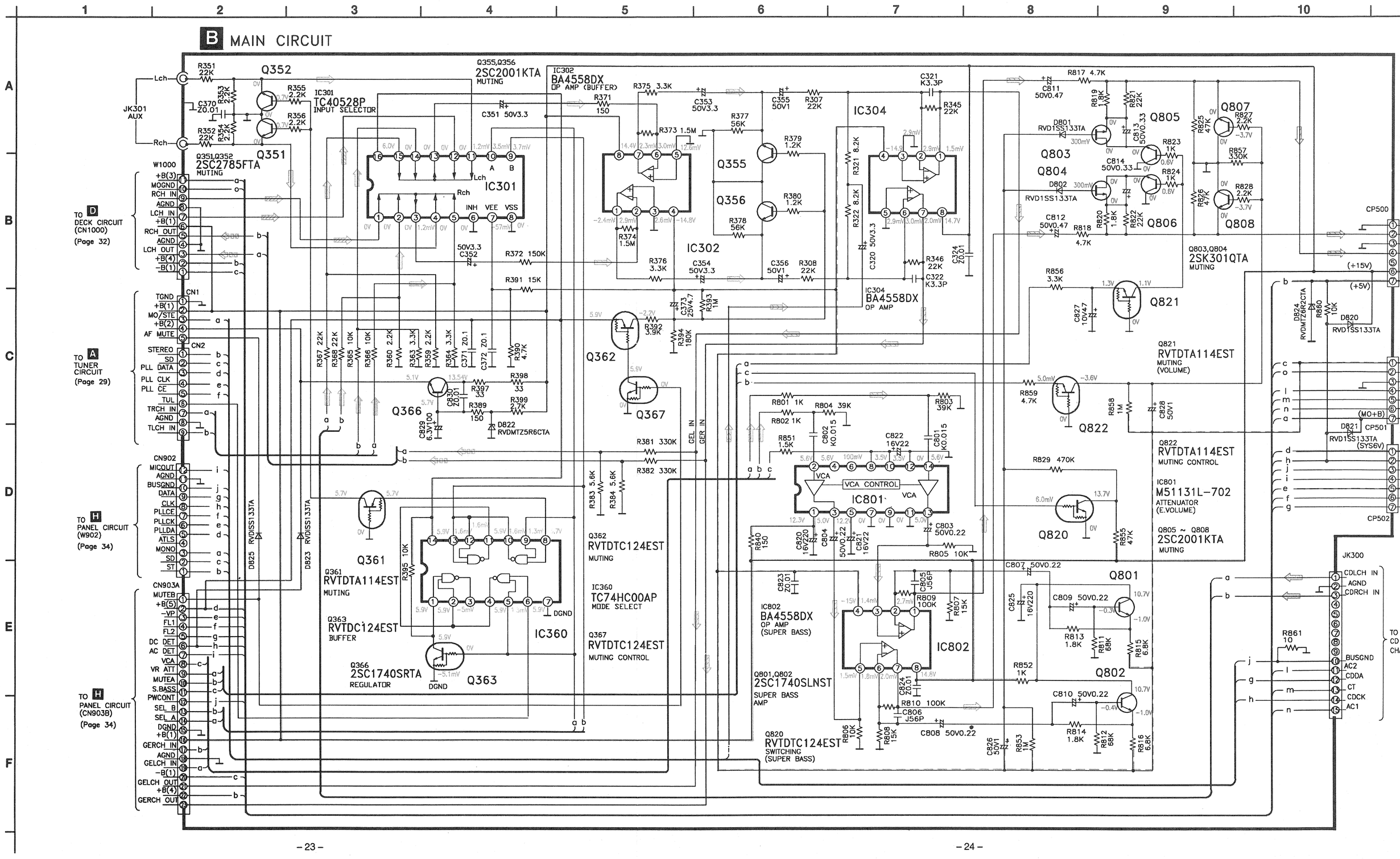
IC901
M38172M4077F
MICROCOMPUTER SYSTEM

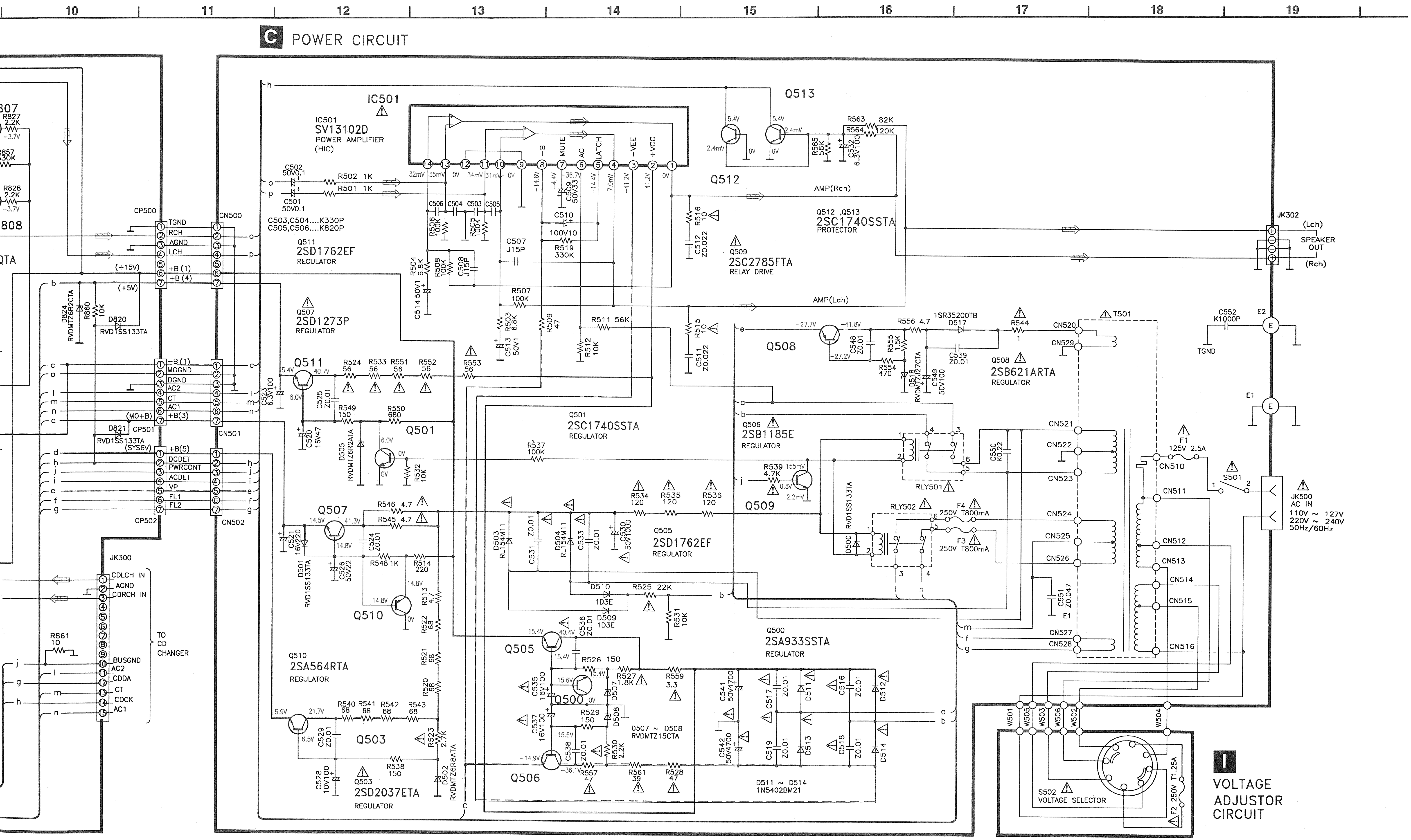
MBP1
XOUT
XIN
MBP2
XC IN
XC OUT
MUTE B
VR
MUTE A
S.BASS
VR. ATT
S4 . . . S19
D4 D5 . . . D13
PW DET.

NOTES
( ) INDICATES PIN NO. OF RIGHT CHANNEL

AUX. SIGNAL LINE
MAIN SIGNAL LINE
FM SIGNAL LINE
AM SIGNAL LINE
FM OSC SIGNAL LINE
AM OSC SIGNAL LINE
PLAYBACK SIGNAL LINE
RECORD SIGNAL LINE
CD SIGNAL LINE
MIC SIGNAL LINE

■ SCHEMATIC DIAGRAM




10
11
12
13
14
15
16
17
18
19
C POWER CIRCUIT
IC501
IC501
SV13102D
POWER AMPLIFIER
(HIC)
Q513
Q512
AMP(Rch)
AMP(Lch)
Q512 ,Q513
2SC1740SSTA
PROTECTOR
Q509
2SC2785FTA
RELAY DRIVE
Q511
2SD1762EF
REGULATOR
Q507
2SD1273P
REGULATOR
Q501
2SC1740SSTA
REGULATOR
Q506
2SB1185E
REGULATOR
Q508
2SB621ARTA
REGULATOR
Q505
2SD1762EF
REGULATOR
Q500
2SA933SSTA
REGULATOR
Q510
2SA564RTA
REGULATOR
Q503
2SD2037ETA
REGULATOR
C503,C504....K330P
C505,C506....K820P
D507 ~ D508
RVDMTZ15CTA
D511 ~ D514
1N5402BM21
JK302
SPEAKER OUT
(Lch)
(Rch)
JK500
AC IN
110V ~ 127V
220V ~ 240V
50Hz/60Hz
T501
RLY501
RLY502
S501
S502
VOLTAGE SELECTOR
F1
125V 2.5A
F2 250V T1.25A
F3 250V T800mA
F4 250V T800mA
JK300
CDLCH IN
AGND
CDRCH IN
BUSGND
AC2
CDDA
CT
CDCK
AC1
TO CD CHANGER
CP500
CN500
CP501
CN501
CP502
CN502
TGND
RCH
AGND
LCH
+B (1)
+B (4)
-B (1)
MOGND
DGND
AC2
CT
AC1
+B(3)
+B(5)
DCDET
PWRCONT
ACDET
VP
FL1
FL2
(+15V)
(+5V)
(MO+B)
(SYS6V)
I
VOLTAGE ADJUSTOR CIRCUIT

NOTES:

< For TUNER CIRCUIT >

- VR1 : FM VCO adjustment VR.

< For POWER CIRCUIT >

- S501 : Power supply switch.

< For VOLTAGE ADJUSTOR CIRCUIT >

- S502 : Voltage select switch.

< GENERAL >

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis.
  Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

  No mark ... Tape Playback ( ) ... MW < > ... FM
  ... SW1 ... SW2

  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 pins of IC or LSI with fingers directly.

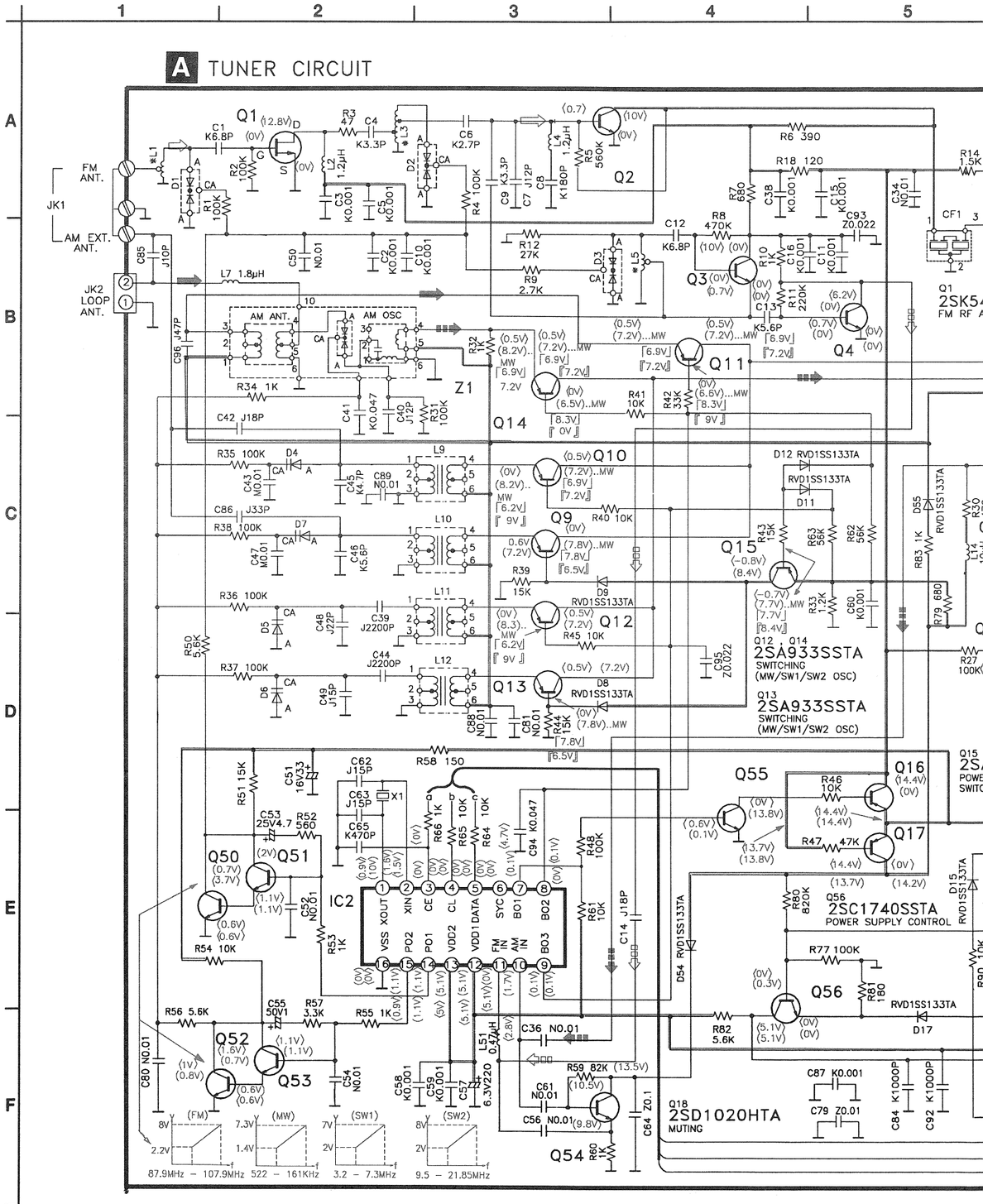
- Important safety notice :
  Components identified by ⚠ mark have special characteristics important for safety.
  When replacing any of these components, use only manufacturer's specified parts.

- **This schematic diagram may be modified at anytime with the development of new technology.**

... MAIN SIGNAL LINE
... CD SIGNAL LINE
... AM(MW/SW1/SW2) SIGNAL LINE
... FM OSC SIGNAL LINE
... FM SIGNAL LINE
... AM(MW/SW1/SW2) OSC SIGNAL LINE
... AM/FM SIGNAL LINE

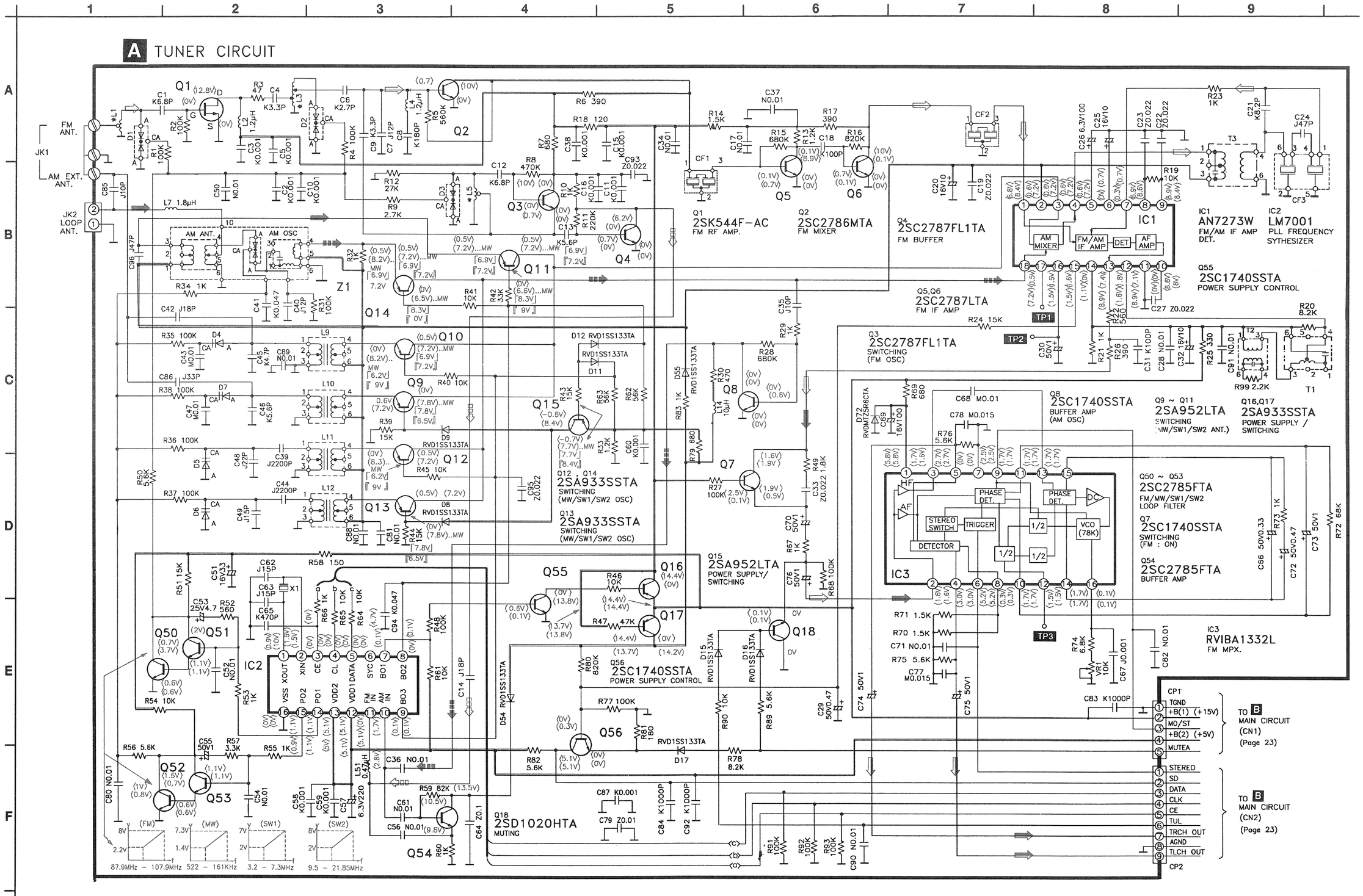
... PLAYBACK SIGNAL LINE
... RECORDING SIGNAL LINE
... MIC SIGNAL LINE
... AUX SIGNAL LINE
... +B LINE
... — B LINE

SCHEMATIC DIAGRAM



SA-CH46

■ SCHEMATIC DIAGRAM



NOTES:

< For DECK CIRCUIT >

- S451 : Deck 1 motor switch.
- S452 : Deck 1 fast wind select switch.
- S453 : Deck 1 playback switch.
- S454 : Deck 1 record switch.
- S455 : Deck 2 fastwind select switch.
- S456 : Deck 2 playback switch.
- S457 : Deck 2 motor switch.

- VR451 : Tape speed adjustment VR.

< GENERAL >

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis.
  Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

  No mark ... Tape Playback

  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 pins of IC or LSI with fingers directly.

- **This schematic diagram may be modified at anytime with the development of new technology.**

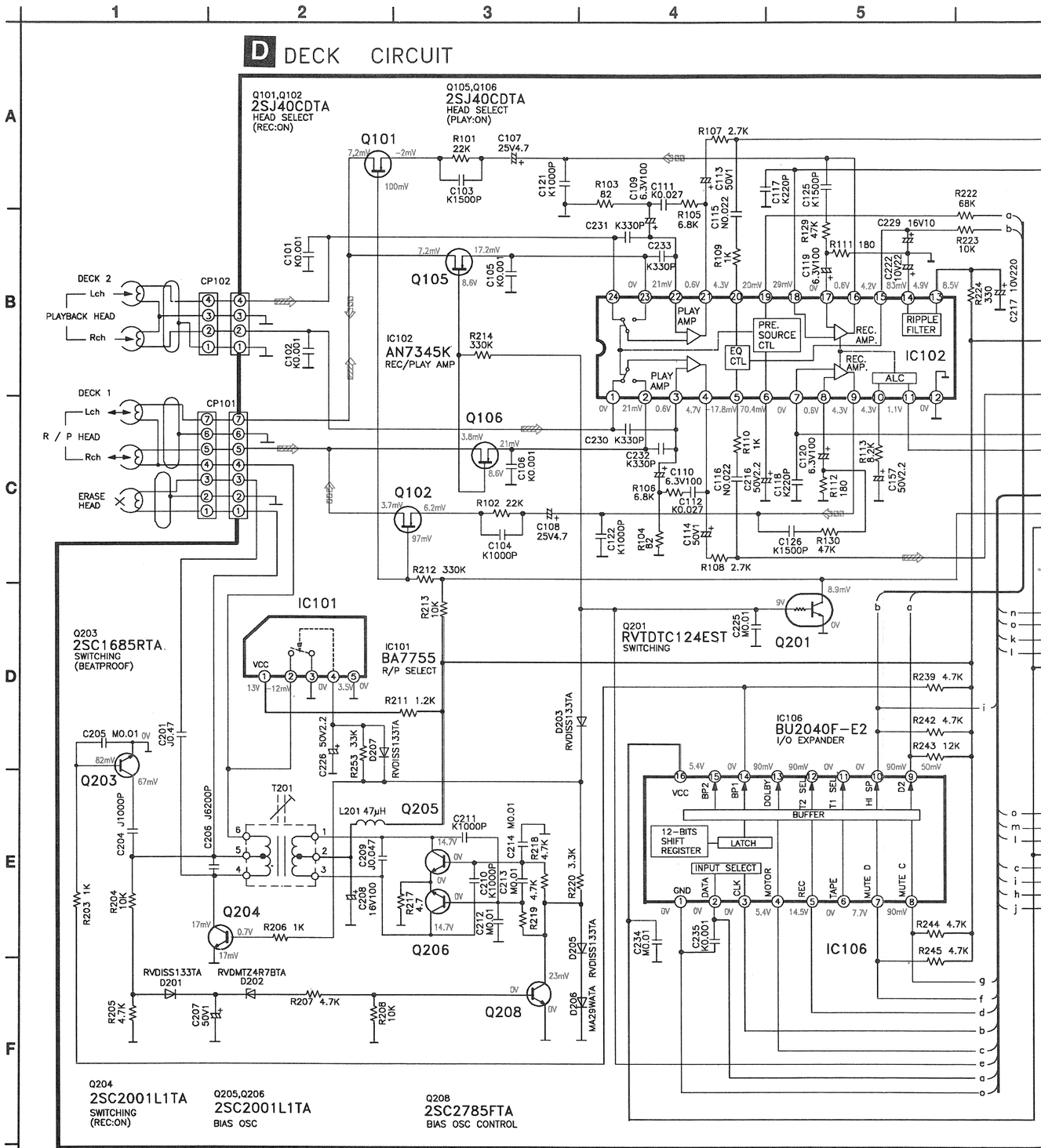
... PLAYBACK SIGNAL LINE

... RECORDING SIGNAL LINE

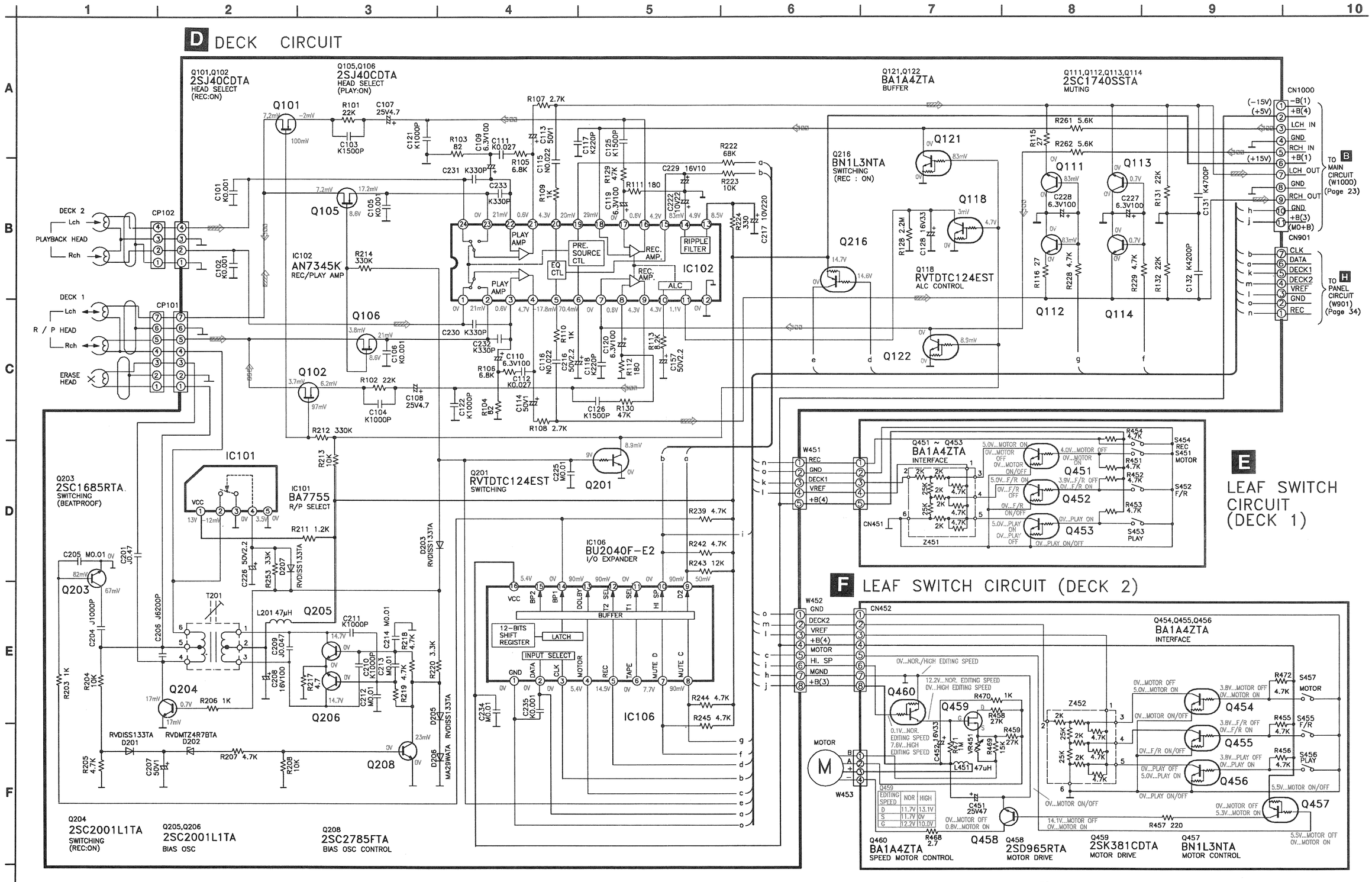
... +B LINE

... — B LINE

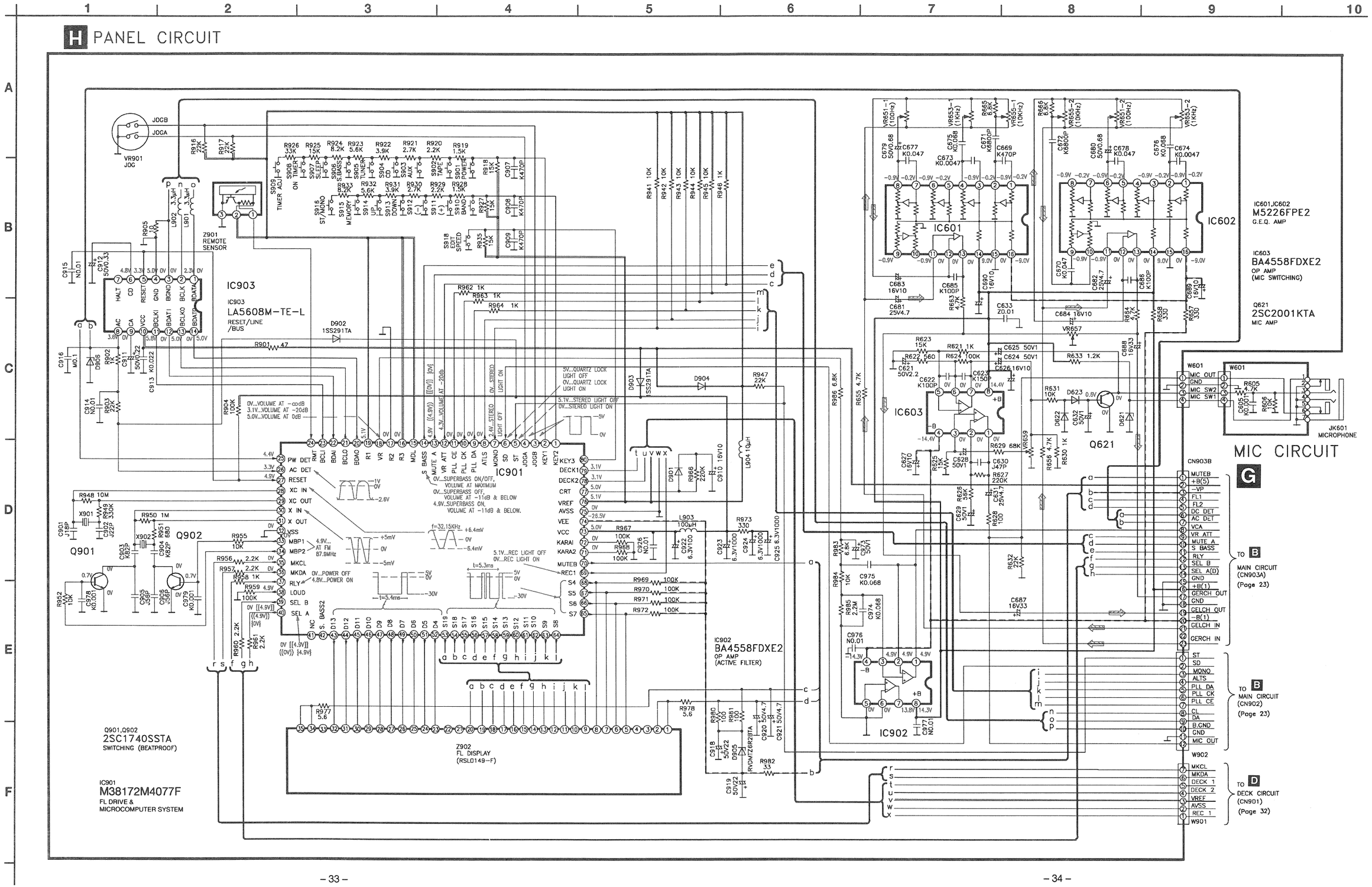
■ SCHEMATIC DIAGRAM

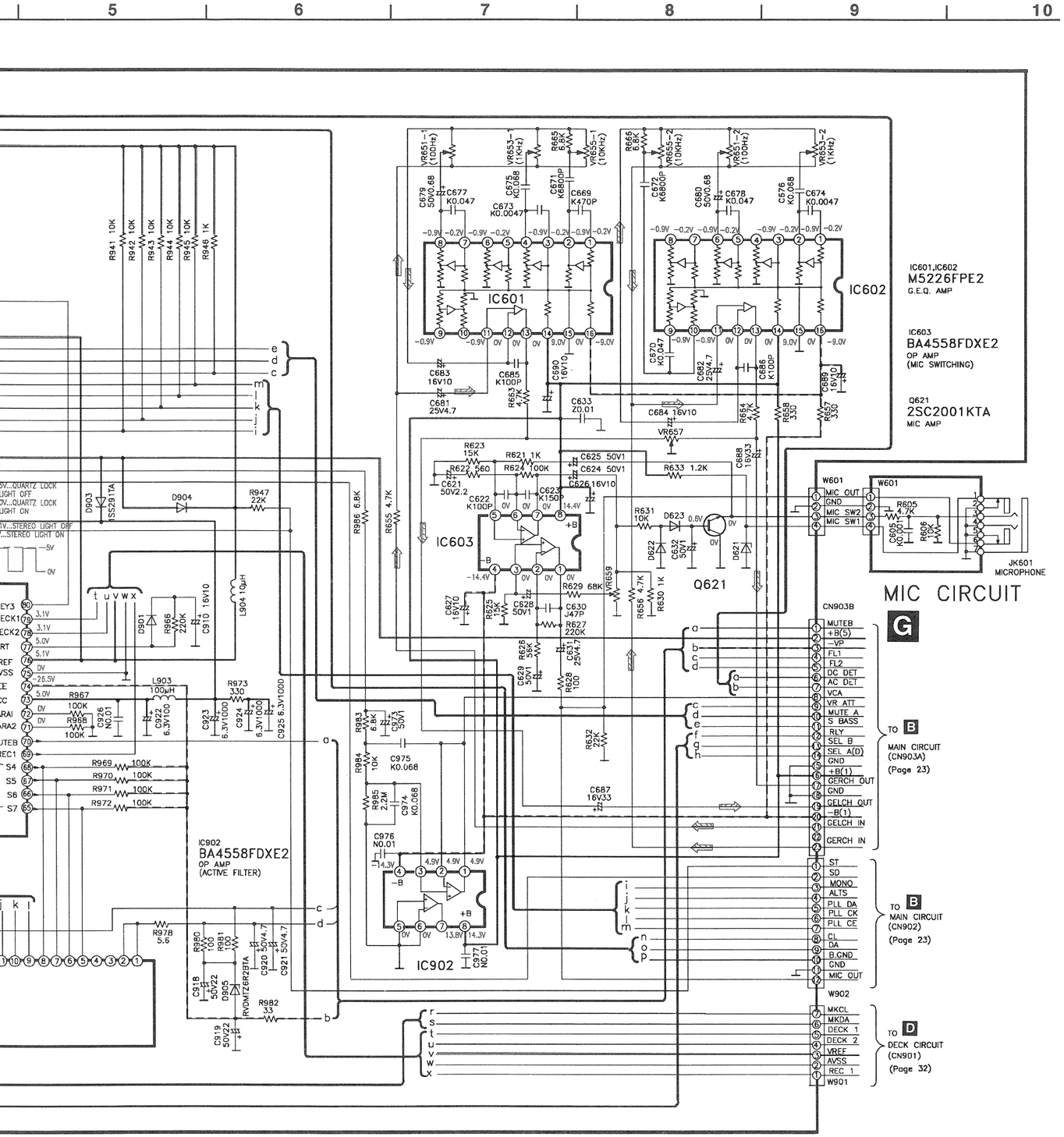


■ SCHEMATIC DIAGRAM



■ SCHEMATIC DIAGRAM





NOTES:

< For PANEL CIRCUIT >

- S901 : Power switch (POWER).
- S902 : Tape function select switch (TAPE).
- S903 : Aux function select switch (AUX).
- S904 : CD function select switch (CD).
- S905 : Tuner function select switch (TUNER).
- S906 : Super bass switch (S.BASS).
- S907 : Sleep Switch (SLEEP).
- S908 : Timer on switch (ON TIMER).
- S909 : Timer adjust switch (TIMER ADJUST).
- S910 : Band select switch (BAND).
- S911 : Manual tuning up/ time switch (TIME +).
- S912 : Manual tuning down/time switch (TIME —).
- S913 : Preset tuning down switch (PRESET TUNING ▼).
- S914 : Preset tuning up switch (PRESET TUNING ▲).
- S915 : Memory switch (MEMORY).
- S916 : FM Stereo/Beatproof select switch (FM MODE/BP).
- S918 : Editing speed select switch (EDITING SPEED).

- VR651-1 ~ VR651-2 : Graphic E.Q. (100Hz) control V.R.
- VR653-1 ~ VR653-2 : Graphic E.Q. (1kHz) control V.R.
- VR655-1 ~ VR655-2 : Graphic E.Q. (10kHz) control V.R.
- VR657 : Balance control V.R.
- VR659 : Mic mixing control V.R.
- VR901 : Al jog control V.R.

< GENERAL >

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis.
  Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

No mark ... Tape Playback (( )) ... CD [[ ]]... Aux
{ } ... AM/FM

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 pins of IC or LSI with fingers directly.

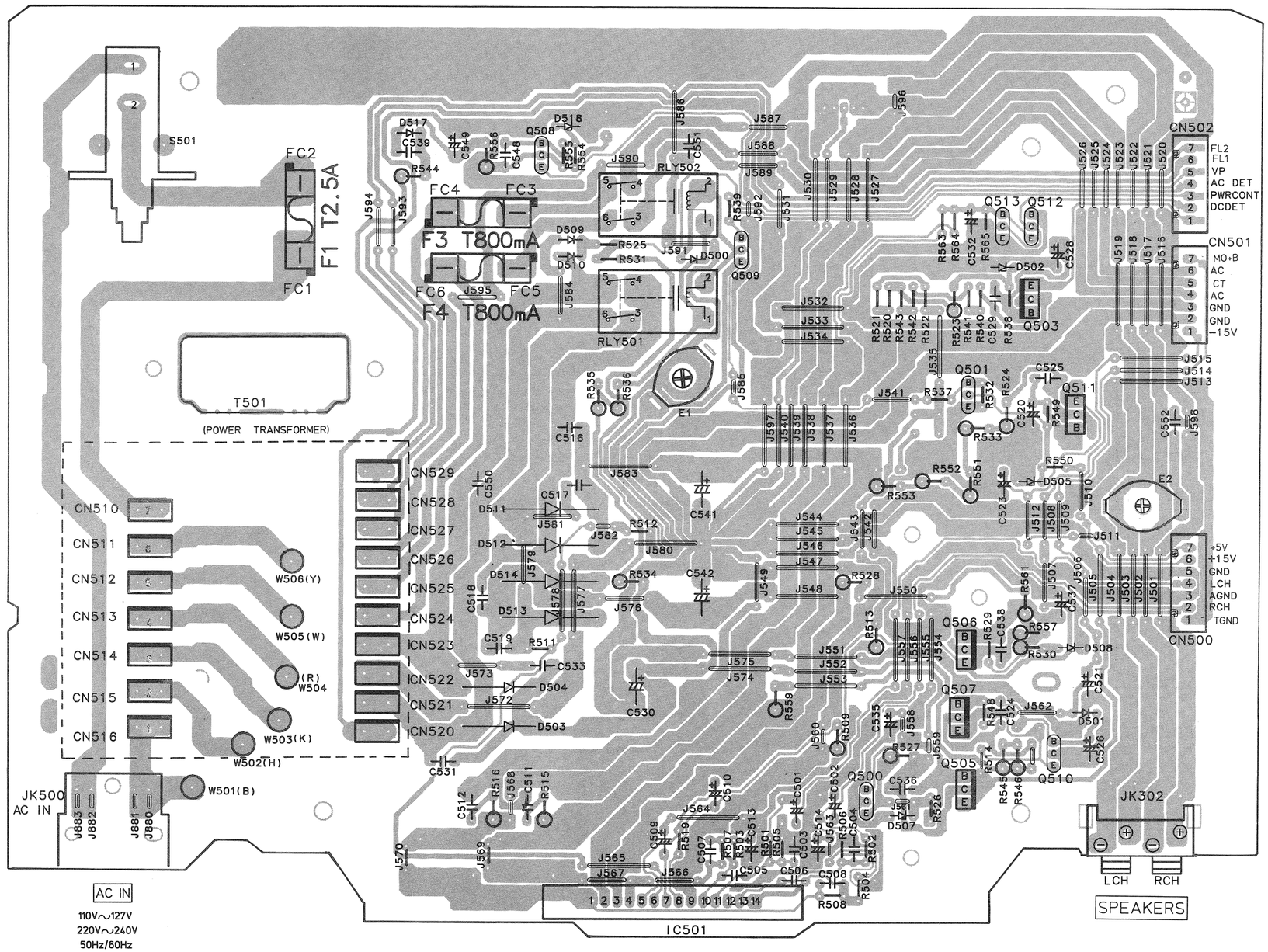
- **This schematic diagram may be modified at anytime with the development of new technology.**

... MAIN SIGNAL LINE
... +B LINE
... — B LINE

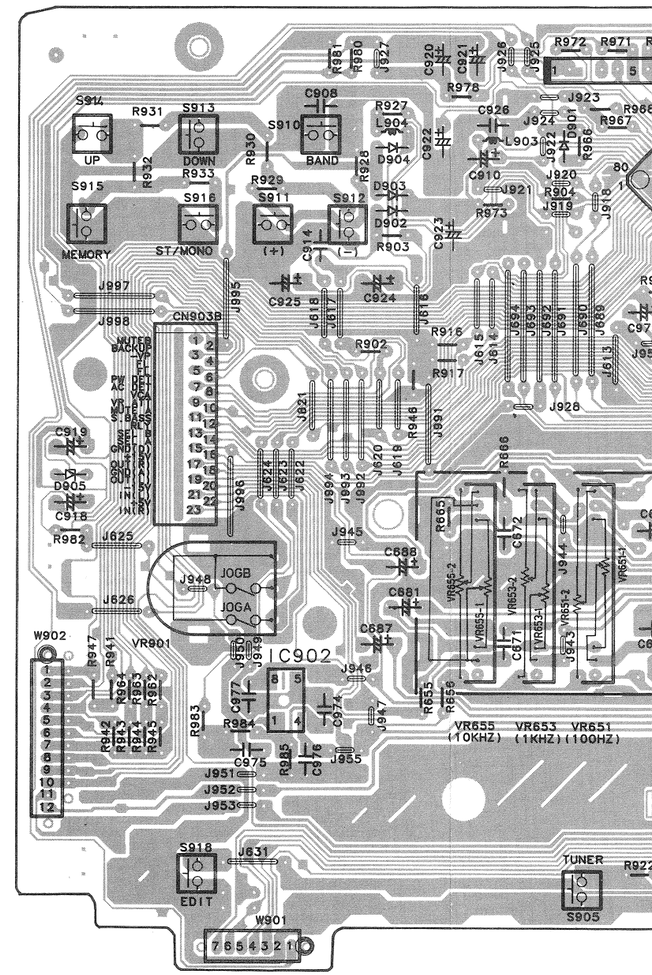
SA-CH46 SA-CH46

■ PRINTED CIRCUIT BOARD DIAGRAM

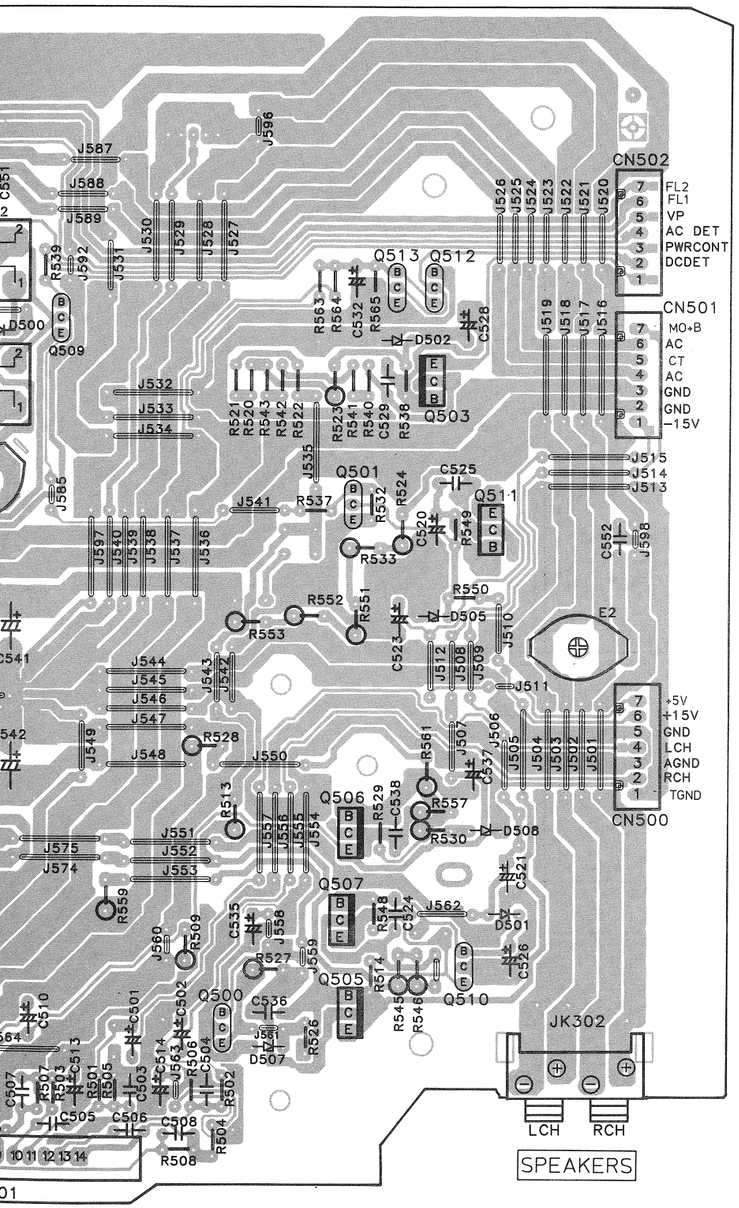
C POWER P.C.B. (REPX0053A)



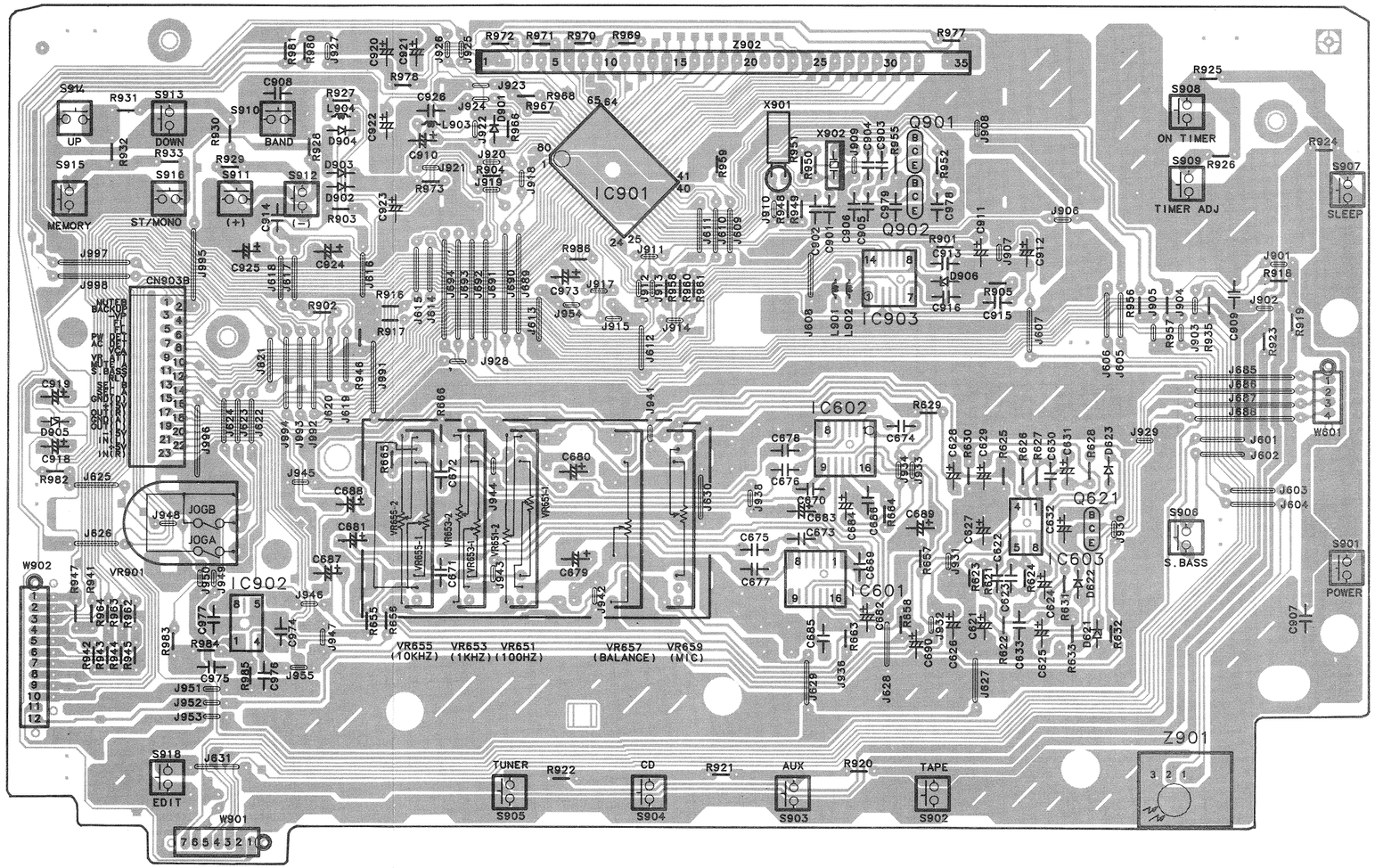
H PANEL P.C.B. (REPX0050A)



5 6 7 8 9 10 11 12 13 14 15

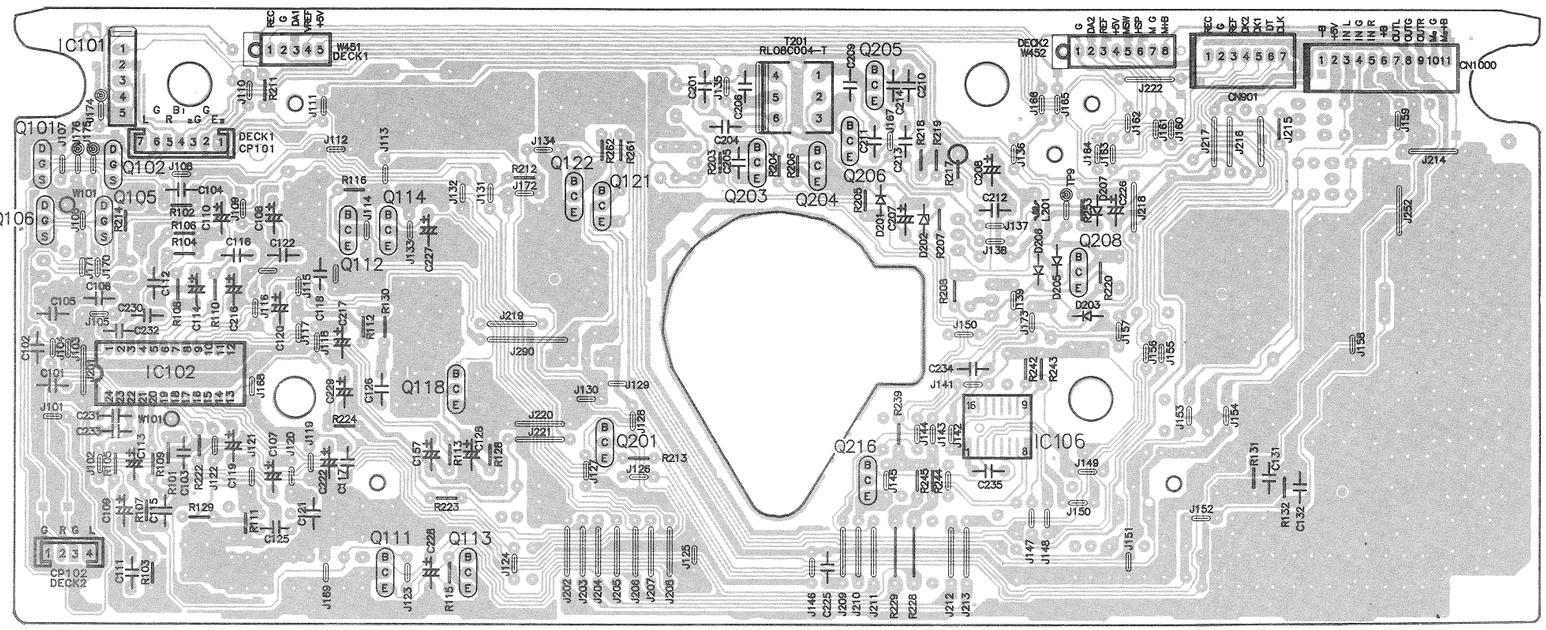


H PANEL P.C.B. (REPX0050A)

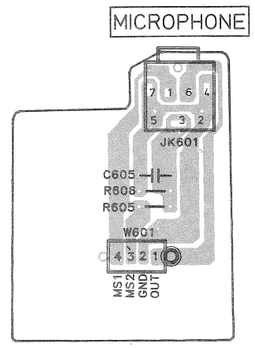


■ PRINTED CIRCUIT BOARD DIAGRAM

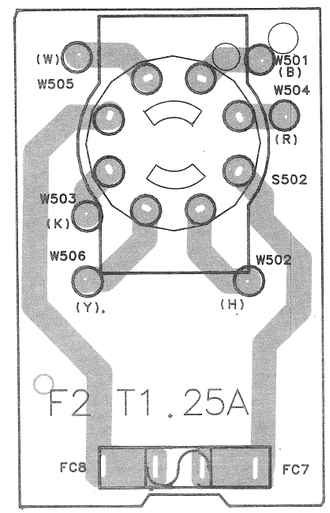
D DECK P.C.B. (REPX0052)

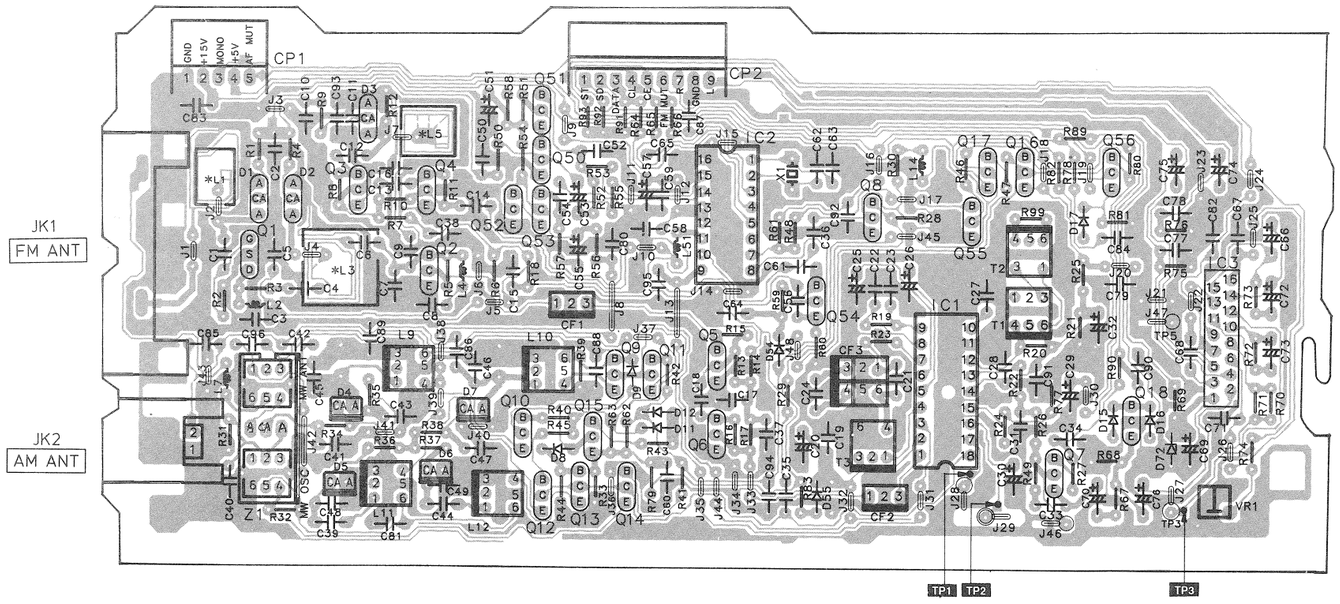


G MIC P.C.B. (REPX0050A)



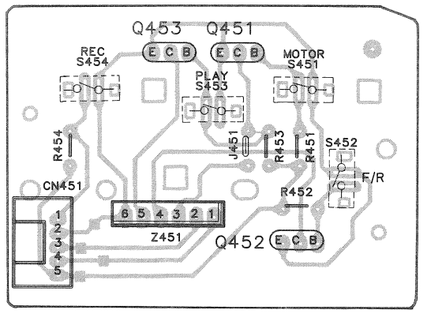
I VOLTAGE ADJUSTOR P.C.B. (REPX0053A)



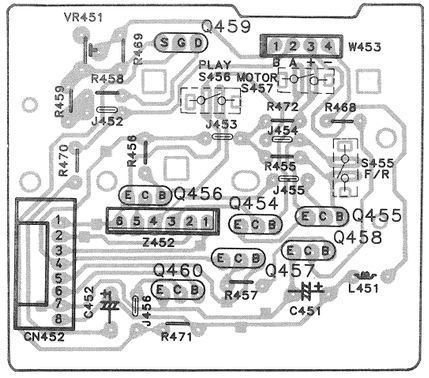


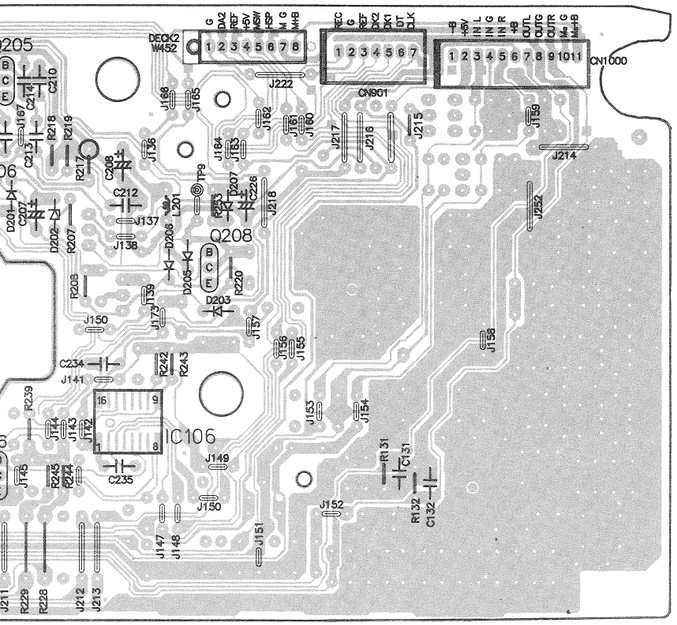
A TUNER P.C.B. (REP1626A)

E LEAF SWITCH (DECK 1) P.C.B. (REPX0033)



F LEAF SWITCH (DECK 2) P.C.B. (REPX0033)





G MIC P.C.B. (REPX0050A)

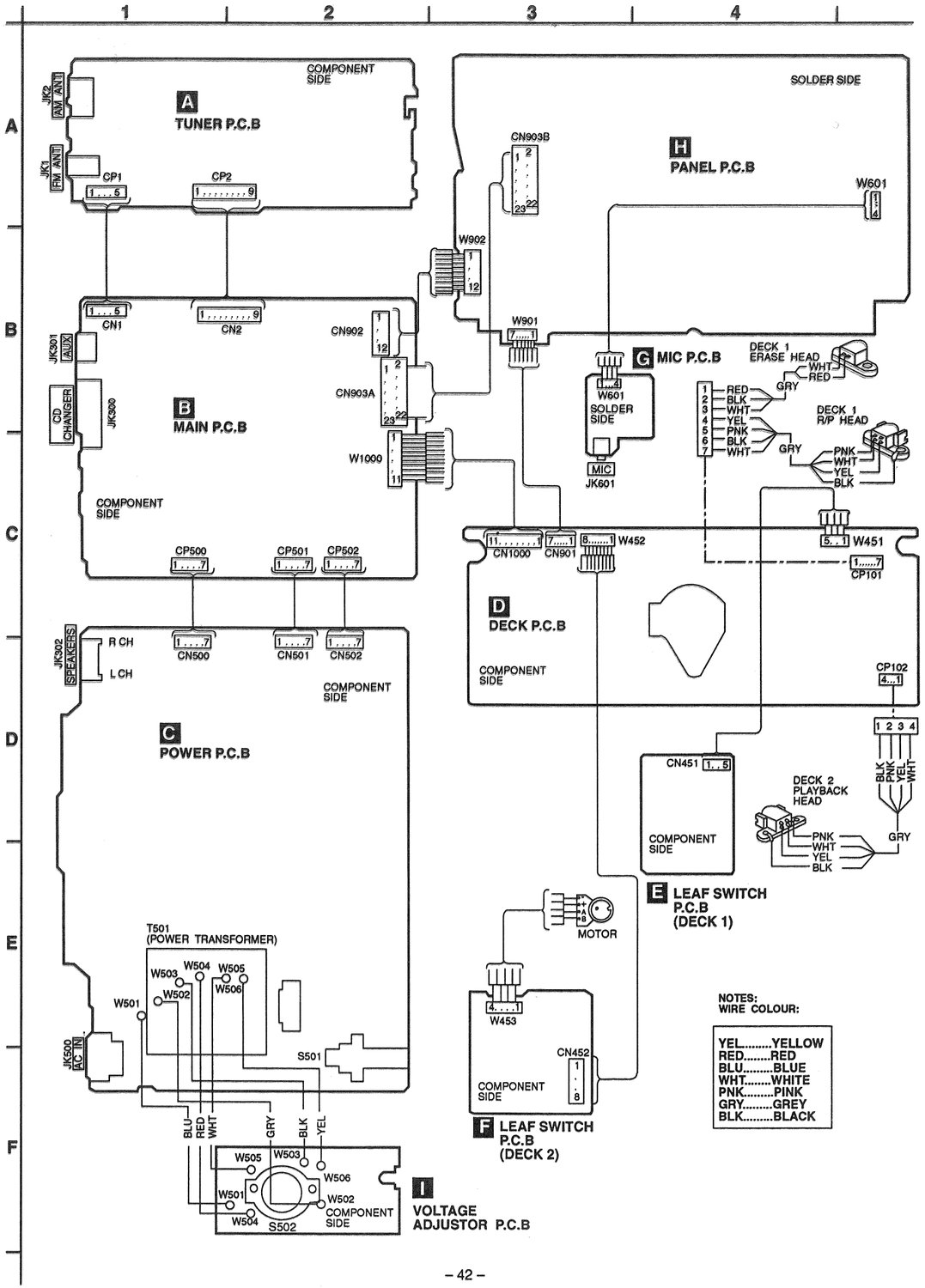
I VOLTAGE ADJUSTOR P.C.B. (REPX0053A)

E LEAF SWITCH (DECK 1) P.C.B. (REPX0033)

F LEAF SWITCH (DECK 2) P.C.B. (REPX0033)

B MAIN P.C.B. (REPX0051A)

■ WIRING CONNECTION DIAGRAM



■ MECHANISM PARTS LOCATION (RAA0910)

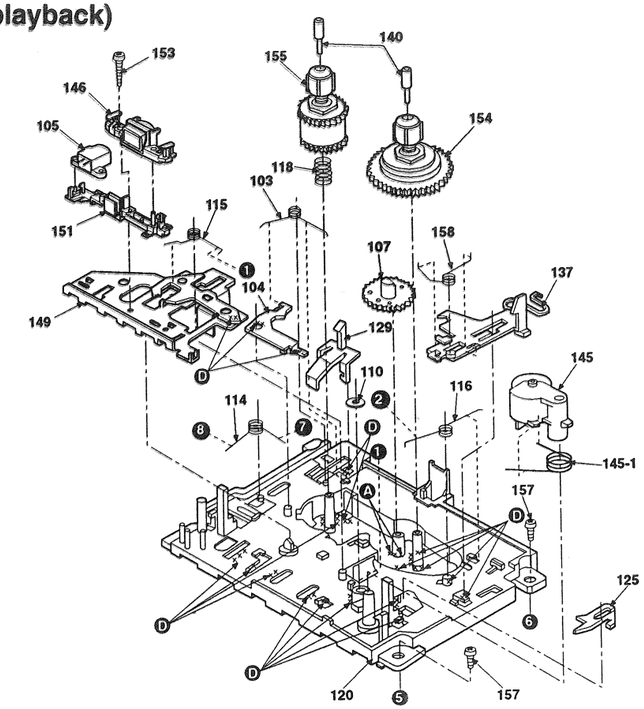
DECK 1 (For recording and playback)

SPECIFICATIONS

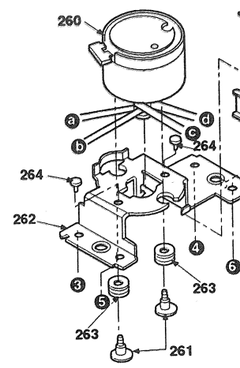
Playback torque	25 ~ 50g.m
Fast forward torque	65 ~ 1300g.m
Rewind torque	65 ~ 130g.m
Wow and flutter	Less than 0.25% (WRMS)

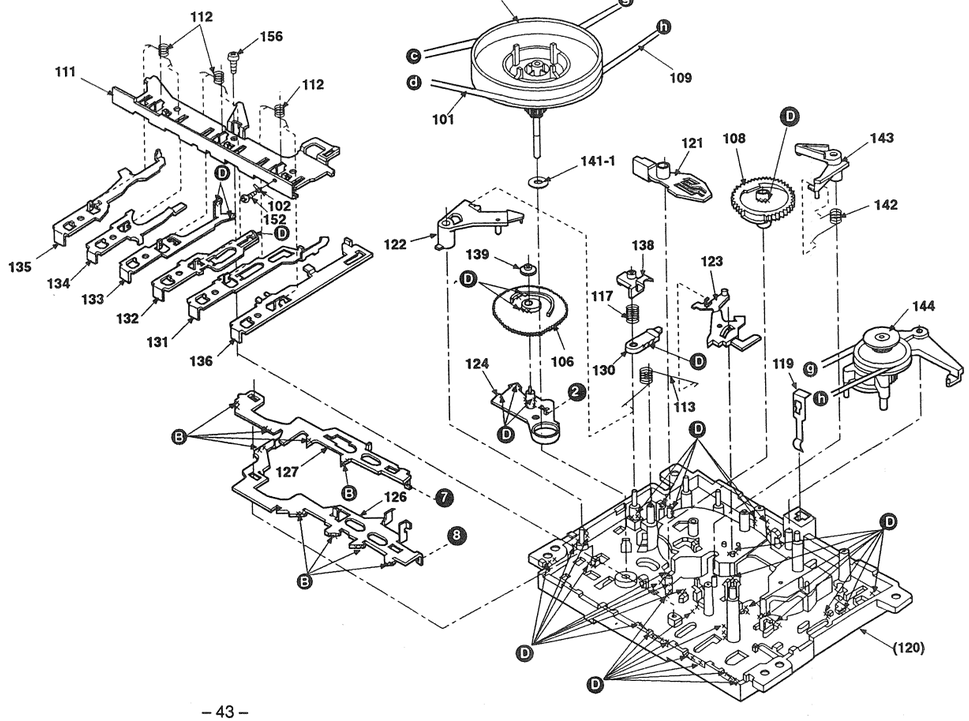
Note:
When changing mechanism parts, apply the specified grease to arrow indicated areas shown in the drawing.

Ref. No.	Part Name
Ⓐ	SZZ0L25
Ⓑ	RZZ0L06
Ⓓ	SZZ0L30



DECK 2 (Fo





■ MECHANISM PARTS LOCATION (RAA0910)

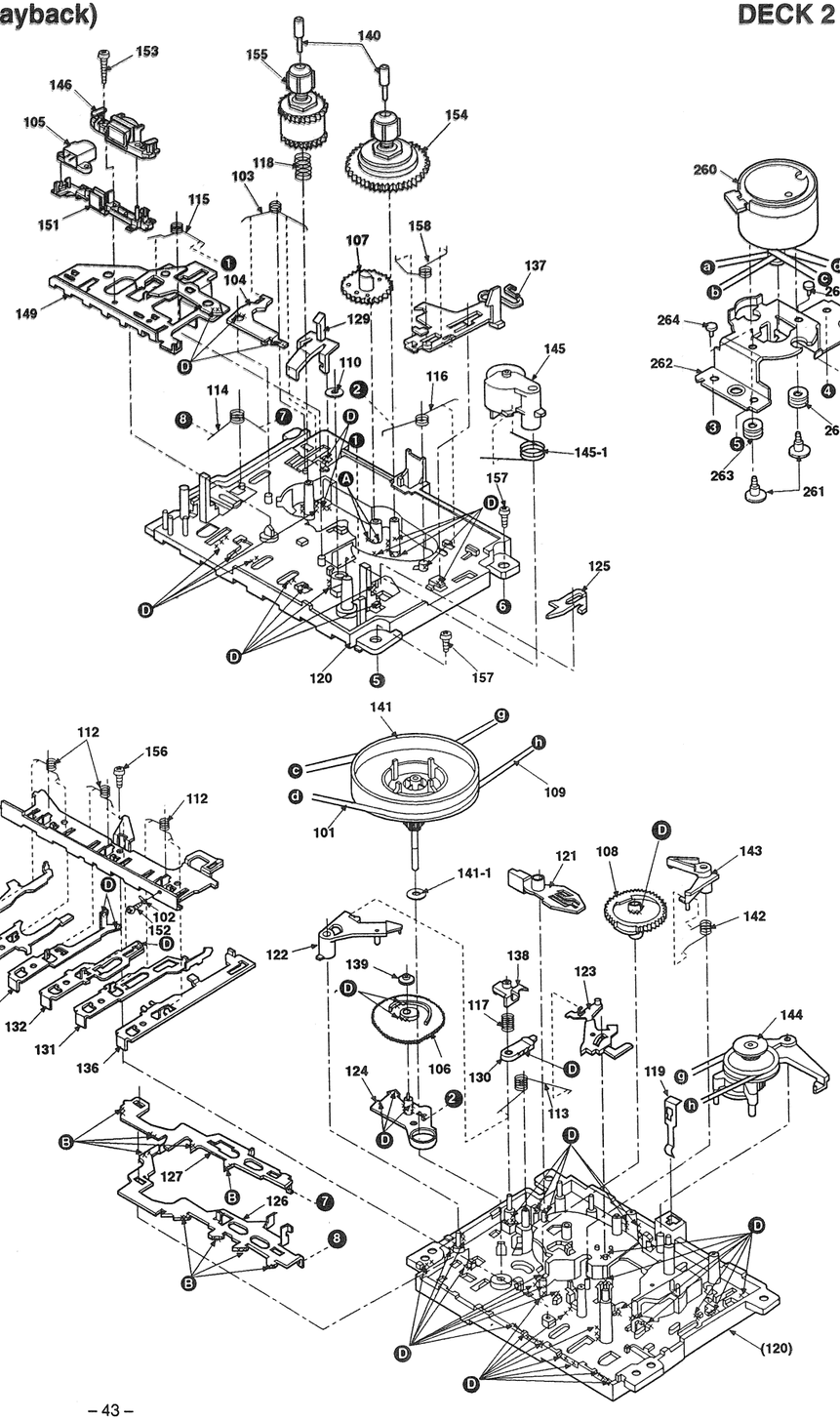
DECK 1 (For recording and playback)

SPECIFICATIONS

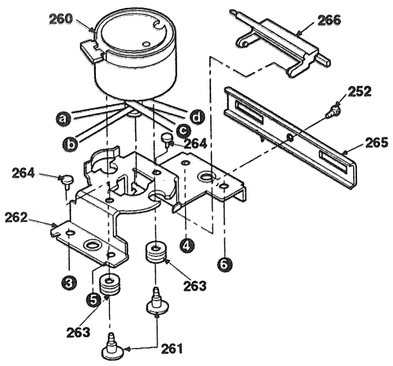
Playback torque	25 ~ 50g.m
Fast forward torque	65 ~ 1300g.m
Rewind torque	65 ~ 130g.m
Wow and flutter	Less than 0.25% (WRMS)

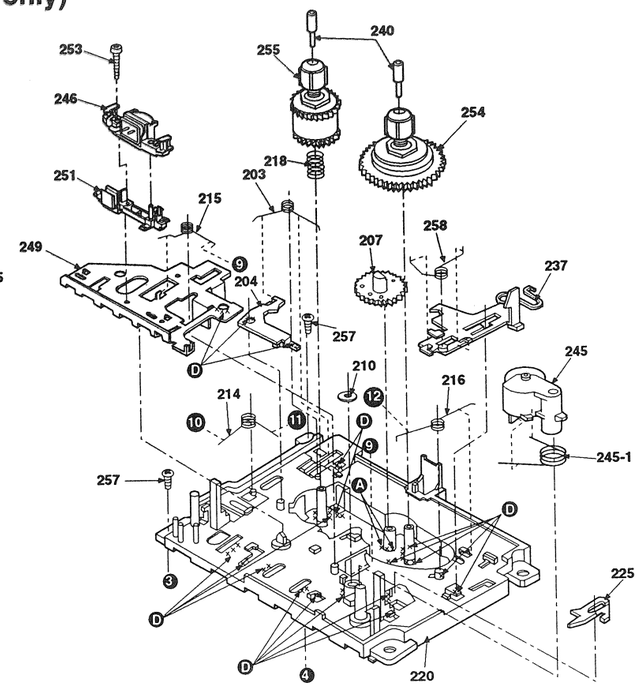
Note:
When changing mechanism parts, apply the specified grease to arrow indicated areas shown in the drawing.

Ref. No.	Part Name
Ⓐ	SZZ0L25
Ⓑ	RZZ0L06
Ⓓ	SZZ0L30



DECK 2 (For playback only)



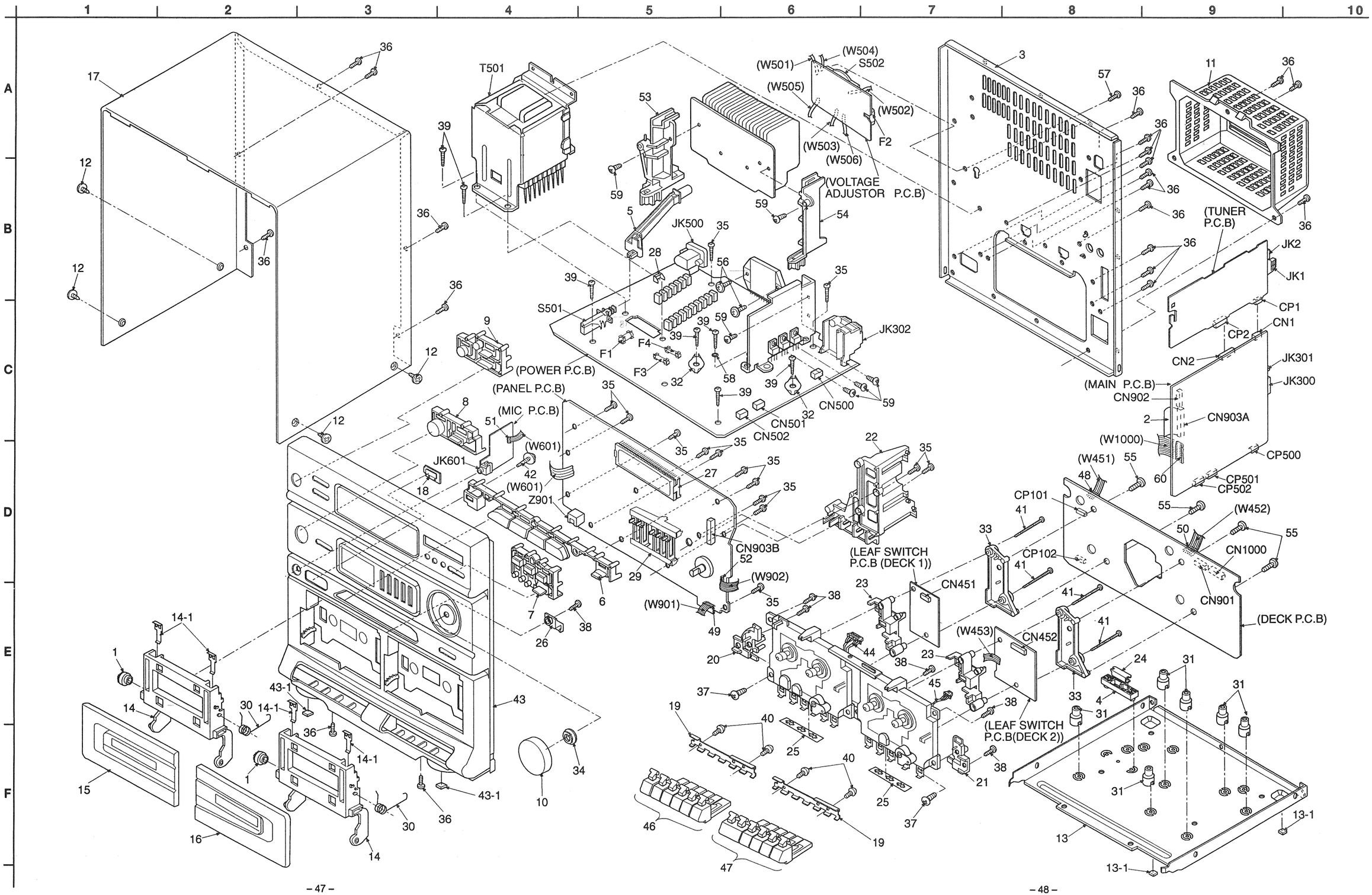


MECHANISM PARTS LIST

NOTES: [M] Indicates in the Remarks columns indicates parts supplied by MESA.

Ref No.	Part No.	Part Name & Description	Remarks
		CASSETTE MECHANISM	
		DECK 1	
101	RDV0007	MAIN BELT	[M]
102	RJR0033	EARTH LUG	[M]
103	RMB0109-1	BRAKE SPRING	[M]
104	RML0116	BRAKE	
105	RBR2CG002-S	E HEAD	[M]
106	RDG0057	IDLER GEAR	[M]
107	RDG0059	FF RELAY GEAR	[M]
108	RDK0005	CAM GEAR	[M]
109	RDV0006-1	RF BELT	[M]
110	RHW16009	CAPSTAN WASHER	[M]
111	RMA0109	BACK PLATE	[M]
112	RMB0043-1	ROD OPERATION SPRING	[M]
113	RMB0045	AS SPRING	[M]
114	RMB0046-1	LOCK PLATE SPRING	[M]
115	RMB0165	HEAD PANEL SPRING	[M]
116	RMB0048	IDLER LEVER SPRING	[M]
117	RMB0053	PAUSE LEVER SPRING	[M]
118	RMB0125	BACK TENSION SPRING	[M]
119	RMC0061	SPRING	[M]
120	RFKRCT090P-K	CHASSIS ASS'Y	[M]
121	RML0071	SWAY LEVER	[M]
122	RML0072	AS RELEASE LEVER	[M]
123	RML0073-1	AS PROTECT LEVER	[M]
124	RML0074	IDLER LEVER	[M]
125	RML0076	EJECT SELECTION LEVE	[M]
126	RML0077	LOCK PLATE	[M]
127	RML0078	FUNCTION PLATE	[M]
129	RML0081-1	LEVER	[M]
130	RML0082	PAUSE LEVER	[M]
131	RMM0023	PLAY ROD	[M]
132	RMM0024	REW ROD	[M]
133	RMM0025	FF ROD	[M]
134	RMM0026	STOP ROD	[M]
135	RMM0027	PAUSE ROD	[M]
136	RMM0028	REC ROD	[M]
137	RMM0029	EJECT SLIDE LEVER	[M]
138	RMR0211	PAUSE BUSH	[M]
139	RMR0227	IDLER GEAR BUSH	[M]
140	RMS0055	REEL SHAFT	[M]
141	RXF0012	FLYWHEEL ASS'Y	[M]
141-1	RHW21008	WASHER	[M]
142	RMB0044	TRIGGER SPRING	[M]
143	RML0075	TRIGGER LEVER	[M]
144	RXP0014	RF CLUTCH ASS'Y	[M]
145	RXP0015	PINCH ROLLER ASS'Y	[M]
145-1	RMB0049	PINCH ARM SPRING	[M]
146	RBR4CY016-M	R/P HEAD	[M]
149	RFKRACH46GCK	HEAD BASE ASS'Y	[M]
151	RMQ0383	HEAD BASE	[M]
152	XTN2+4F	EARTH LUG SCREW	
153	XTN2+12F	SCREW	[M]
154	RXR0004	TAKE UP REEL ASS'Y	[M]
155	RXR0005	SUPPLY REEL ASS'Y	[M]
156	XTN2+6J	SCREW	
157	XTW26+6L	SCREW	
158	RME0098-2	SPRING	[M]
		DECK 2	
201	RDV0009	MAIN BELT B	[M]
202	RJR0033	EARTH LUG	[M]
203	RMB0109-1	BRAKE SPRING	[M]
204	RML0116	BRAKE	
206	RDG0057	IDLER GEAR	[M]
207	RDG0059	FF RELAY GEAR	[M]
208	RDK0005	CAM GEAR	[M]
209	RDV0006-1	RF BELT	[M]
210	RHW16009	CAPSTAN WASHER	[M]
211	RMA0109	BACK PLATE	[M]
212	RMB0043-1	ROD OPERATION SPRING	[M]
213	RMB0045	AS SPRING	[M]
214	RMB0046-1	LOCK PLATE SPRING	[M]
215	RMB0165	HEAD PANEL SPRING	[M]
216	RMB0048	IDLER LEVER SPRING	[M]
217	RMB0053	PAUSE LEVER SPRING	[M]
218	RMB0125	BACK TENSION SPRING	[M]
219	RMC0061	SPRING	[M]
220	RFKRCT090P-K	CHASSIS ASS'Y	[M]
221	RML0071	SWAY LEVER	[M]
222	RML0072	AS RELEASE LEVER	[M]
223	RML0073-1	AS PROTECT LEVER	[M]
224	RML0074	IDLER LEVER	[M]
225	RML0076	EJECT SELECTION LEVE	[M]
226	RML0077	LOCK PLATE	[M]
227	RML0078	FUNCTION PLATE	[M]
230	RML0082	PAUSE LEVER	[M]
231	RMM0023	PLAY ROD	[M]
232	RMM0024	REW ROD	[M]
233	RMM0025	FF ROD	[M]
234	RMM0026	STOP ROD	[M]
235	RMM0027	PAUSE ROD	[M]
237	RMM0029	EJECT SLIDE LEVER	[M]
238	RMR0211	PAUSE BUSH	[M]
239	RMR0227	IDLER GEAR BUSH	[M]
240	RMS0055	REEL SHAFT	[M]
241	RXF0012	FLYWHEEL ASS'Y	[M]
241-1	RHW21008	WASHER	[M]
242	RMB0044	TRIGGER SPRING	[M]
243	RML0075	TRIGGER LEVER	[M]
244	RXP0014	RF CLUTCH ASSY	[M]
245	RXP0015	PINCH ROLLER ASSY	[M]
245-1	RMB0049	PINCH ARM SPRING	[M]
246	RBR4CY016-M	R/P HEAD	[M]
249	RMA0696	HEAD BASE ASS'Y	[M]
251	RMQ0383	HEAD BASE	[M]
252	XTN2+4F	EARTH LUG SCREW	
253	XTN2+12F	SCREW	[M]
254	RXR0004	TAKE UP REEL ASS'Y	[M]
255	RXR0005	SUPPLY REEL ASS'Y	[M]
256	XTN2+6J	SCREW	
257	XTW26+6L	SCREW	
258	RME0098-2	SPRING	[M]
260	RFKPXDT610PK	DC MOTOR ASS'Y	[M]
261	RHD26002	SCREW	
262	RMA0122	ANGLE	[M]
263	RMG0102	RUBBER SPACE	[M]
264	RMG0131	RUBBER SPACE	[M]
265	RMA0121	ANGLE	[M]
266	RML0085	LEVER	[M]

■ CABINET PARTS LOCATION



REPLACEMENT PARTS LIST

Notes: * Important safety notice:
Components identified by ⚠ 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 these 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 Unit :
Supply period for three years from terminal of production.
* [M] Indicates in the Remarks columns indicates parts supplied by MESA.

Ref No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	RDG5874ZA	DAMPER GEAR	[M]
2	REEX0011	FFC WIRE	[M]
3	RGR0163C-A	REAR PANEL	[M]
4	RMR0651-K	TRANSFORMER ANGLE	[M]
5	RGU0875-K	BUTTON, REAR POWER	[M]
6	RGUX0040A-H	BUTTON, INPUT SELECT	[M]
7	RGUX0041-H	BUTTON, TUNER	[M]
8	RGUX0042-H	BUTTON, POWER/TIMER	[M]
9	RGUX0043-H	BUTTON, TIMER	[M]
10	RGW0167-H	KNOB, VOLUME	[M]
11	RMV0058	HEAT SINK COVER	[M]
12	RHD30007	SCREW	
13	RFKJACH455PK	BOTTOM CHASSIS ASS'Y	[M]
13-1	RKA0059-K	LEG FELT	[M]
14	RFKLXDT670P3	CASS. HOLDER ASS'Y	[M]
14-1	RUS757ZAA	CASS. HALF SPRING	[M]
15	RFKLSADH30P1	CASS. LID ASS'Y (L)	[M]
16	RFKLSADH30P2	CASS. LID ASS'Y (R)	[M]
17	RKM0224Z-K	CABINET (PLATE)	[M]
18	RKW0261-Q	SENSOR WINDOW	[M]
19	RMAX0006	ANGLE BAR	[M]
20	RMRX0007	MECHA SUPPORT L	[M]
21	RMRX0008	MECHA SUPPORT R	[M]
22	RMR0652-K	MAIN PCB HOLDER	[M]
23	RMR0368	LEAF SW HOLDER	[M]
24	RMA0678	TRANS. SUPPORT ANGLE	[M]
25	RMXX0004	SPACER	[M]
26	RMR0247	MECHA SUPPORT	[M]
27	RSCX0013	FL HOLDER	[M]
28	RSC0332	PROTECTION PLATE	[M]
29	RSC0310	EQ SHIELD PLATE	[M]
30	RUS781ZA	EJECT SPRING	[M]
31	SHE187-3	POWER PCB SUPPORT	
32	SNE1004-1	EARTH TERMINAL	
33	RMRX0006	DECK PCB SUPPORT	[M]
34	XNS8D	NUT	
35	XTBS26+10J	SCREW (PANEL PCB)	
36	XTBS3+8JFZ1	SCREW (REAR/BOTTOM)	
37	XTB3+10J	SCREW (MECHA SUPPORT	
38	XTB3+12JFR	SCREW (MECHA)	
39	XTB3+20J	SCREW (POWER PCB)	
40	XTV3+8G	SCREW (ANGLE BAR)	
41	XTN2+16GFZ	SCREW (DECK PCB SUPP	
42	XTWS3+10Q	SCREW (PHONE JACK)	
43	RFKGACH46GCK	FRONT PANEL ASS'Y	[M]
43-1	SHS3276	LEG FELT (5.0MM)	[M]
44	REXX0056	HEAD SHIELD WIRE U1	[M]
45	REXX0057	HEAD SHIELD WIRE U2	[M]
46	RGZX0007A-H	BUTTON ASSY (DECK1)	[M]
47	RGZX0007B-H	BUTTON ASSY (DECK2)	[M]
48	RHR192ZA	WIRE HOLDER (5P)	
49	RHR194ZA	WIRE HOLDER (7P)	
50	RHR195ZA	WIRE HOLDER (8P)	
51	RMR0313	WIRE HOLDER (4P)	[M]
52	RMR0321	WIRE HOLDER (12P)	[M]
53	RMR0653-K	HEAT SINK SUPPORT L	[M]
54	RMR0654-K	HEAT SINK SUPPORT R	[M]
55	XTBS26+8J	SCREW (DECK PCB)	
56	XTW3+15T	SCREW	
57	XYN3+C6FZ	SCREW (VOLT. SEL)	
58	XWA3B	WASHER	
59	XTB3+12CFN	SCREW	
60	RHR198ZA	11 PINS WIRE HOLDER	
		INTEGRATED CIRCUITS	
IC1	AN7273W	IC, AM/FM IF	
IC2	LM7001	IC, PLL	
IC3	RVIBA1332L	IC, MPX	
IC101	BA7755	IC, ANALOG SW	
IC102	AN7345K	IC, REC/PB	[M]
IC106	BU2040F-E2	IC, I/O EXPANDER	[M]
IC301	TC4052BP	IC, ANALOG SW	[M]
IC302	BA4558DX	IC, OP AMP	
IC304	BA4558DX	IC, OP AMP	
IC360	TC74HC00AP	IC, LOGIC GATE	[M]
IC501	SVI3102D	IC, HIC	⚠
IC601	M5226FPE2	IC, GEQ	
IC602	M5226FPE2	IC, GEQ	
IC603	BA4558FDXE2	IC, OP AMP	[M]

Ref No.	Part No.	Part Name & Description	Remarks
IC801	M51131L-702	IC, VCA	
IC802	BA4558DX	IC, OP AMP	
IC901	M38172M4077F	IC, U-COM	[M]
IC902	BA4558FDXE2	IC, OP AMP	[M]
IC903	LA5608M-TE-L	IC, RESET	
		TRANSISTORS	
Q1	2SK544F-AC	TRANSISTOR	
Q2	2SC2786MTA	TRANSISTOR	
Q3	2SC2787FL1TA	TRANSISTOR	
Q4	2SC2787FL1TA	TRANSISTOR	
Q5	2SC2787LTA	TRANSISTOR	
Q6	2SC2787LTA	TRANSISTOR	
Q7	2SC1740SSTA	TRANSISTOR	
Q8	2SC1740SSTA	TRANSISTOR	
Q9	2SA952LTA	TRANSISTOR	[M]
Q10	2SA952LTA	TRANSISTOR	[M]
Q11	2SA952LTA	TRANSISTOR	[M]
Q12	2SA933SSTA	TRANSISTOR	
Q13	2SA933SSTA	TRANSISTOR	
Q14	2SA933SSTA	TRANSISTOR	
Q15	2SA952LTA	TRANSISTOR	[M]
Q16	2SA933SSTA	TRANSISTOR	
Q17	2SA933SSTA	TRANSISTOR	
Q18	2SD1020HTA	TRANSISTOR	[M]
Q50	2SC2785FTA	TRANSISTOR	
Q51	2SC2785FTA	TRANSISTOR	
Q52	2SC2785FTA	TRANSISTOR	
Q53	2SC2785FTA	TRANSISTOR	
Q54	2SC2785FTA	TRANSISTOR	
Q55	2SC1740SSTA	TRANSISTOR	
Q56	2SC1740SSTA	TRANSISTOR	
Q101	2SJ40CDTA	TRANSISTOR	
Q102	2SJ40CDTA	TRANSISTOR	
Q105	2SJ40CDTA	TRANSISTOR	
Q106	2SJ40CDTA	TRANSISTOR	
Q111	2SC1740SSTA	TRANSISTOR	
Q112	2SC1740SSTA	TRANSISTOR	
Q113	2SC1740SSTA	TRANSISTOR	
Q114	2SC1740SSTA	TRANSISTOR	
Q118	RVTDTC124EST	TRANSISTOR	[M]
Q121	BA1A4ZTA	TRANSISTOR	[M]
Q122	BA1A4ZTA	TRANSISTOR	[M]
Q201	RVTDTC124EST	TRANSISTOR	[M]
Q203	2SC1685RTA	TRANSISTOR	[M]
Q204	2SC2001L1TA	TRANSISTOR	
Q205	2SC2001L1TA	TRANSISTOR	

Ref No.	Part No.	Part Name & Description	Remarks
Q206	2SC2001L1TA	TRANSISTOR	
Q208	2SC2785FTA	TRANSISTOR	
Q216	BN1L3NTA	TRANSISTOR	[M]
Q351	2SC2785FTA	TRANSISTOR	
Q352	2SC2785FTA	TRANSISTOR	
Q355	2SC2001KTA	TRANSISTOR	
Q356	2SC2001KTA	TRANSISTOR	
Q361	RVTDTA114EST	TRANSISTOR	
Q362	RVTDTA114EST	TRANSISTOR	
Q363	RVTDTC124EST	TRANSISTOR	[M]
Q366	2SC1740SRTA	TRANSISTOR	
Q367	RVTDTC124EST	TRANSISTOR	[M]
Q451	BA1A4ZTA	TRANSISTOR	[M]
Q452	BA1A4ZTA	TRANSISTOR	[M]
Q453	BA1A4ZTA	TRANSISTOR	[M]
Q454	BA1A4ZTA	TRANSISTOR	[M]
Q455	BA1A4ZTA	TRANSISTOR	[M]
Q456	BA1A4ZTA	TRANSISTOR	[M]
Q457	BN1L3NTA	TRANSISTOR	[M]
Q458	2SD965RTA	TRANSISTOR	
Q459	2SK381CDTA	TRANSISTOR	
Q460	BA1A4ZTA	TRANSISTOR	[M]
Q500	2SA933SSTA	TRANSISTOR	
Q501	2SC1740SSTA	TRANSISTOR	
Q503	2SD2037ETA	TRANSISTOR	[M] ⚠
Q505	2SD1762EF	TRANSISTOR	⚠
Q506	2SB1185E	TRANSISTOR	⚠
Q507	2SD1273P	TRANSISTOR	⚠
Q508	2SB621ARTA	TRANSISTOR	⚠
Q509	2SC2785FTA	TRANSISTOR	⚠
Q510	2SA564RTA	TRANSISTOR	
Q511	2SD1762EF	TRANSISTOR	
Q512	2SC1740SSTA	TRANSISTOR	
Q513	2SC1740SSTA	TRANSISTOR	
Q621	2SC2001KTA	TRANSISTOR	
Q801	2SC1740SLNST	TRANSISTOR	
Q802	2SC1740SLNST	TRANSISTOR	
Q803	2SK301QTA	TRANSISTOR	[M]
Q804	2SK301QTA	TRANSISTOR	[M]
Q805	2SC2001KTA	TRANSISTOR	
Q806	2SC2001KTA	TRANSISTOR	
Q807	2SC2001KTA	TRANSISTOR	
Q808	2SC2001KTA	TRANSISTOR	
Q820	RVTDTC124EST	TRANSISTOR	[M]
Q821	RVTDTA114EST	TRANSISTOR	
Q822	RVTDTA114EST	TRANSISTOR	
Q901	2SC1740SSTA	TRANSISTOR	
Q902	2SC1740SSTA	TRANSISTOR	

Ref No.	Part No.	Part Name & Description	Remarks
		DIODES	
D1	SVC211SPA-AL	DIODE	
D2	SVC211SPA-AL	DIODE	
D3	SVC211SPA-AL	DIODE	
D4	RVDSVC321	DIODE	
D5	RVDSVC321	DIODE	
D6	RVDSVC321	DIODE	
D7	RVDSVC321	DIODE	
D8	RVD1SS133TA	DIODE	
D9	RVD1SS133TA	DIODE	
D11	RVD1SS133TA	DIODE	
D12	RVD1SS133TA	DIODE	
D15	RVD1SS133TA	DIODE	
D16	RVD1SS133TA	DIODE	
D17	RVD1SS133TA	DIODE	
D54	RVD1SS133TA	DIODE	
D55	RVD1SS133TA	DIODE	
D72	RVDMTZ5R6CTA	DIODE	[M]
D201	RVD1SS133TA	DIODE	
D202	RVDMTZ4R7BTA	DIODE	
D203	RVD1SS133TA	DIODE	
D205	RVD1SS133TA	DIODE	
D206	MA29WATA	DIODE	
D207	RVD1SS133TA	DIODE	
D500	RVD1SS133TA	DIODE	
D501	RVD1SS133TA	DIODE	
D502	RVDMTZ6R8ATA	DIODE	[M]
D503	RL154M11	DIODE	⚠
D504	RL154M11	DIODE	⚠
D505	RVDMTZ6R2ATA	DIODE	[M]
D507	RVDMTZ15CTA	DIODE	[M]
D508	RVDMTZ15CTA	DIODE	[M]
D509	1D3E	DIODE	[M]
D510	1D3E	DIODE	[M]
D511	1N5402BM21	DIODE	⚠
D512	1N5402BM21	DIODE	⚠
D513	1N5402BM21	DIODE	⚠
D514	1N5402BM21	DIODE	⚠
D517	1SR35200TB	DIODE	⚠
D518	RVDMTZJ27CTA	DIODE	[M]
D621	RVDMTZ5R6BTA	DIODE	
D622	RVD1SS133TA	DIODE	
D623	RVD1SS133TA	DIODE	
D801	RVD1SS133TA	DIODE	
D802	RVD1SS133TA	DIODE	
D820	RVD1SS133TA	DIODE	
D821	RVD1SS133TA	DIODE	

Ref No.	Part No.	Part Name & Description	Remarks
D822	RVDMTZ5R6CTA	DIODE	[M]
D823	RVD1SS133TA	DIODE	
D824	RVDMTZ6R2CTA	DIODE	[M]
D825	RVD1SS133TA	DIODE	
D901	MA165TA	DIODE	
D902	1SS291TA	DIODE	
D903	1SS291TA	DIODE	
D904	MA165TA	DIODE	
D905	RVDMTZ6R2BTA	DIODE	
D906	RVDMTZ5R1BTA	DIODE	
		VARIABLE RESISTORS	
VR1	EVNDXAA00B14	VR, FM VCO	
VR451	RVNCC24B1T-A	VR, TAPE SPEED	
VR651	EWAJQAW05G54	VR, GEQ(100Hz)	[M]
VR653	EWAJQAW05G54	VR, GEQ(1KHz)	[M]
VR655	EWAJQAW05G54	VR, GEQ(10KHz)	[M]
VR657	EWAJQAW05G54	VR, BALANCE	[M]
VR659	EWAJWAW05B24	VR, MIC MIXING	[M]
VR901	EVQWQAF1524B	VR, VOL JOG	[M]
		SWITCHES	
S451	RSH1A013-J	SW, DECK 1 MOTOR	[M]
S452	RSH1A004-1	SW, DECK 1 FWD/REV	[M]
S453	RSH1A004-1	SW, DECK 1 PLAY	[M]
S454	RSH1A004-1	SW, DECK 1 REC	[M]
S455	RSH1A004-1	SW, DECK 2 FWD/REV	[M]
S456	RSH1A004-1	SW, DECK 2 PLAY	[M]
S457	RSH1A013-J	SW, DECK 2 MOTOR	[M]
S501	ESB8249V	SW, POWER	⚠
S502	ESE37263	SW, VOLTAGE SELECTOR	⚠
S901	EVQ21405R	SW, POWER/STANDBY	
S902	EVQ21405R	SW, TAPE	
S903	EVQ21405R	SW, AUX	
S904	EVQ21405R	SW, CD	
S905	EVQ21405R	SW, TUNER	
S906	EVQ21405R	SW, S.BASS	
S907	EVQ21405R	SW, SLEEP	
S908	EVQ21405R	SW, ON TIMER	
S909	EVQ21405R	SW, TIMER ADJ	
S910	EVQ21405R	SW, BAND	
S911	EVQ21405R	SW, TUNING/TIMER(+)	
S912	EVQ21405R	SW, TUNING/TIMER(-)	
S913	EVQ21405R	SW, PRESET DOWN	
S914	EVQ21405R	SW, PRESET UP	
S915	EVQ21405R	SW, MEMORY	

Ref No.	Part No.	Part Name & Description	Remarks
S916	EVQ21405R	SW, STEREO/MONO	
S918	EVQ21405R	SW, EDIT	
		CONNECTORS	
CN1	SJS50582JQH	SOCKET (5P)	
CN2	SJS50982JQH	SOCKET (9P)	[M]
CN451	RJS5T7ZA	CONNECTOR (5P)	
CN452	RJS8T7ZA	CONNECTOR (8P)	
CN500	SJS50778JQ	SOCKET (7P)	
CN501	SJS50778JQ	SOCKET (7P)	
CN502	SJS50778JQ	SOCKET (7P)	
CN510	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN511	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN512	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN513	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN514	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN515	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN516	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN520	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN521	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN522	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN523	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN524	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN525	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN526	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN527	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN528	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN529	RJS1A1101T1	CONNECTOR (TRANS 2P)	
CN901	RJS7T4ZA	CONNECTOR (7P)	
CN902	RJS1A5212	WIRE HOLDER (12P)	[M]
CN903A	RJS1A6823	FFC CONNECTOR (23P)	
CN903B	RJS1A8323	FPC CONNECTOR (23P)	
CN1000	RJS11T4ZA	CONNECTOR (11P)	
CP1	RJP5G9YA	CONNECTOR (5P)	
CP2	RJP9G9YA	CONNECTOR (9P)	
CP101	RJP7G18ZA	CONNECTOR (7P)	
CP102	RJP4G18ZA	CONNECTOR (4P)	
CP500	RJP7G9YA	CONNECTOR (7P)	[M]
CP501	RJP7G9YA	CONNECTOR (7P)	[M]
CP502	RJP7G9YA	CONNECTOR (7P)	[M]
		COILS & TRANSFORMERS	
L2	RLQZP1R2KT-Y	COIL	
L4	RLQZP1R2KT-Y	COIL	
L7	RLQZP1R8KT-Y	COIL	
L9	RL03B97-M	COIL, SW1 ANT	

Ref No.	Part No.	Part Name & Description	Remarks
L10	RL03B96-M	COIL, SW2 OSC	
L11	RL03B97-M	COIL, SW1 ANT	
L12	RL03B96-M	COIL, SW2 OSC	
L14	RLQZP100KT-Y	COIL	
L51	RLQZPR47KT-Y	COIL	
L201	RLQZB470KT-D	COIL	
L451	RLQZB470KT-D	COIL	
L901	RLQZP3R3KT-Y	COIL	
L902	RLQZP3R3KT-Y	COIL	
L903	RLQZP101KT-Y	COIL	
L904	RLQZP100KT-Y	COIL	
T1	RLI4B016-Z	FM IFT	[M]
T2	RLI4B015-Z	FM ANT COIL	[M]
T3	RLI2B153-M	AM IFT	
T201	RL08C004-T	IFT	[M]
T501	RTP1N3E003-V	POWER TRANSFORMER	[M] ⚠
		COMPONENT COMBINATIONS	
Z1	RLA2Z001M-T	AM RF BLOCK	
Z451	EXBF6L306SYV	RESISTOR BLOCK	
Z452	EXBF6L306SYV	RESISTOR BLOCK	
Z901	RCDGP1U58XD	REMOTE CONTROL SENSOR	
Z902	RSL0149-F	FL DISPLAY	[M]
		CERAMIC FILTERS	
CF1	RLFFETWNA01L	FM CF	
CF2	RLFFETWNA01L	FM CF	
CF3	RVFSFZ450HL3	AM CF	[M]
		OSCILLATORS	
X1	SVQ49U722T-S	7.2MHZ X'TAL	
X901	RSXD32K7S02	CRYSTAL RESONATOR	[M]
X902	RSXZ4M19M01T	CRYSTAL RESONATOR	
		FUSES	
F1	XBA2C25TB0	FUSE	⚠
F2	XBA2C12TB0	FUSE	⚠
F3	XBA2C08TB0	FUSE	⚠
F4	XBA2C08TB0	FUSE	⚠
		FUSE CLIPS	
FC1	EYF52BC	FUSE CLIP	
FC2	EYF52BC	FUSE CLIP	

Ref No.	Part No.	Part Name & Description	Remarks
FC3	EYF52BC	FUSE CLIP	
FC4	EYF52BC	FUSE CLIP	
FC5	EYF52BC	FUSE CLIP	
FC6	EYF52BC	FUSE CLIP	
FC7	SJT388	FUSE CLIP	
FC8	SJT388	FUSE CLIP	
		RELAYS	
RLY501	RSY0013-0	RELAY	⚠
RLY502	RSY0013-0	RELAY	⚠
		JACKS	
JK1	RJH5301	JK, ANT TERMINAL	[M]
JK2	SJS208	JK, LOOP ANT TER	
JK300	RJT065K15	JK, BUS CONNECTOR	
JK301	SJF3068-7N	JK, RCA TERMINAL	[M]
JK302	RJR0054	JK, SP TERMINAL	
JK500	SJS9236	JK, AC INLET	⚠
JK601	RJJ37TK01-C	JK, MIC	[M]
		PACKING MATERIALS	
P1	RPF0100	BAG (SET)	[M]
P2	RPGX0116	GIFT BOX	[M] (GC)
P2	RPGX0122	GIFT BOX	[M] (GC1)
P3	RPN0673	POLYFOAM	[M]
P4	SPB1061	VINYL BAG	
P5	SPSD152	ACCESSORY CASE	
P6	RPQX0002-D	HANDLE	[M] (GC)
P7	RPQX0009	HANDLE PAD	[M] (GC)
		ACCESSORIES	
A1	RQCB0169	SERVICE CENTER LIST	
A2	RQT2291-G	INSTRUCTION MANUAL	[M]
A3	RJA0019-U	AC CORD	[M] ⚠
A4	SPB1163	PREPARED LOOP ANT	[M]
A4-1	SLA9Z5T	LOOP ANT	[M]
A4-2	SMA233-1	ANT HOLDER	
A4-3	XTB3+10J	MOUNTING SCREW	
A5	SSA272	FM ANT	[M]
A6	EUR642170	REMOTE CONTROL UNIT	[M]
A7	RP-PA91AP	MIC ADAPTER	[M]
A8	SJP5213-2	ADAPTER	

RESISTORS & CAPACITORS

Notes:
* Capacitor values are in microfarads (μF) unless specified otherwise, P=Pico-farads (pF) F=Farads
* Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM).
* Bracketed indications in Ref. No. columns specify the area (Refer to the first page for area). Parts without these indications can be used for all areas.
* [M] Indicates in the values & remarks column indicates parts supplied by **MESA**

Ref. No.	Part No.	Values & Remarks
	RESISTORS	
R1	ERDS2TJ104T	100K 1/4W
R2	ERDS2TJ104T	100K 1/4W
R3	ERDS2TJ470T	47 1/4W
R4	ERDS2TJ104T	100K 1/4W
R5	ERDS2TJ564T	560K 1/4W
R6	ERDS2TJ391T	390 1/4W
R7	ERDS2TJ681T	680 1/4W
R8	ERDS2TJ474T	470K 1/4W
R9	ERDS2TJ272T	2.7K 1/4W
R10	ERDS2TJ102T	1K 1/4W
R11	ERDS2TJ224T	220K 1/4W
R12	ERDS2TJ273T	27K 1/4W
R13	ERDS2TJ122T	1.2K 1/4W
R14	ERDS2TJ152T	1.5K 1/4W
R15	ERDS2TJ684T	680K 1/4W
R16	ERDS2TJ824T	820K 1/4W
R17	ERDS2TJ391T	390 1/4W
R18	ERDS2TJ121T	120 1/4W
R19	ERDS2TJ103T	10K 1/4W
R20	ERDS2TJ822T	8.2K 1/4W
R21	ERDS2TJ102T	1K 1/4W
R22	ERDS2TJ561T	560 1/4W
R23	ERDS2TJ102T	1K 1/4W
R24	ERDS2TJ153T	15K 1/4W
R25	ERDS2TJ331T	330 1/4W
R26	ERDS2TJ391T	390 1/4W
R27	ERDS2TJ104T	100K 1/4W
R28	ERDS2TJ684T	680K 1/4W
R29	ERDS2TJ102T	1K 1/4W
R30	ERDS2TJ471T	470 1/4W
R31	ERDS2TJ104T	100K 1/4W
R32	ERDS2TJ102T	1K 1/4W
R33	ERDS2TJ122T	1.2K 1/4W
R34	ERDS2TJ102T	1K 1/4W
R35	ERDS2TJ104T	100K 1/4W
R36	ERDS2TJ104T	100K 1/4W
R37	ERDS2TJ104T	100K 1/4W
R38	ERDS2TJ104T	100K 1/4W
R39	ERDS2TJ153T	15K 1/4W
R40	ERDS2TJ103T	10K 1/4W
R41	ERDS2TJ103T	10K 1/4W
R42	ERDS2TJ333T	33K 1/4W
R43	ERDS2TJ153T	15K 1/4W
R44	ERDS2TJ153T	15K 1/4W
R45	ERDS2TJ103T	10K 1/4W
R46	ERDS2TJ103T	10K 1/4W
R47	ERDS2TJ473T	47K 1/4W
R48	ERDS2TJ104T	100K 1/4W
R49	ERDS2TJ182T	1.8K 1/4W
R50	ERDS2TJ562T	5.6K 1/4W
R51	ERDS2TJ153T	15K 1/4W
R52	ERDS2TJ561T	560 1/4W
R53	ERDS2TJ102T	1K 1/4W
R54	ERDS2TJ103T	10K 1/4W
R55	ERDS2TJ102T	1K 1/4W
R56	ERDS2TJ562T	5.6K 1/4W
R57	ERDS2TJ332T	3.3K 1/4W
R58	ERDS2TJ151T	150 1/4W
R59	ERDS2TJ823T	82K 1/4W
R60	ERDS2TJ102T	1K 1/4W
R61	ERDS2TJ103T	10K 1/4W
R62	ERDS2TJ563T	56K 1/4W
R63	ERDS2TJ563T	56K 1/4W
R64	ERDS2TJ103T	10K 1/4W
R65	ERDS2TJ103T	10K 1/4W
R66	ERDS2TJ102T	1K 1/4W
R67	ERDS2TJ102T	1K 1/4W
R68	ERDS2TJ104T	100K 1/4W
R69	ERDS2TJ681T	680 1/4W
R70	ERDS2TJ152T	1.5K 1/4W
R71	ERDS2TJ152T	1.5K 1/4W
R72	ERDS2TJ683T	68K 1/4W
R73	ERDS2TJ102T	1K 1/4W
R74	ERDS2TJ682T	6.8K 1/4W
R75	ERDS2TJ562T	5.6K 1/4W
R76	ERDS2TJ562T	5.6K 1/4W
R77	ERDS2TJ104T	100K 1/4W
R78	ERDS2TJ822T	8.2K 1/4W
R79	ERDS2TJ681T	680 1/4W
R80	ERDS2TJ824T	820K 1/4W
R81	ERDS2TJ181T	180 1/4W
R82	ERDS2TJ562T	5.6K 1/4W
R83	ERDS2TJ102T	1K 1/4W
R89	ERDS2TJ562T	5.6K 1/4W
R90	ERDS2TJ103T	10K 1/4W
R91	ERDS2TJ104T	100K 1/4W
R92	ERDS2TJ104T	100K 1/4W
R93	ERDS2TJ104T	100K 1/4W
R99	ERDS2TJ222T	2.2K 1/4W
R101	ERDS2TJ223T	22K 1/4W
R102	ERDS2TJ223T	22K 1/4W
R103	ERDS2TJ820T	82 1/4W
R104	ERDS2TJ820T	82 1/4W
R105	ERDS2TJ682T	6.8K 1/4W
R106	ERDS2TJ682T	6.8K 1/4W
R107	ERDS2TJ272T	2.7K 1/4W
R108	ERDS2TJ272T	2.7K 1/4W
R109	ERDS2TJ102T	1K 1/4W
R110	ERDS2TJ102T	1K 1/4W
R111	ERDS2TJ181T	180 1/4W
R112	ERDS2TJ181T	180 1/4W
R113	ERDS2TJ822T	8.2K 1/4W
R115	ERDS2TJ270T	27 1/4W
R116	ERDS2TJ270T	27 1/4W
R128	ERDS2TJ225T	2.2M 1/4W
R129	ERDS2TJ473T	47K 1/4W
R130	ERDS2TJ473T	47K 1/4W
R131	ERDS2TJ223T	22K 1/4W
R132	ERDS2TJ223T	22K 1/4W
R203	ERDS2TJ102T	1K 1/4W
R204	ERDS2TJ103T	10K 1/4W
R205	ERDS2TJ472T	4.7K 1/4W
R206	ERDS2TJ102T	1K 1/4W
R207	ERDS2TJ472T	4.7K 1/4W
R208	ERDS2TJ103T	10K 1/4W
R211	ERDS2TJ122T	1.2K 1/4W
R212	ERDS2TJ334T	330K 1/4W
R213	ERDS2TJ103T	10K 1/4W
R214	ERDS2TJ334T	330K 1/4W
R217	ERD25FVJ4R7T	4.7 1/4W
R218	ERDS2TJ472T	4.7K 1/4W
R219	ERDS2TJ472T	4.7K 1/4W
R220	ERDS2TJ332T	3.3K 1/4W
R222	ERDS2TJ683T	68K 1/4W
R223	ERDS2TJ103T	10K 1/4W
R224	ERDS2TJ331T	330 1/4W
R228	ERD25TJ472T	4.7K 1/4W
R229	ERD25TJ472T	4.7K 1/4W
R239	ERDS2TJ472T	4.7K 1/4W
R242	ERDS2TJ472T	4.7K 1/4W
R243	ERDS2TJ123T	12K 1/4W
R244	ERDS2TJ472T	4.7K 1/4W
R245	ERDS2TJ472T	4.7K 1/4W
R253	ERDS2TJ333T	33K 1/4W
R261	ERDS2TJ562T	5.6K 1/4W
R262	ERDS2TJ562T	5.6K 1/4W
R307	ERDS2TJ223T	22K 1/4W
R308	ERDS2TJ223T	22K 1/4W

Ref. No.	Part No.	Values & Remarks
R321	ERDS2TJ822T	8.2K 1/4W
R322	ERDS2TJ822T	8.2K 1/4W
R345	ERDS2TJ223T	22K 1/4W
R346	ERDS2TJ223T	22K 1/4W
R351	ERDS2TJ223T	22K 1/4W
R352	ERDS2TJ223T	22K 1/4W
R353	ERDS2TJ222T	2.2K 1/4W
R354	ERDS2TJ222T	2.2K 1/4W
R355	ERDS2TJ222T	2.2K 1/4W
R356	ERDS2TJ222T	2.2K 1/4W
R359	ERDS2TJ222T	2.2K 1/4W
R360	ERDS2TJ222T	2.2K 1/4W
R363	ERDS2TJ332T	3.3K 1/4W
R364	ERDS2TJ332T	3.3K 1/4W
R365	ERDS2TJ103T	10K 1/4W
R366	ERDS2TJ103T	10K 1/4W
R367	ERDS2TJ223T	22K 1/4W
R368	ERDS2TJ223T	22K 1/4W
R371	ERDS2TJ154T	150K 1/4W
R372	ERDS2TJ154T	150K 1/4W
R373	ERDS2TJ155T	1.5M 1/4W
R374	ERDS2TJ155T	1.5M 1/4W
R375	ERDS2TJ332T	3.3K 1/4W
R376	ERDS2TJ332T	3.3K 1/4W
R377	ERDS2TJ563T	56K 1/4W
R378	ERDS2TJ563T	56K 1/4W
R379	ERDS2TJ122T	1.2K 1/4W
R380	ERDS2TJ122T	1.2K 1/4W
R381	ERDS2TJ334T	330K 1/4W
R382	ERDS2TJ334T	330K 1/4W
R383	ERDS2TJ562T	5.6K 1/4W
R384	ERDS2TJ562T	5.6K 1/4W
R389	ERDS2TJ151T	150 1/4W
R390	ERDS2TJ472T	4.7K 1/4W
R391	ERDS2TJ153T	15K 1/4W
R392	ERDS2TJ392T	3.9K 1/4W
R393	ERDS2TJ105T	1M 1/4W
R394	ERDS2TJ184T	180K 1/4W
R395	ERDS2TJ103T	10K 1/4W
R397	ERDS2TJ330T	33 1/4W
R398	ERDS2TJ330T	33 1/4W
R399	ERDS2TJ272T	2.7K 1/4W
R451	ERDS2TJ472T	4.7K 1/4W
R452	ERDS2TJ472T	4.7K 1/4W
R453	ERDS2TJ472T	4.7K 1/4W
R454	ERDS2TJ472T	4.7K 1/4W
R455	ERDS2TJ472T	4.7K 1/4W
R456	ERDS2TJ472T	4.7K 1/4W
R457	ERDS2TJ221T	220 1/4W
R458	ERDS2TJ273T	27K 1/4W
R459	ERDS2TJ273T	27K 1/4W
R468	ERDS2TJ2R7T	2.7 1/4W
R469	ERDS2TJ153T	15K 1/4W
R470	ERDS2TJ102T	1K 1/4W

Ref. No.	Part No.	Values & Remarks
R471	ERDS2TJ105T	1M 1/4W
R472	ERDS2TJ472T	4.7K 1/4W
R501	ERDS2TJ102T	1K 1/4W
R502	ERDS2TJ102T	1K 1/4W
R503	ERDS2TJ682T	6.8K 1/4W
R504	ERDS2TJ682T	6.8K 1/4W
R505	ERDS2TJ104T	100K 1/4W
R506	ERDS2TJ104T	100K 1/4W
R507	ERDS2TJ104T	100K 1/4W
R508	ERDS2TJ104T	100K 1/4W
R509	ERD25FVJ470T	47 1/4W
R511	ERDS2TJ563T	56K 1/4W
R512	ERDS2TJ103T	10K 1/4W
R513	ERD25FVJ4R7T	4.7 1/4W
R514	ERDS2TJ221T	220 1/4W
R515	ERDS1FVJ100T	10 1/2W ⚠
R516	ERDS1FVJ100T	10 1/2W ⚠
R519	ERDS2TJ334T	330K 1/4W
R520	ERDS2TJ680T	68 1/4W
R521	ERDS2TJ680T	68 1/4W
R522	ERDS2TJ680T	68 1/4W
R523	ERDS1FVJ272T	2.7K 1/2W ⚠
R524	ERDS1FVJ560T	56 1/2W ⚠
R525	ERDS2TJ223T	22K 1/4W
R526	ERDS2TJ151T	150 1/4W
R527	ERDS1FVJ182T	1.8K 1/2W ⚠
R528	ERDS1FVJ470T	47 1/2W ⚠
R529	ERDS2TJ151T	150 1/4W
R530	ERDS1FVJ222T	2.2K 1/2W ⚠
R531	ERDS2TJ103T	10K 1/4W
R532	ERDS2TJ103T	10K 1/4W
R533	ERDS1FVJ560T	56 1/2W ⚠
R534	ERDS1FVJ121T	120 1/2W ⚠
R535	ERDS1FVJ121T	120 1/2W ⚠
R536	ERDS1FVJ121T	120 1/2W ⚠
R537	ERDS2TJ104T	100K 1/4W
R538	ERDS2TJ151T	150 1/4W
R539	ERDS2TJ472T	4.7K 1/4W
R540	ERDS2TJ680T	68 1/4W
R541	ERDS2TJ680T	68 1/4W
R542	ERDS2TJ680T	68 1/4W
R543	ERDS2TJ680T	68 1/4W
R544	ERDS1FVJ1R0T	1 1/2W ⚠
R545	ERDS1FVJ4R7T	4.7 1/2W ⚠
R546	ERDS1FVJ4R7T	4.7 1/2W ⚠
R548	ERDS2TJ102T	1K 1/4W
R549	ERDS2TJ151T	150 1/4W
R550	ERDS2TJ681T	680 1/4W
R551	ERDS1FVJ560T	56 1/2W ⚠
R552	ERDS1FVJ560T	56 1/2W ⚠
R553	ERDS1FVJ560T	56 1/2W ⚠
R554	ERDS2TJ471T	470 1/4W
R555	ERDS2TJ152T	1.5K 1/4W
R556	ERD2FCVJ4R7T	4.7 1/4W

Ref. No.	Part No.	Values & Remarks
R557	ERDS1FVJ470T	47 1/2W ⚠
R559	ERDS1FVJ3R3T	3.3 1/2W ⚠
R561	ERD2FCVG390T	39 ⚠ 1/4W [M]
R563	ERDS2TJ823T	82K 1/4W
R564	ERDS2TJ124T	120K 1/4W
R565	ERDS2TJ563T	56K 1/4W
R605	ERDS2TJ472T	4.7K 1/4W
R606	ERDS2TJ103T	10K 1/4W
R621	ERDS2TJ102T	1K 1/4W
R622	ERDS2TJ561T	560 1/4W
R623	ERDS2TJ153T	15K 1/4W
R624	ERDS2TJ104T	100K 1/4W
R625	ERDS2TJ153T	15K 1/4W
R626	ERDS2TJ563T	56K 1/4W
R627	ERDS2TJ224T	220K 1/4W
R628	ERDS2TJ101T	100 1/4W
R629	ERDS2TJ683T	68K 1/4W
R630	ERDS2TJ102T	1K 1/4W
R631	ERDS2TJ103T	10K 1/4W
R632	ERDS2TJ223T	22K 1/4W
R633	ERDS2TJ122T	1.2K 1/4W
R655	ERDS2TJ472T	4.7K 1/4W
R656	ERDS2TJ472T	4.7K 1/4W
R657	ERDS2TJ331T	330 1/4W
R658	ERDS2TJ331T	330 1/4W
R663	ERDS2TJ472T	4.7K 1/4W
R664	ERDS2TJ472T	4.7K 1/4W
R665	ERDS2TJ682T	6.8K 1/4W
R666	ERDS2TJ682T	6.8K 1/4W
R801	ERDS2TJ102T	1K 1/4W
R802	ERDS2TJ102T	1K 1/4W
R803	ERDS2TJ393T	39K 1/4W
R804	ERDS2TJ393T	39K 1/4W
R805	ERDS2TJ103T	10K 1/4W
R806	ERDS2TJ103T	10K 1/4W
R807	ERDS2TJ153T	15K 1/4W
R808	ERDS2TJ153T	15K 1/4W
R809	ERDS2TJ104T	100K 1/4W
R810	ERDS2TJ104T	100K 1/4W
R811	ERDS2TJ683T	68K 1/4W
R812	ERDS2TJ683T	68K 1/4W
R813	ERDS2TJ182T	1.8K 1/4W
R814	ERDS2TJ182T	1.8K 1/4W
R815	ERDS2TJ682T	6.8K 1/4W
R816	ERDS2TJ682T	6.8K 1/4W
R817	ERDS2TJ472T	4.7K 1/4W
R818	ERDS2TJ472T	4.7K 1/4W
R819	ERDS2TJ182T	1.8K 1/4W
R820	ERDS2TJ182T	1.8K 1/4W
R821	ERDS2TJ223T	22K 1/4W
R822	ERDS2TJ223T	22K 1/4W
R823	ERDS2TJ102T	1K 1/4W
R824	ERDS2TJ102T	1K 1/4W
R825	ERDS2TJ473T	47K 1/4W

Ref. No.	Part No.	Values & Remarks
R826	ERDS2TJ473T	47K 1/4W
R827	ERDS2TJ222T	2.2K 1/4W
R828	ERDS2TJ222T	2.2K 1/4W
R829	ERDS2TJ474T	470K 1/4W
R840	ERDS2TJ151T	150 1/4W
R851	ERDS2TJ152T	1.5K 1/4W
R852	ERDS2TJ102T	1K 1/4W
R853	ERDS2TJ105T	1M 1/4W
R855	ERDS2TJ473T	47K 1/4W
R856	ERDS2TJ332T	3.3K 1/4W
R857	ERDS2TJ334T	330K 1/4W
R858	ERDS2TJ105T	1M 1/4W
R859	ERDS2TJ472T	4.7K 1/4W
R860	ERDS2TJ103T	10K 1/4W
R861	ERDS2TJ100T	10 1/4W
R901	ERDS2TJ470T	47 1/4W
R902	ERDS2TJ102T	1K 1/4W
R903	ERDS2TJ223T	22K 1/4W
R904	ERDS2TJ104T	100K 1/4W
R905	ERDS2TJ100T	10 1/4W
R916	ERDS2TJ223T	22K 1/4W
R917	ERDS2TJ223T	22K 1/4W
R918	ERDS2TJ153T	15K 1/4W
R919	ERDS2TJ152T	1.5K 1/4W
R920	ERDS2TJ222T	2.2K 1/4W
R921	ERDS2TJ272T	2.7K 1/4W
R922	ERDS2TJ392T	3.9K 1/4W
R923	ERDS2TJ562T	5.6K 1/4W
R924	ERDS2TJ822T	8.2K 1/4W
R925	ERDS2TJ153T	15K 1/4W
R926	ERDS2TJ333T	33K 1/4W
R927	ERDS2TJ153T	15K 1/4W
R928	ERDS2TJ152T	1.5K 1/4W
R929	ERDS2TJ222T	2.2K 1/4W
R930	ERDS2TJ272T	2.7K 1/4W
R931	ERDS2TJ392T	3.9K 1/4W
R932	ERDS2TJ562T	5.6K 1/4W
R933	ERDS2TJ822T	8.2K 1/4W
R935	ERDS2TJ153T	15K 1/4W
R941	ERDS2TJ103T	10K 1/4W
R942	ERDS2TJ103T	10K 1/4W
R943	ERDS2TJ103T	10K 1/4W
R944	ERDS2TJ103T	10K 1/4W
R945	ERDS2TJ103T	10K 1/4W
R946	ERDS2TJ102T	1K 1/4W
R947	ERDS2TJ223T	22K 1/4W
R948	ERDS2TJ106T	10M 1/4W
R949	ERDS2TJ334T	330K 1/4W
R950	ERDS2TJ105T	1M 1/4W
R951	ERDS2TJ681T	680 1/4W
R952	ERDS2TJ103T	10K 1/4W
R955	ERDS2TJ103T	10K 1/4W
R956	ERDS2TJ222T	2.2K 1/4W
R957	ERDS2TJ222T	2.2K 1/4W

Ref. No.	Part No.	Values & Remarks
R958	ERDS2TJ102T	1K 1/4W
R959	ERDS2TJ104T	100K 1/4W
R960	ERDS2TJ222T	2.2K 1/4W
R961	ERDS2TJ222T	2.2K 1/4W
R962	ERDS2TJ102T	1K 1/4W
R963	ERDS2TJ102T	1K 1/4W
R964	ERDS2TJ102T	1K 1/4W
R966	ERDS2TJ224T	220K 1/4W
R967	ERDS2TJ104T	100K 1/4W
R968	ERDS2TJ104T	100K 1/4W
R969	ERDS2TJ104T	100K 1/4W
R970	ERDS2TJ104T	100K 1/4W
R971	ERDS2TJ104T	100K 1/4W
R972	ERDS2TJ104T	100K 1/4W
R973	ERDS2TJ331T	330 1/4W
R977	ERDS2TJ5R6T	5.6 1/4W
R978	ERDS2TJ5R6T	5.6 1/4W
R980	ERDS2TJ101T	100 1/4W
R981	ERDS2TJ101T	100 1/4W
R982	ERDS2TJ330T	33 1/4W
R983	ERDS2TJ682T	6.8K 1/4W
R984	ERDS2TJ103T	10K 1/4W
R985	ERDS2TJ225T	2.2M 1/4W
R986	ERDS2TJ682T	6.8K 1/4W
	CAPACITORS	
C1	ECBT1H6R8KC5	6.8P 50V
C2	ECBT1H102KB5	1000P 50V
C3	ECBT1H102KB5	1000P 50V
C4	ECBT1H3R3KC5	3.3P 50V
C5	ECBT1H102KB5	1000P 50V
C6	ECBT1H2R7KC5	2.7P 50V
C7	ECBT1H120JC5	12P 50V
C8	ECBT1H181KB5	180P 50V
C9	ECBT1H3R3KC5	3.3P 50V
C10	ECBT1H102KB5	1000P 50V
C11	ECBT1H102KB5	1000P 50V
C12	ECBT1H6R8KC5	6.8P 50V
C13	ECBT1H5R6KC5	5.6P 50V
C14	ECBT1H180JC5	18P 50V
C15	ECBT1H102KB5	1000P 50V
C16	ECBT1H102KB5	1000P 50V
C17	ECBT1C103NS5	0.01 16V
C18	ECBT1H101KB5	100P 50V
C19	ECBT1E223ZF5	0.022 25V
C20	ECEA1CU100B	10 16V
C21	ECBT1H8R2KC5	8.2P 50V
C22	ECBT1E223ZF5	0.022 25V
C23	ECBT1E223ZF5	0.022 25V
C24	ECBT1H470J5	47P 50V
C25	ECEA1CU100B	10 16V
C26	ECEA0JU101B	100 6.3V
C27	ECBT1E223ZF5	0.022 25V

Ref. No.	Part No.	Values & Remarks
C28	ECBT1C103NS5	0.01 16V
C29	ECEA1HUR47B	0.47 50V
C30	ECEA1HU010B	1 50V
C31	ECBT1H101KB5	100P 50V
C32	ECEA1CU100B	10 16V
C33	ECBT1E223ZF5	0.022 25V
C34	ECBT1C103NS5	0.01 16V
C35	ECBT1H100JC5	10P 50V
C36	ECBT1C103NS5	0.01 16V
C37	ECBT1C103NS5	0.01 16V
C38	ECBT1H102KB5	1000P 50V
C39	ECQP1222JZ	2200P 100V
C40	ECBT1H120JC5	12P 50V
C41	ECFR1C473KR	0.047 16V
C42	ECBT1H180JC5	18P 50V
C43	ECBT1C103MS5	0.01 16V
C44	ECQP1222JZ	2200P 100V
C45	ECBT1H4R7KC5	4.7P 50V
C46	ECBT1H5R6KC5	5.6P 50V
C47	ECBT1C103MS5	0.01 16V
C48	ECBT1H220JC5	22P 50V
C49	ECBT1H150JC5	15P 50V
C50	ECBT1C103NS5	0.01 16V
C51	ECEA1CU330B	33 16V
C52	ECBT1C103NS5	0.01 16V
C53	ECEA25M4R7RB	4.7 25V
C54	ECBT1C103NS5	0.01 16V
C55	ECEA1HU010B	1 50V
C56	ECBT1C103NS5	0.01 16V
C57	ECEA0JU221B	220 6.3V
C58	ECBT1H102KB5	1000P 50V
C59	ECBT1H102KB5	1000P 50V
C60	ECBT1H102KB5	1000P 50V
C61	ECBT1C103NS5	0.01 16V
C62	ECBT1H150JC5	15P 50V
C63	ECBT1H150JC5	15P 50V
C64	ECFR1E104ZF5	0.1 25V
C65	ECBT1H471KB5	470P 50V
C66	ECEA1HUR33B	0.33 50V
C67	ECQP1102JZT	1000P 100V
C68	ECBT1C103MS5	0.01 16V
C69	ECEA1CU101B	100 16V
C70	ECEA1HU010B	1 50V
C71	ECBT1C103NS5	0.01 16V
C72	ECEA1HU4R7B	4.7 50V
C73	ECEA1HU010B	1 50V
C74	ECEA1HU010B	1 50V
C75	ECEA1HU010B	1 50V
C76	ECEA1HU010B	1 50V
C77	ECBT0J153MS5	0.015 6.3V
C78	ECBT0J153MS5	0.015 6.3V
C79	ECKR1H103ZF5	0.01 50V
C80	ECBT1C103NS5	0.01 16V
C81	ECBT1C103NS5	0.01 16V

Ref. No.	Part No.	Values & Remarks
C82	ECBT1C103NS5	0.01 16V
C83	ECBT1H102KB5	1000P 50V
C84	ECBT1H102KB5	1000P 50V
C85	ECBT1H100JC5	10P 50V
C86	ECBT1H330J5	33P 50V
C87	ECBT1H102KB5	1000P 50V
C88	ECBT1C103NS5	0.01 16V
C89	ECBT1C103NS5	0.01 16V
C90	ECBT1C103NS5	0.01 16V
C91	ECBT1C103NS5	0.01 16V
C92	ECBT1H102KB5	1000P 50V
C93	ECKR1H103ZF5	0.01 50V
C94	ECFR1C473KR	0.047 16V
C95	ECBT1E223ZF5	0.022 25V
C96	ECBT1H470J5	47P 50V
C101	ECBT1H102KB5	1000P 50V
C102	ECBT1H102KB5	1000P 50V
C103	ECBT1C152KR5	1500P 16V
C104	ECBT1C152KR5	1500P 16V
C105	ECBT1H102KB5	1000P 50V
C106	ECBT1H102KB5	1000P 50V
C107	ECEA1EU4R7B	4.7 25V
C108	ECEA1EU4R7B	4.7 25V
C109	ECEA0JU101B	100 6.3V
C110	ECEA0JU101B	100 6.3V
C111	ECFR1C273KR	0.027 16V
C112	ECFR1C273KR	0.027 16V
C113	ECEA1HU010B	1 50V
C114	ECEA1HU010B	1 50V
C115	ECBT0J223NS5	0.022 6.3V
C116	ECBT0J223NS5	0.022 6.3V
C117	ECBT1H221KB5	220P 50V
C118	ECBT1H221KB5	220P 50V
C119	ECEA0JU101B	100 6.3V
C120	ECEA0JU101B	100 6.3V
C121	ECBT1H102KB5	1000P 50V
C122	ECBT1H102KB5	1000P 50V
C125	ECBT1C152KR5	1500P 16V
C126	ECBT1C152KR5	1500P 16V
C128	ECEA1AU330B	33 10V
C131	ECBT1C472KR5	4700P 16V
C132	ECBT1C472KR5	4700P 16V
C157	ECEA1HU2R2B	2.2 50V
C201	ECQV1H474JZ3	0.47 50V
C204	ECQP2A102JZT	1000P 100V
C205	ECBT1C103MS5	0.01 16V
C206	ECQP2A622JZT	6200P 100V [M]
C207	ECEA1HU010B	1 50V
C208	ECEA1CU101B	100 16V
C209	ECQV1H473JZ3	0.047 50V
C210	ECBT1H102KB5	1000P 50V
C211	ECBT1H102KB5	1000P 50V
C212	ECBT1C103MS5	0.01 16V
C213	ECBT1C103MS5	0.01 16V

Ref. No.	Part No.	Values & Remarks
C214	ECBT1C103MS5	0.01 16V
C216	ECEA1HU2R2B	2.2 50V
C217	ECEA1AU221B	220 10V
C222	ECEA1AU220B	22 10V
C225	ECBT1C103MS5	0.01 16V
C226	ECEA1HU2R2B	2.2 50V
C227	ECEA0JU101B	100 6.3V
C228	ECEA0JU101B	100 6.3V
C229	ECEA1CU100B	10 16V
C230	ECBT1H331KB5	330P 50V
C231	ECBT1H331KB5	330P 50V
C232	ECBT1H331KB5	330P 50V
C233	ECBT1H331KB5	330P 50V
C234	ECBT1C103MS5	0.01 16V
C235	ECBT1H102KB5	1000P 50V
C320	ECEA1HU3R3B	3.3 50V
C321	ECBT1H3R3KC5	3.3P 50V
C322	ECBT1H3R3KC5	3.3P 50V
C323	ECKR1H103ZF5	0.01 50V
C324	ECKR1H103ZF5	0.01 50V
C351	ECEA1HU3R3B	3.3 50V
C352	ECEA1HU3R3B	3.3 50V
C353	ECEA1HU3R3B	3.3 50V
C354	ECEA1HU3R3B	3.3 50V
C355	ECEA1HU010B	1 50V
C356	ECEA1HU010B	1 50V
C370	ECKR1H103ZF5	0.01 50V
C371	ECFR1E104ZF5	0.1 25V
C372	ECFR1E104ZF5	0.1 25V
C373	ECEA1EU4R7B	4.7 25V
C451	ECEA1EK470B	47 25V
C452	ECEA1CK330B	33 16V
C501	ECEA1HU0R1B	0.1 50V
C502	ECEA1HU0R1B	0.1 50V
C503	ECBT1H331KB5	330P 50V
C504	ECBT1H331KB5	330P 50V
C505	ECBT1H821KB5	820P 50V
C506	ECBT1H821KB5	820P 50V
C507	ECBT1H150J5	15P 50V
C508	ECBT1H150J5	15P 50V
C509	ECEA1HU330B	33 50V
C510	ECEA2AU100B	10 100V
C511	ECKR1H223ZF5	0.022 50V
C512	ECKR1H223ZF5	0.022 50V
C513	ECEA1HU010B	1 50V
C514	ECEA1HU010B	1 50V
C516	ECKR2H103ZF5	0.01 500V ⚠
C517	ECKR2H103ZF5	0.01 500V ⚠
C518	ECKR2H103ZF5	0.01 500V ⚠
C519	ECKR2H103ZF5	0.01 500V ⚠
C520	ECEA1CU470B	47 16V
C521	ECEA1CU221B	220 16V
C523	ECEA0JU101B	100 6.3V
C524	ECKR1H103ZF5	0.01 50V

Ref. No.	Part No.	Values & Remarks
C525	ECKR1H103ZF5	0.01 50V
C526	ECEA1HU220B	22 50V
C528	ECEA1AU101B	100 10V
C529	ECKR1H103ZF5	0.01 50V
C530	ECEA1HU102E	1000 50V ⚠
C531	ECKR2H103ZF5	0.01 500V ⚠
C532	ECEA0JU101B	100 6.3V
C533	ECKR2H103ZF5	0.01 500V ⚠
C535	ECEA1CU101B	100 16V ⚠
C536	ECKR1H103ZF5	0.01 50V ⚠
C537	ECEA1CU101B	100 16V ⚠
C538	ECKR1H103ZF5	0.01 50V
C539	ECKR1H103ZF5	0.01 50V
C541	ECEA45V472YE	4700 45V ⚠
C542	ECEA45V472YE	4700 45V ⚠
C548	ECKR1H103ZF5	0.01 50V
C549	ECEA1HU101B	100 50V
C550	ECQE1224KZ	0.22 100V
C551	ECKR1H473ZF5	0.047 50V
C552	ECBT1H102KB5	1000P 50V
C605	ECBT1H102KB5	1000P 50V
C621	ECEA1HU2R2B	2.2 50V
C622	ECBT1H101KB5	100P 50V
C623	ECBT1H151KB5	150P 50V
C624	ECEA1HU010B	1 50V
C625	ECEA1HU010B	1 50V
C626	ECEA1CU100B	10 16V
C627	ECEA1CU100B	10 16V
C628	ECEA1HU010B	1 50V
C629	ECEA1HU010B	1 50V
C630	ECBT1H470J5	47P 50V
C631	ECEA1EK4R7B	4.7 25V
C632	ECEA1HU010B	1 50V
C633	ECKR1H103ZF5	0.01 50V
C669	ECBT1H471KB5	470P 50V
C670	ECBT1H471KB5	470P 50V
C671	ECBT1C682KR5	6800P 16V
C672	ECBT1C682KR5	6800P 16V
C673	ECBT1C472KR5	4700P 16V
C674	ECBT1C472KR5	4700P 16V
C675	ECFR1C683KR	0.068 16V
C676	ECFR1C683KR	0.068 16V
C677	ECFR1C473KR	0.047 16V
C678	ECFR1C473KR	0.047 16V
C679	ECEA1HKR68B	0.68 50V
C680	ECEA1HKR68B	0.68 50V
C681	ECEA1EK4R7B	4.7 25V
C682	ECEA1EK4R7B	4.7 25V
C683	ECEA1CU100B	10 16V
C684	ECEA1CU100B	10 16V
C685	ECBT1H101KB5	100P 50V
C686	ECBT1H101KB5	100P 50V
C687	ECEA1CU330B	33 16V
C688	ECEA1CU330B	33 16V

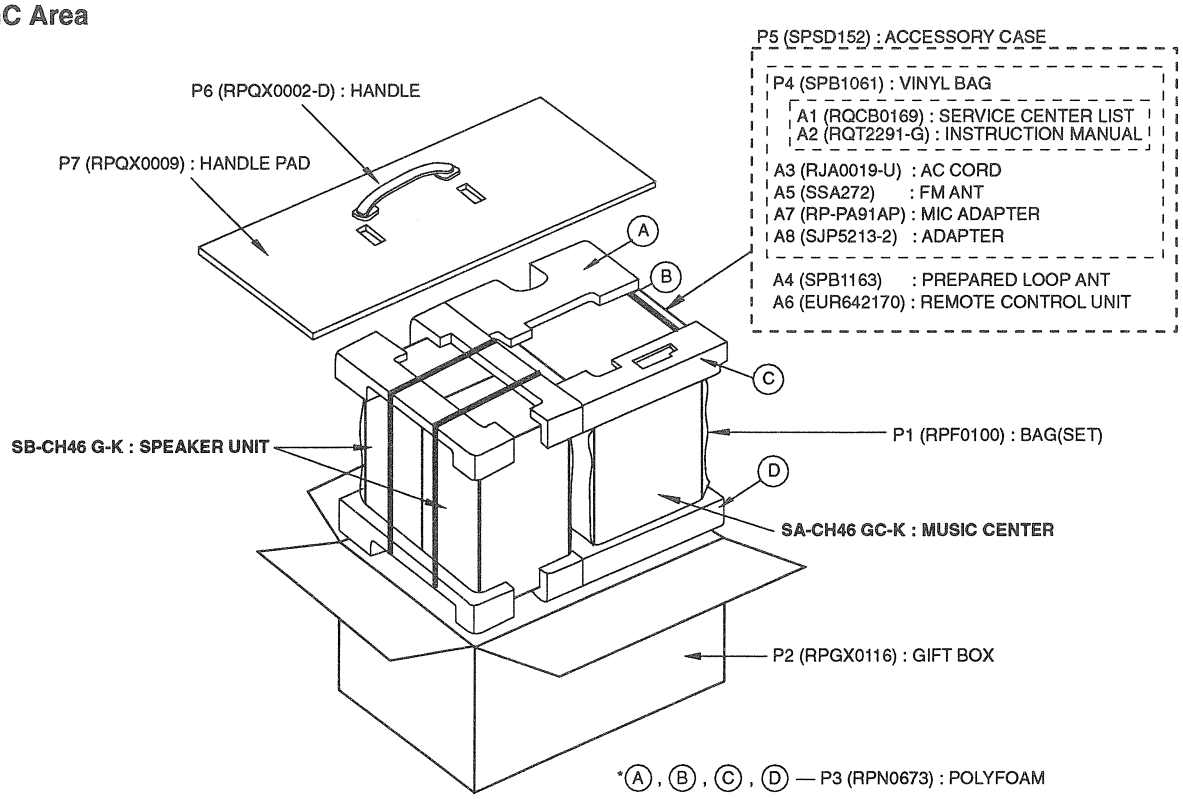
Ref. No.	Part No.	Values & Remarks
C689	ECEA1CU100B	10 16V
C690	ECEA1CU100B	10 16V
C801	ECFR1C153KR	0.015 16V
C802	ECFR1C153KR	0.015 16V
C803	ECEA1HUR22B	0.22 50V
C804	ECEA1HUR22B	0.22 50V
C805	ECBT1H560J5	56P 50V
C806	ECBT1H560J5	56P 50V
C807	ECEA1HUR22B	0.22 50V
C808	ECEA1HUR22B	0.22 50V
C809	ECEA1HUR22B	0.22 50V
C810	ECEA1HUR22B	0.22 50V
C811	ECEA1HUR47B	0.47 50V
C812	ECEA1HUR47B	0.47 50V
C813	ECEA1HUR33B	0.33 50V
C814	ECEA1HUR33B	0.33 50V
C820	ECEA1CU221B	220 16V
C821	ECEA1CU220B	22 16V
C822	ECEA1CU220B	22 16V
C823	ECKR1H103ZF5	0.01 50V
C824	ECKR1H103ZF5	0.01 50V
C825	ECEA1CU221B	220 16V
C826	ECEA1HU010B	1 50V
C827	ECEA1AU470B	47 10V
C828	ECEA1HU010B	1 50V
C829	ECEA0JU101B	100 6.3V
C830	ECKR1H103ZF5	0.01 50V
C901	ECBT1H180JC5	18P 50V
C902	ECBT1H220JC5	22P 50V
C903	ECBT1H820KB5	82P 50V
C904	ECBT1H820KB5	82P 50V
C905	ECBT1H560J5	56P 50V
C906	ECBT1H560J5	56P 50V
C907	ECBT1H471KB5	470P 50V
C908	ECBT1H471KB5	470P 50V
C909	ECBT1H471KB5	470P 50V
C910	ECEA1CKA100B	10 16V
C911	ECEA1HUR22B	0.22 50V
C912	ECEA1HUR33B	0.33 50V
C913	ECBT1C222KR5	2200P 16V
C914	ECBT1C103NS5	0.01 16V
C915	ECBT1C103NS5	0.01 16V
C916	ECFR1C104MR	0.1 16V
C918	ECEA1HKA220B	22 50V
C919	ECEA1HKA220B	22 50V
C920	ECEA1HK4R7B	4.7 50V
C921	ECEA1HK4R7B	4.7 50V
C922	ECEA0JK101B	100 6.3V
C923	ECEA0JU102B	1000 6.3V
C924	ECEA0JU102B	1000 6.3V
C925	ECEA0JU102B	1000 6.3V
C926	ECBT1C103NS5	0.01 16V
C973	ECEA1HKA010B	1 50V
C974	ECFR1C683KR	0.068 16V

Ref. No.	Part No.	Values & Remarks
C975	ECFR1C683KR	0.068 16V
C976	ECBT1C103NS5	0.01 16V
C977	ECBT1C103NS5	0.01 16V
C978	ECBT1H102KB5	1000P 50V
C979	ECBT1H102KB5	1000P 50V

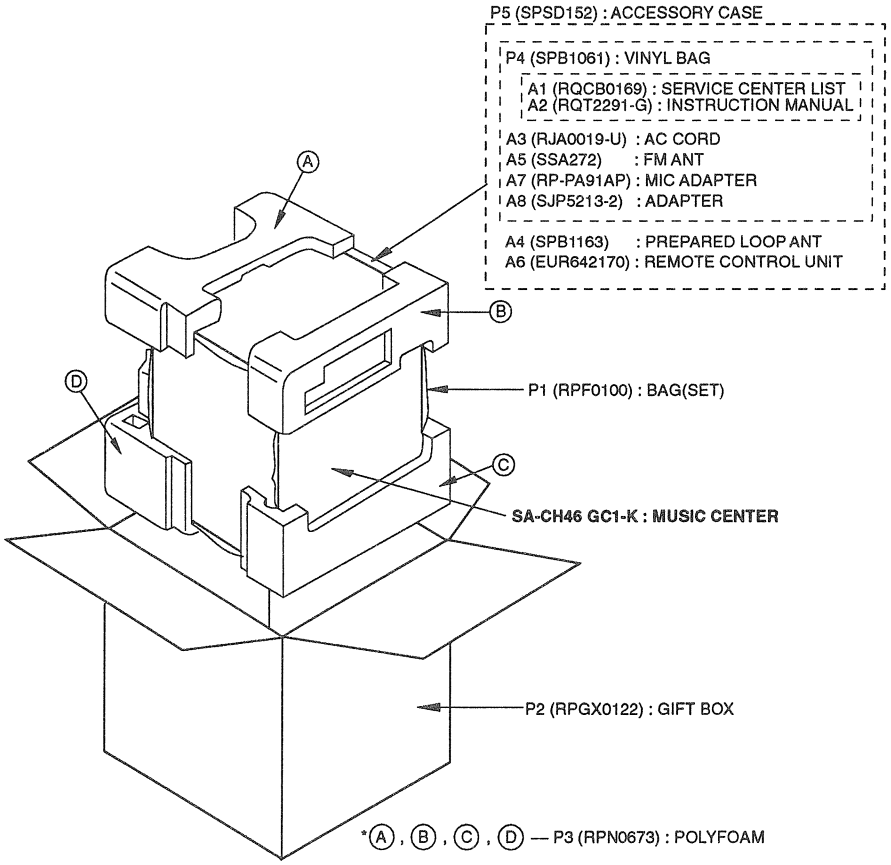
Ref. No.	Part No.	Values & Remarks

■ PACKAGING

• For GC Area



• For GC1 Area



MESA Printed in Singapore
S931004200P/J/A