ORDER NO. MD9603021C1
A2

Service Manual

Stereo Integrated Amplifier

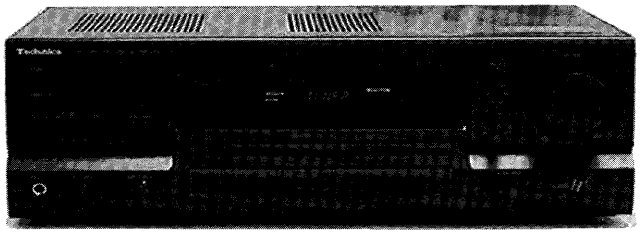
DOLBY SURROUND PRO • LOGIC *

Amplifier

SU-G96

Colour

(K) . . . . . Black Type



Area

Suffix for Model No.	Area	Colour
(PP)	U.S.A. and Canada	(K)

System No. : S275PC-K, S3700P-M, S375PC-K, S3750P-K, S4750P-K (Refer to page 3)

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■ Specifications

■ Amplifier Section

Rated minimum sine wave RMS power output
40 Hz–20 kHz both channels driven
0.9% total hamonic distortion 130W per channel (8Ω)
1 kHz continuous power output,
both channels driven 0.9% total
hamonic distortion 135W per channel (8Ω)
Total harmonic distortion
Rated power at 40 Hz – 20kHz 0.9% (8Ω)
Half power at 1 kHz 0.05% (8Ω)
Power output at the Dolby Pro Logic operation
0.9% at 1 kHz,
Front 2X100 W (8Ω)
Center 100 W (8Ω)
Surround 100 W (8Ω)
Low frequency damping factor 30 (8Ω)
Load impedance
Front 8Ω
Center 8Ω
Surround 4-8Ω
Dynamic headroom 2dB (8Ω)
SMPTE intermodulation distortion 0.9% (8Ω)
Frequency response
PHONO RIAA standard curve ± 0.8dB
TUNER, CD, TAPE MONITOR,
VCR 1, TV/VCR 2, EQ/EXT 10Hz – 60kHz, ± 3dB
Input sensitivity
PHONO 0.3mV (3mV, IHF '66)
TUNER, CD, TAPE MONITOR,
VCR 1, TV/VCR 2, EQ/EXT 18mV (200mV, IHF '66)
S/N (IHF, A)
PHONO 70dB (80dB, IHF '66)
TUNER, CD, TAPE MONITOR,
VCR 1, TV/VCR 2, EQ/EXT 75dB (85dB, IHF '66)
Input impedance
PHONO 47kΩ
TUNER, CD, TAPE MONITOR,
VCR 1, TV/VCR 2, EQ/EXT 22kΩ
Tone controls
BASS 50Hz, +10 to -10dB
TREBLE 20kHz, +10 to -10dB
Super Bass 80Hz, +7dB

■ Video Section

Output voltage at 1 V input (unbalanced) 1±0.1 Vp-p
Maximum input voltage 1.3 Vp-p
Input/output impedance 75 Ω

■ General

Power consumption 270W, 350VA
Power supply AC 120V, 60Hz
Dimensions (W x H x D) 430 x 153 x 360 mm ($16^{15}/_{16}$" x $6^{1}/_{32}$" x $14^{11}/_{64}$")
Weight 9.4 kg (20.7 lb.)

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

Technics®

Contents

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

■ Contents

■ Safety Precaution

(This "Safety Precaution" is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock .
2. When replacing parts ,use only manufacturer's recommended components for safety .
3. Check the condition of the power cord .Replace if wear or damage is evident .
4. After servicing ,be sure to restore the lead dress, insulation barriers ,insulation papers ,shields ,etc .
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard .

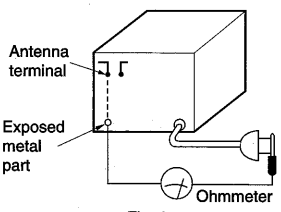


Fig. 1

Resistance = 3MΩ – 5.2MΩ

. INSULATION RESISTANCE TEST

1. Unplug the power cord and short the two prongs of the plug with a jumper wire .
2. Turn on the power switch .
3. Measure the resistance value with ohmmeter between the jumper AC plug and each exposed metal cabinet part ,such as screwheads, antenna ,control shafts ,handle brackets , etc . Equipment with antenna terminals should read between 3MΩ and 5.2MΩ to all exposed parts* .(Fig. 1) Equipment without antenna terminals should read approximately infinity to all exposed parts . (Fig. 2)
   *Note :Some exposed parts may be isolated from the chassis by design. These will read infinity .
4. If the measurement is outside the specified limits ,there is a possibility of a shock hazard .The equipment should be repaired and rechecked before it is returned to the customer .

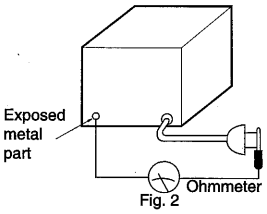


Fig. 2

Resistance = Approx ∞

■ Before Repair and Adjustment

Disconnect AC power, discharge 4 Power Supply Capacitors C703, C704, C705 and C706 through a 10Ω , 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 AC 120 V, 60Hz in NO SIGNAL mode should be 400 ~ 1000 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.

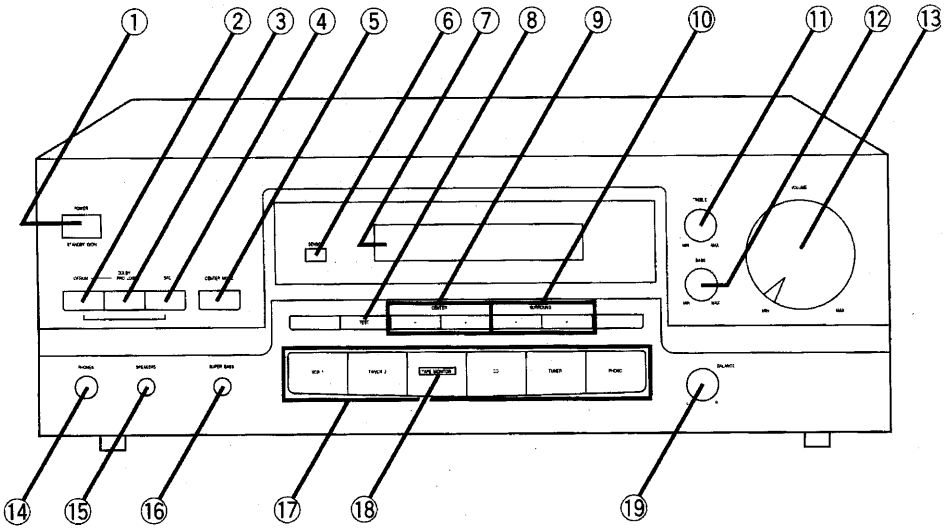
The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.
If this occurs, follow the procedure outlines below:

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.

■ Line up of Components

System Name	S275PC-K	S3700P-M	S375PC-K	S3750P-K	S4750P-K
Electronics Block (Made in MAV)	**SD-S737PP-K**	**SD-S737PP-K**	**SD-S747PP-K**	**SD-S737PP-K**	**SD-S747PP-K**
Amplifier (Made in MAV)	SU-G96PP-K	SU-G96PP-K	SU-G96PP-K	SU-G96PP-K	SU-G96PP-K
Tuner (Made in MAV)	ST-K55PP-K	ST-K55PP-K	ST-K55PP-K	ST-K55PP-K	ST-K55PP-K
Graphic Equalizer (Made in MAV)			SH-8017PP-K		SH-8017PP-K
Electronics Block (Made in MESA)	**SD-S927PC-K**	**SD-S937P-K**	**SD-S937PC-K**	**SD-S937P-K**	**SD-S947P-K**
Cassette Deck (Made in MESA)	RS-TR180PP-K	RS-TR180PP-K	RS-TR180PP-K	RS-TR180PP-K	RS-TR280PP-K
CD Changer (Made in MESA)	SL-MC59PP-K	SL-MC409PP-K	SL-MC409PP-K	SL-MC409PP-K	SL-MC409PP-K
Accessories Box (Made in MESA)	SH-WA27PC-K	SH-WA37P-K	SH-WA37PC-K	SH-WA37P-K	SH-WA47P-K
Front Speaker (Made in MEP)	SB-A27PP-K	SB-A37P-M	SB-A37PP-K	SB-A37PP-K	SB-A47P-K
Speaker Block (Made in MEP)		**SB-AD370P-M**		**SB-AD370P-K**	**SB-A370P-K**
Center Speaker (Made in MEP)		SB-C937P-M		SB-C937PP-K	SB-C937PP-K
Surround Speaker (Made in MEP)		SB-S937P-M		SB-S937PP-K	SB-S937PP-K
Rack (Made in MEP)	SH-KS27PC-K	SH-KS37P-M	SH-KS37PC-K	SH-KS37P-K	SH-KS47P-K



■ Front Panel Controls

No.	Name
①	**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.
②	**DOLBY PRO LOGIC, SFC OFF/ON button (OFF/ON)**
③	**DOLBY PRO LOGIC select button (DOLBY PRO LOGIC)**
④	**Sound field control select button (SFC)**
⑤	**Center mode select button (CENTER MODE)**
⑥	**Remote control signal sensor (SENSOR)**
⑦	**Display**
⑧	**Test signal ON/OFF button (TEST)**
⑨	**Center level adjust buttons (CENTER)**

No.	Name
⑩	**Surround level adjust buttons (SURROUND)**
⑪	**Treble control (TREBLE)**
⑫	**Bass control (BASS)**
⑬	**Volume control (VOLUME)**
⑭	**Headphone jack (PHONES)**
⑮	**Speaker ON/OFF button (SPEAKERS)**
⑯	**Super bass ON/OFF button (SUPER BASS)**
⑰	**Input select buttons**
⑱	**Tape monitor button (TAPE MONITOR)**
⑲	**Balance cintrol (BALANCE)**

■ Operation Checks and Main Component Replacement Procedures

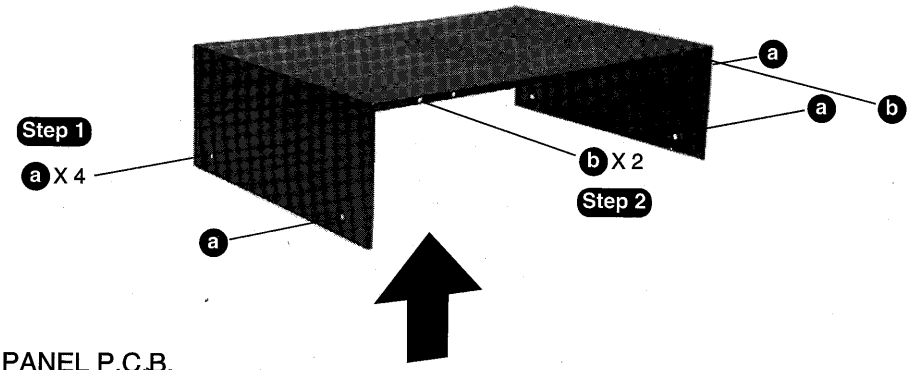
"ATTENTION SERVICER" Some chassis components may have sharp edges. Be careful when disassembling and servicing.

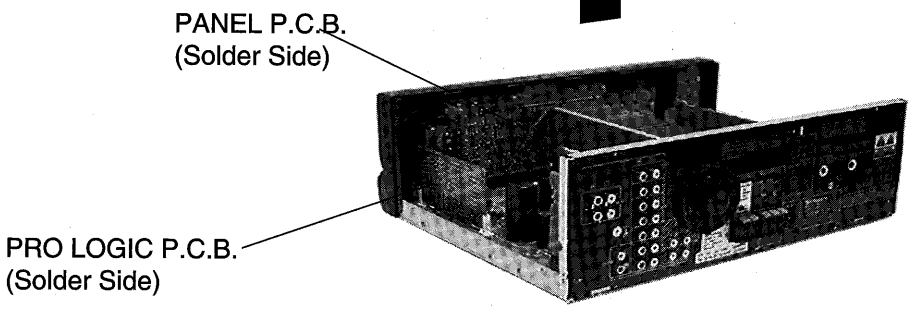
1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
2. For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.
3. Select items from the following index when checks or replacement are required.

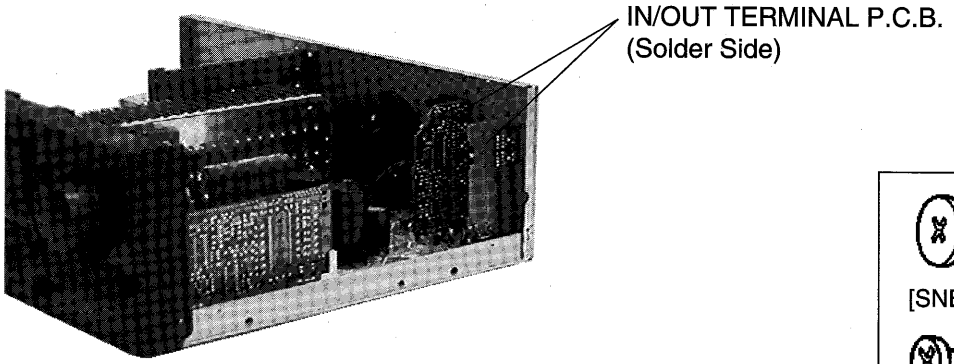
• Contents

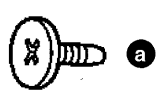
■ Checking Procedure For Each Major P.C.B.

1. Checking of the Panel P.C.B., Pro Logic P.C.B. and Tuner P.C.B.







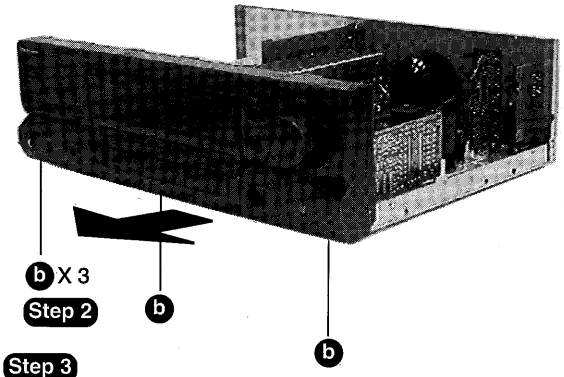


[SNE2129-1] (Black)

[XTBS3+8JFZ1] (Black)

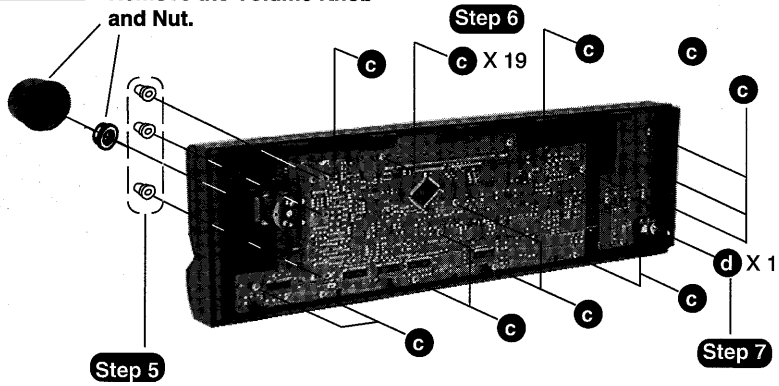
To Remove Front Panel, Panel P.C.B., Power Switch P.C.B. and Headphone Jack P.C.B.

Step 1
Remove the top cabinet.

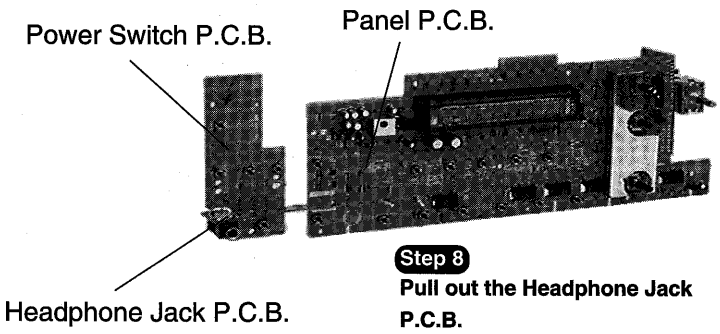


Step 3
Remove the front panel in the direction of arrow.

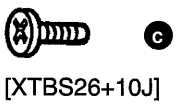
Step 4
Remove the Volume Knob and Nut.



Step 5
Pull out 3 knobs.



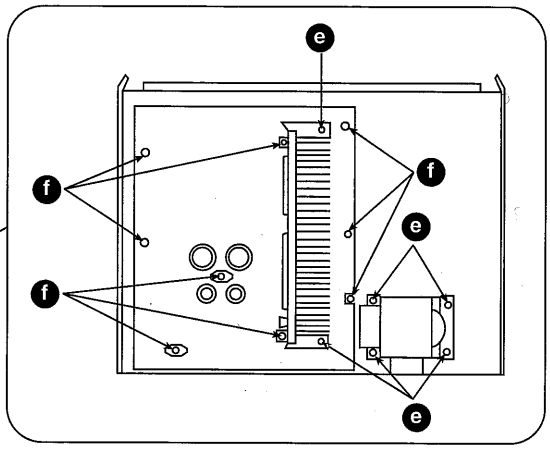
Step 8
Pull out the Headphone Jack P.C.B.

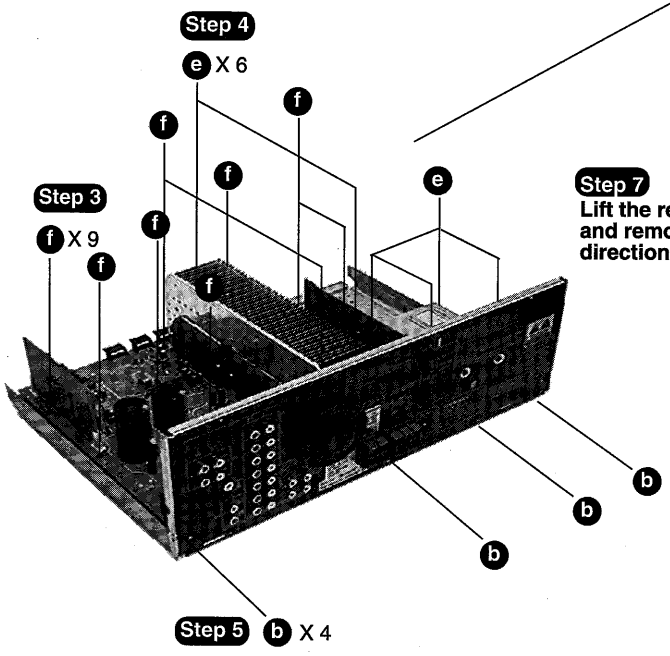


3. Checking of the MAIN P.C.B.

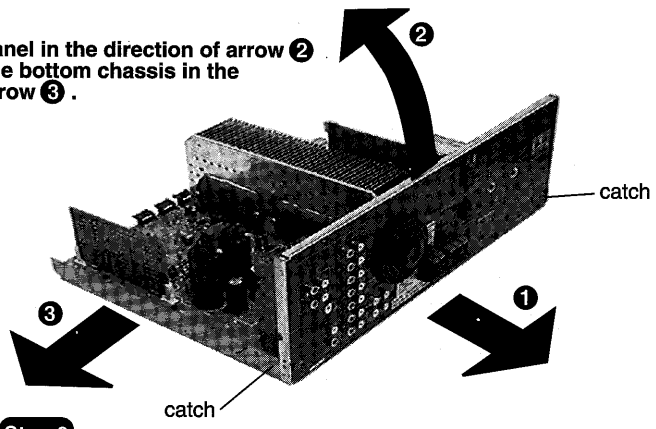
Step 1
Remove the top cabinet.

Step 2
Remove the front panel.



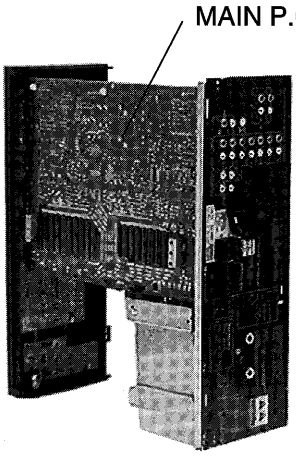


Step 7
Lift the rear panel in the direction of arrow ❷ and remove the bottom chassis in the direction of arrow ❸.

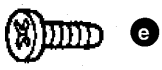


Step 6
Release 2 catches and pull the rear panel in the direction of arrow ❶ for about 10mm.
(Note : All P.C.B. and transformer are attach to the rear panel)

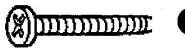
Step 8
Connect the front panel to the main P.C.B. as shown.



• Check the Main P.C.B. as shown •



[XTB3+8FFZ] (Black)



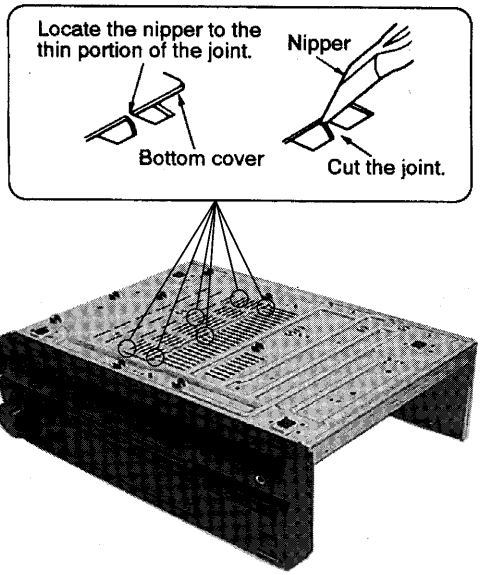
[XTB3+20JFZ] (Black)

■ Main Component Replacement Procedures

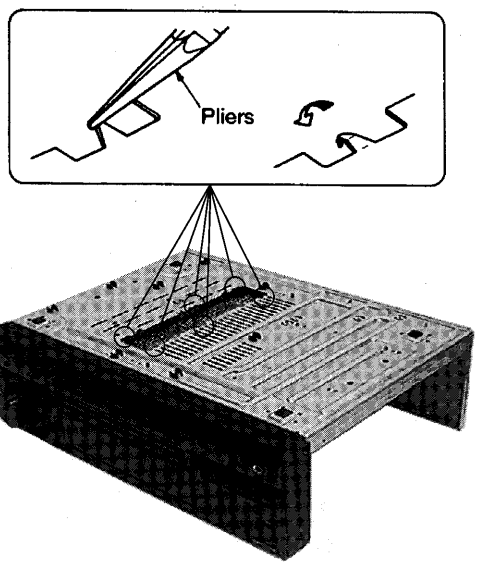
1. Replacement of the Power IC and Regulator Transistor

Step 1
Remove the top cabinet.

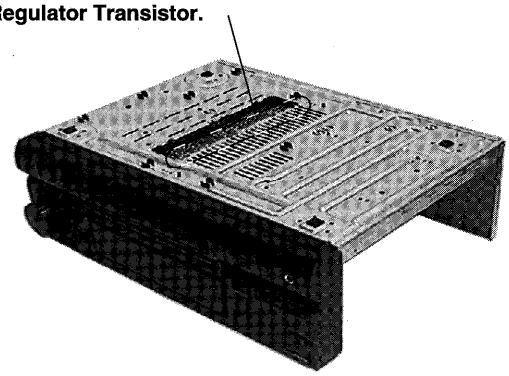
Step 2 **Cut the joints as shown below. (6 joints)**

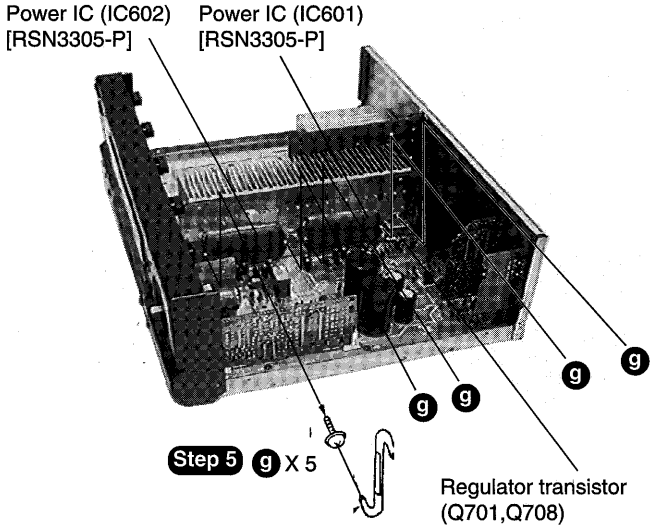


Step 3 **Fold the joints. (6 joints)**



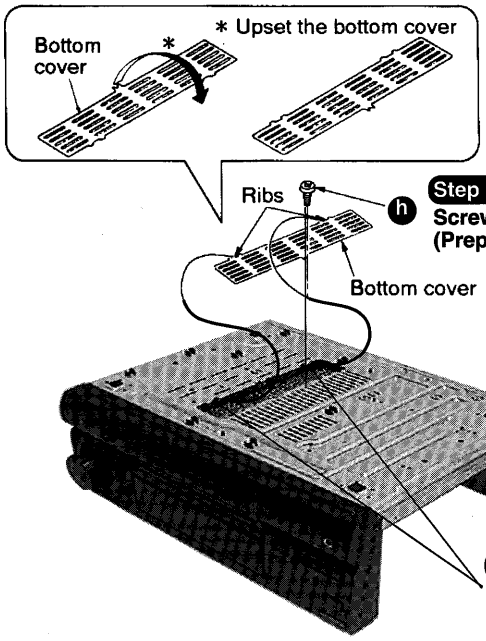
Step 4
Desolder the terminals of Power IC and Regulator Transistor.





Installation of the bottom cover after replacement

Step 1



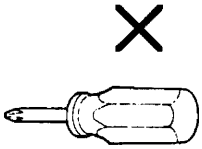
[XTW3+15T]

[XTB3+8J] (Black)

CAUTION

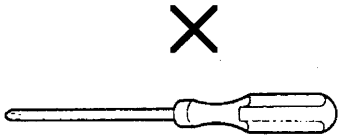
1. After replacing the power IC or regulator transistor, apply a sufficient quantity of compound grease (RFKX0002/SZZ0L15) between the heat sink and the power IC or regulator transistor (Radiation of power IC).
2. Tighten enough the screws (g) after replacing the power IC and regulator transistor. Otherwise, the heat radiation works little.
3. When installing or removing the power IC or transistor holder, be sure to use an offset screwdriver.

- A long straight screwdriver cannot be used for removing or mounting the screws since its long grip interferes with the neighbouring P.C.B. (See Fig.1)
- A short straight screwdriver may be used for removal, but cannot be used for mounting because the limited space in the unit will not allow sufficient tightening torque.(See Fig.2)



A short straight screwdriver

Fig.2



A short straight screwdriver

Fig.1

- Insufficient tightening will cause poor heat dissipation from the power IC and regulator transistor and,in the worst case, may lead to their thermal breakdown.

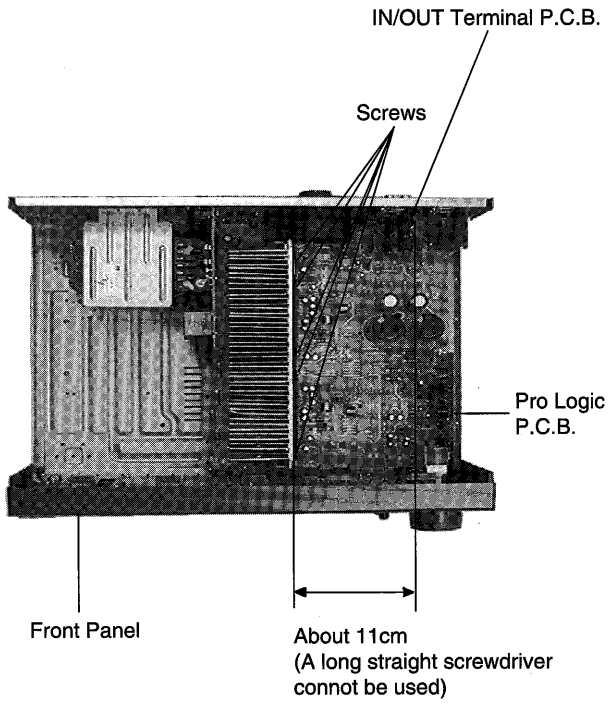
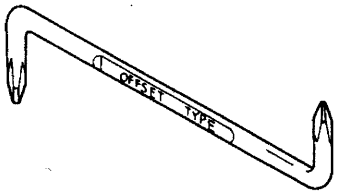


Fig.1

——OFFSET SCREWDRIVER——

•The PROTO offset screwdriver No.34-$^{1}/_{4}$ is recommended for use in the application above.



No.	⊕	← L →
34¼	1 & 2	4¾"

•The address of PROTO International Sales is as follows.

PROTO®

International Sales

International Sales Office
Stanley-Proto Industrial Tools
14117 Industrial Park Blvd.
Covington, GA 30209 U.S.A.
Fax: 706-786-4387
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Nunrweding 3131
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Fax: 61-3-894-1173
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1017 Moo 13 Bangkaew
Amphur Bangplee
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Fax: 66-2-316-6071
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Tokyo 160 Japan
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Phone: 81-3-3360-8458

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72030 Puebla, Pue, Maxico
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Phone: 305-591-3828

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Woodside, Sheffield
539PD
England
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Phone: 44-742-768-888

Canada
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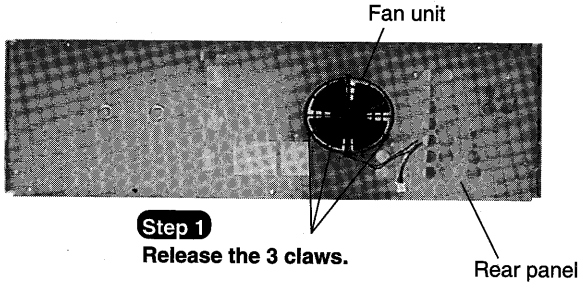
Canada, L7L 5R6
Fax: 416-335-0075
Phone: 416-335-0075

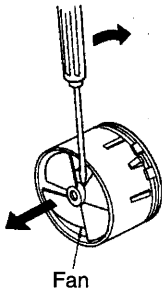
Middel East, Mediterranean & Africa
Stanley-MEMA
Cory House The Rlng
Bracknell Berkshire
RG 12 1A2
England
Fax: 44-344-485-526
Phone: 44-344-51813

2. Replacement of the fan motor

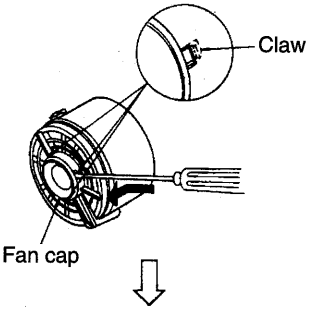


Step 1
Release the 3 claws.

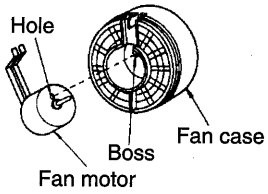
Step 2
Put a screwdriver at the root of the fan and remove it.



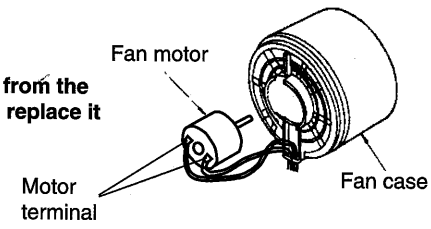
Step 3
Remove the fan cap.



NOTE
When replacing the fan motor, align the boss of the fan case with the hole of the fan motor.



Step 4
Desolder the wires from the motor terminal and replace it with a new one.



■ Fan Motor Troubleshooting

The Model SA-EX500 employ fan motor error sensing electronics.
If the cooling fan is not operating and "OVER LOAD" is displayed on the FL display, check the fan motor and its driving circuit.

"OVER LOAD" is displayed on the FL display.

Is the air cooling path blocked or the fan motorjammed by any external obstacle?

YES → Remove the obstacle.

NO

Remove the fan from the unit.

Is the fan motor's DC resistance 20 ~ 30 Ω ?

NO → Fan motor failure
Short circuit : DC resistance below 5 Ω
Open circuit : DC resistance over 1kΩ

YES

Reinstall the fan on the unit.

Are the terminal voltage of Q772 and Q773 normal in both and inactive states of the fan motor? (see table1.)

NO → Check the integrity of Q771, Q772, Q773 and the fan motor driving circuit. (see fig.1)

YES

(Voltage table)

		fan. off	fan. on
Q771	E	0V	0V
	C	–0.7V	0V
	B	0V	–0.7V
Q772	E	0V	0V
	C	0V	–9.1V
	B	–0.7V	0V
Q773	E	0V	–8.0V
	C	–14.8V	–14.8V
	B	0V	–8.5V

(Table 1)

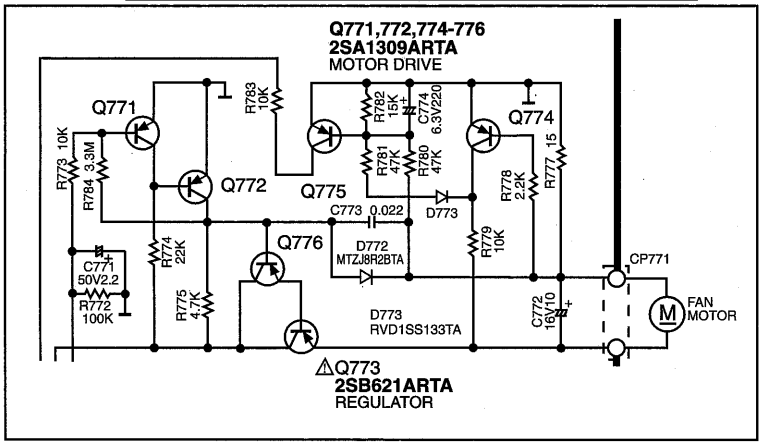


fig.1

Is an audio signal present at pins ⑦ and ⑩ of IC601 or pins ⑦ and ⑩ of IC602

NO → The power IC (IC601 or IC602) is defective.

YES

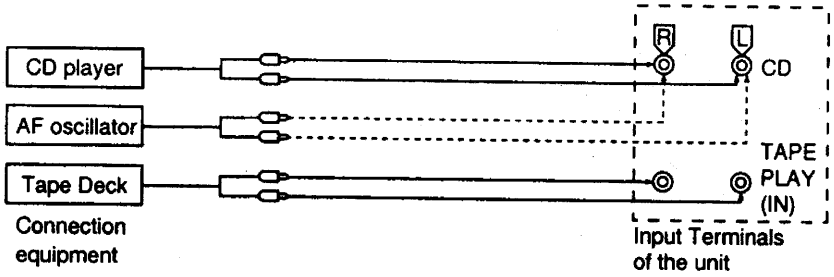
The fan motor, power ICs and fan driver are functioning normally.

■ Troubleshooting

This unit has test points on each circuit board block for use in troubleshooting.

CONNECTION

Connect either a CD player, tape deck or AF oscillator to the input terminals of the unit.



REQUIRED ITEMS

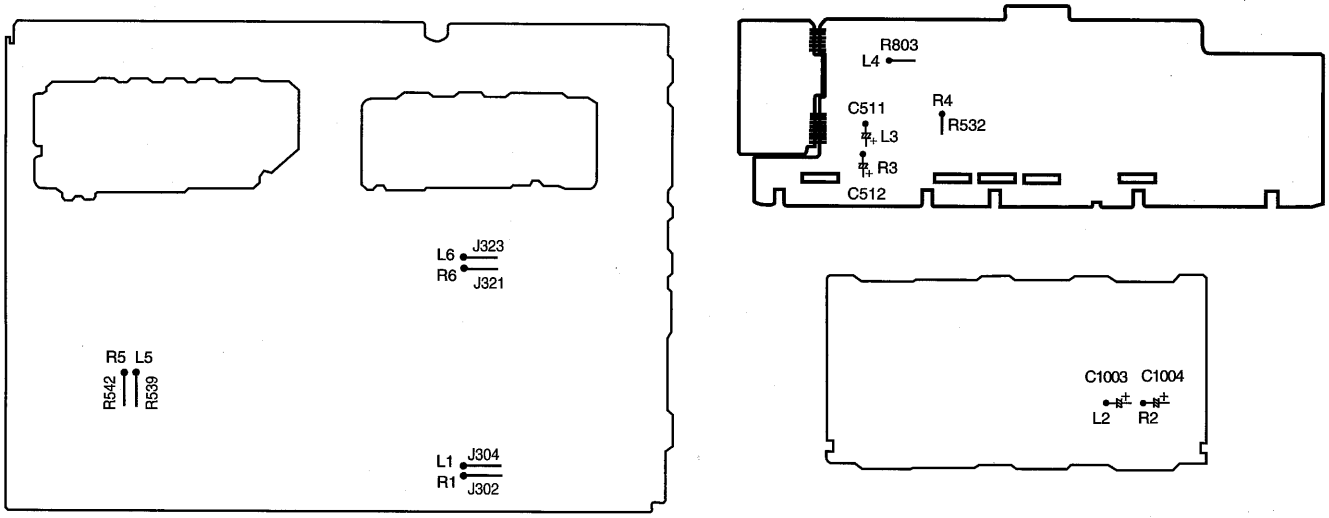
1. Testing with a CD player ——— Test disc (SZZP1054C / first progarm, 1kHz, 0dB)
2. Testing with a tape deck ——— Test tape (QZZCLA / 315Hz, 0dB)
3. Testing with a AF oscillator ——— Set the output at 500Hz, 200mV
4. Oscilloscope (min. 10MHz) ---------- To measure the output waveform at the test points.

TEST PROCEDURE FOR AMPLIFIER CIRCUIT

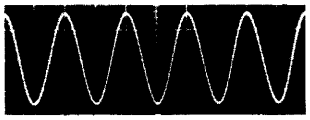
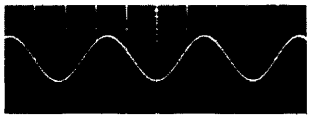
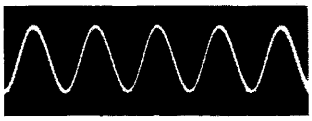
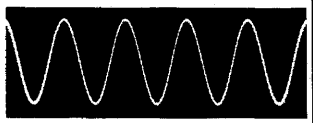
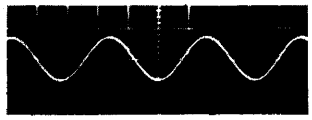
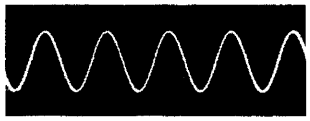
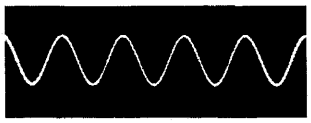
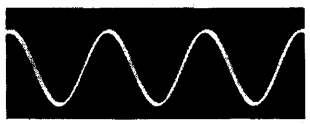
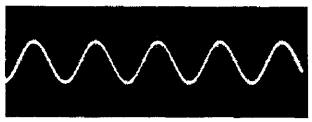
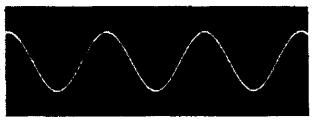
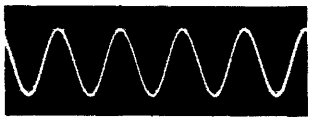
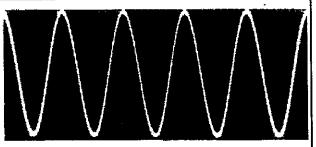
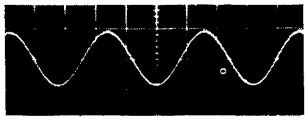
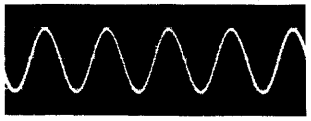
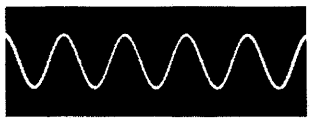
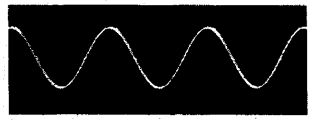
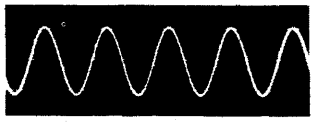
When the CD player AF oscillator is connected:	When the tape deck is connected:
Power on the unit. Set the input selector button of the unit to the "CD" postion. Set the Speaker ON/OFF button of the unit to the SPEAKERS "ON" position.	Power on the unit. Set the input selector button of the unit to the "TAPE MONITOR" postion. Set the Speaker ON/OFF button of the unit to the SPEAKERS "ON" position.
Run the CD player (SZZP1054C / first program 1kHz, 0dB) or Run the AF oscillator (Oscillator output at 500Hz, 200mV)	Run the tape deck (QZZCLA 315Hz, 0dB)
Using the Oscilloscope, check the output waveforms at the test points on the circuit boards of the unit in the following order: (L1,R1)→(L2,R2)→(L3,R3)→(L4,R4)→(L5,R5)→(L6,R6). Refer to page 10.	

Note: Connect the '+' probe of the oscilloscope to each test point and the '–' probe to chassis ground.

TEST POINTS POSITIONS OF AMPLIFIER CIRCUIT



NORMAL WAVEFORMS OF AMPLIFIER CIRCUIT AND LIKELY FAULTY BLOCKS

TP	CD player	Tape deck	AF oscillator	Likely faulty block if the normal waveform shown at the left is not present.
L1/R1	 0.5msec 2V	 1msec 500mV	 1msec 500mV	Input selector block IC401 & area
L2/R2	 0.5msec 2V	 1msec 500mV	 1msec 500mV	Dolby pro logic blockIC1001 and IC1002& area
L3/R3	 0.5msec 500mV	 1msec 50mV	 1msec 100mV	Master volume block VR501 & area
L4/R4	 0.5msec 500mV	 1msec 1V	 1msec 1V	Tone control block IC511 & area
L5/R5	 0.5msec 100mV*	 1msec 500mV	 1msec 500mV	Power limiter block Q581 toQ584 & area
L6/R6	 0.5msec 5V*	 1msec 10V	 1msec 10V	Main amplifier block IC601 & area

Measurement conditions. Volume control (VR501), Treble control (VR512) and Bass control (VR511) positions : ⊙
*Volume control position (VR501) for these test : ◉

CHECKING PROCEDURE FOR SURROUND CIRCUIT

Outputting surround signal normally requires that opposite phase signals be applied to both the left and right channels. However, this unit incorporates a service mode, allowing the surround circuit to be tested using in-phase signals.

When the CD player or AF oscillator is connected :

Power on the unit.
Set the input selector button of the unit to the "CD" position.

↓

While pressing both VCR1 button and Speakers button, press the "Power" button.

↓

The letter "SURROUND" flash on the FL display.

↓

Ⓐ

When the tape deck is connected :

Power on the unit.
Set the input selector button of the unit to the "TAPE MONITOR" position.

↓

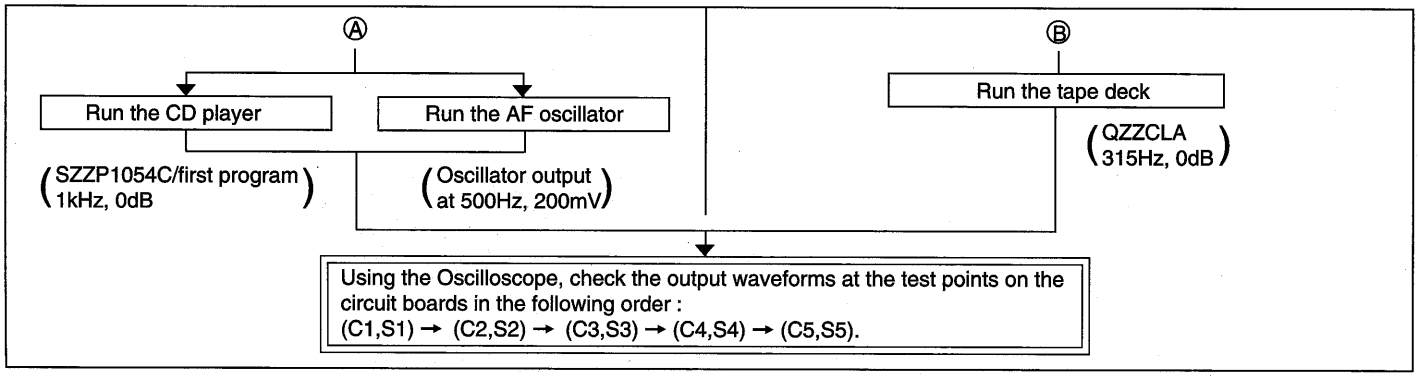
While pressing both VCR1 button and Speakers button, press the "Power" button.

↓

The letter "SURROUND" flash on the FL display.

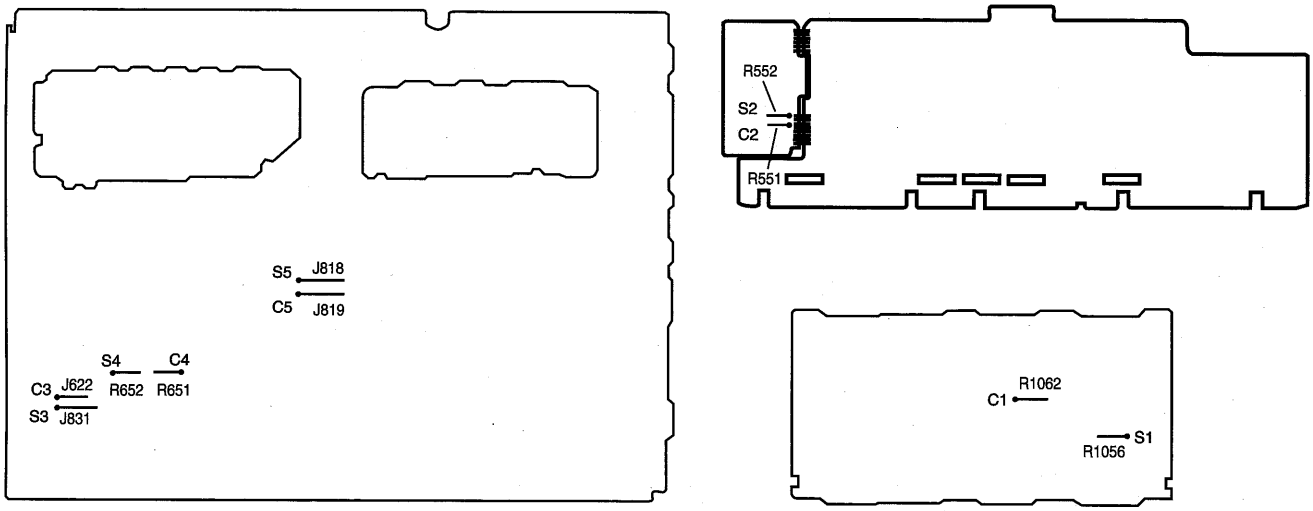
↓

Ⓑ

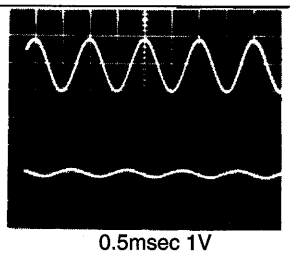
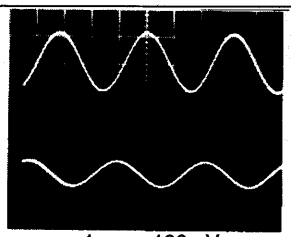
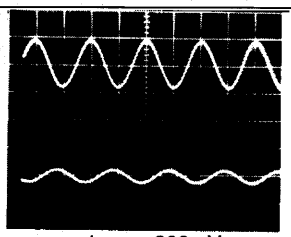
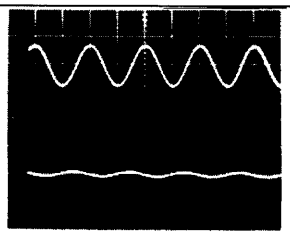
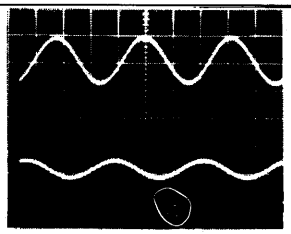
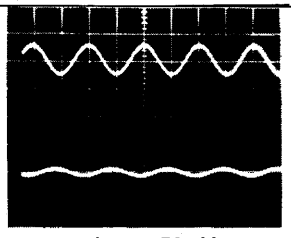
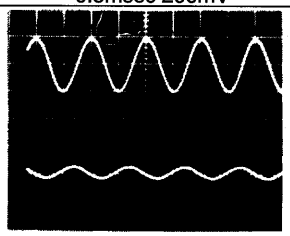
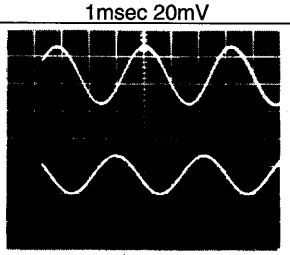
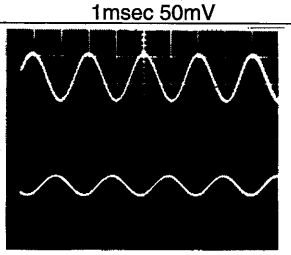


• To exit the service mode, power off the unit.

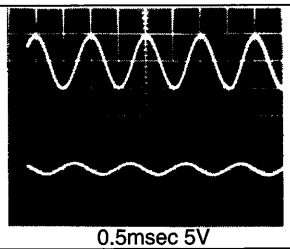
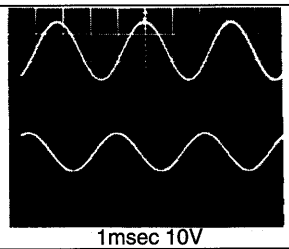
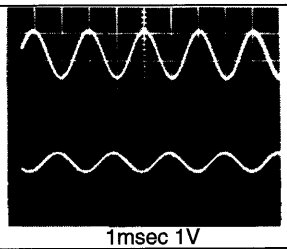
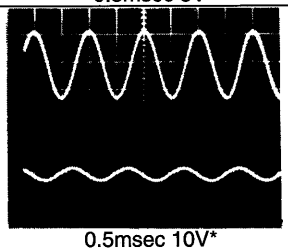
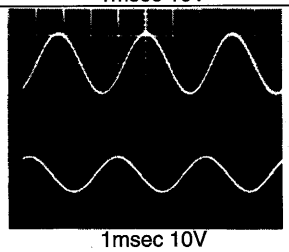
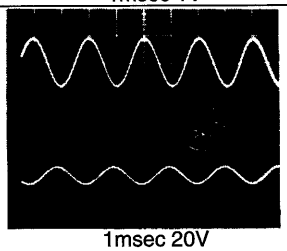
TEST POINTS POSITIONS OF SOURROUND CIRCUIT



NORMAL WAVEFORMS OF AMPLIFIER CIRCUIT AND LIKELY FAULTY BLOCKS

TP	CD player	Tape deck	AF oscillator	Likely faulty block if the normal waveform shown at the left is not present.
C1 S1	 0.5msec 1V	 1msec 100mV	 1msec 200mV	Dolby pro logic block IC1001 and IC1002 & area
C2 S2	 0.5msec 200mV	 1msec 20mV	 1msec 50mV	Master volume block VR501 & area
C3 S3	 0.5msec 5V	 1msec 500mV	 1msec 1V	Tone control block IC551 & area

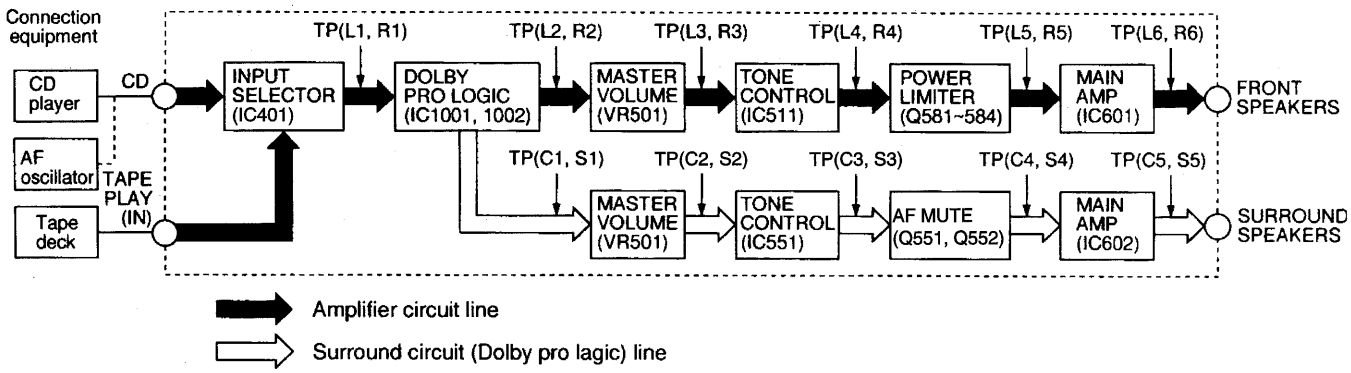
NORMAL WAVEFORMS OF AMPLIFIER CIRCUIT AND LIKELY FAULTY BLOCKS

TP	CD player	Tape deck	AF oscillator	Likely faulty block if the normal waveform shown at the left is not present.
C4 S4	 0.5msec 5V	 1msec 10V	 1msec 1V	AF mute block Q551, Q552 & area
C5 S5	 0.5msec 10V*	 1msec 10V	 1msec 20V	Main amplifier block IC602 & area

Measurement conditions. Volume control (VR501), Tremble control (VR512) and Bass control (VR511) positions: ⊙
*Volume control position (VR501) for these test : ◉

CIRCUIT BLOCKS

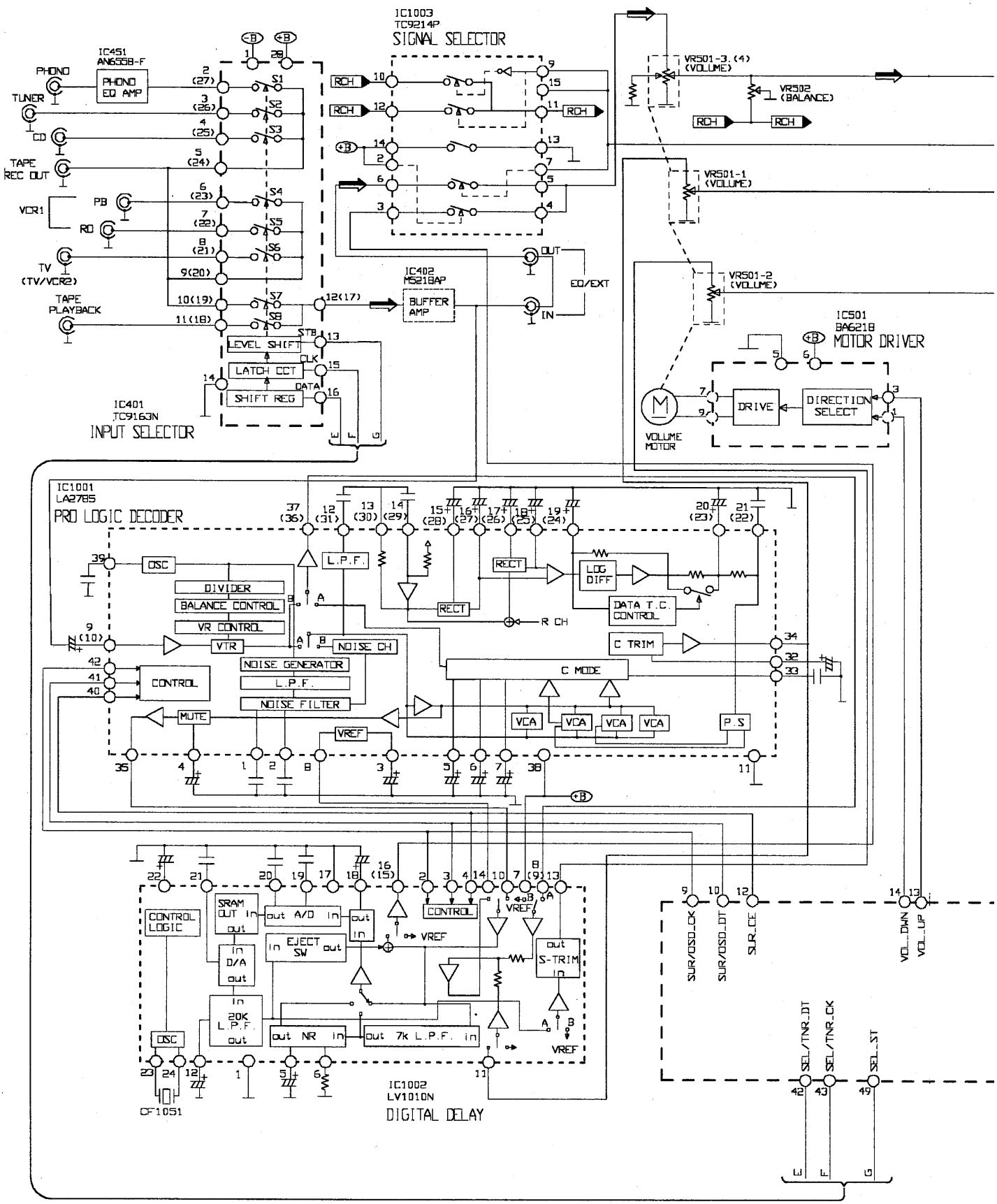
CIRCUIT BLOCKS OF THE MAIN UNIT

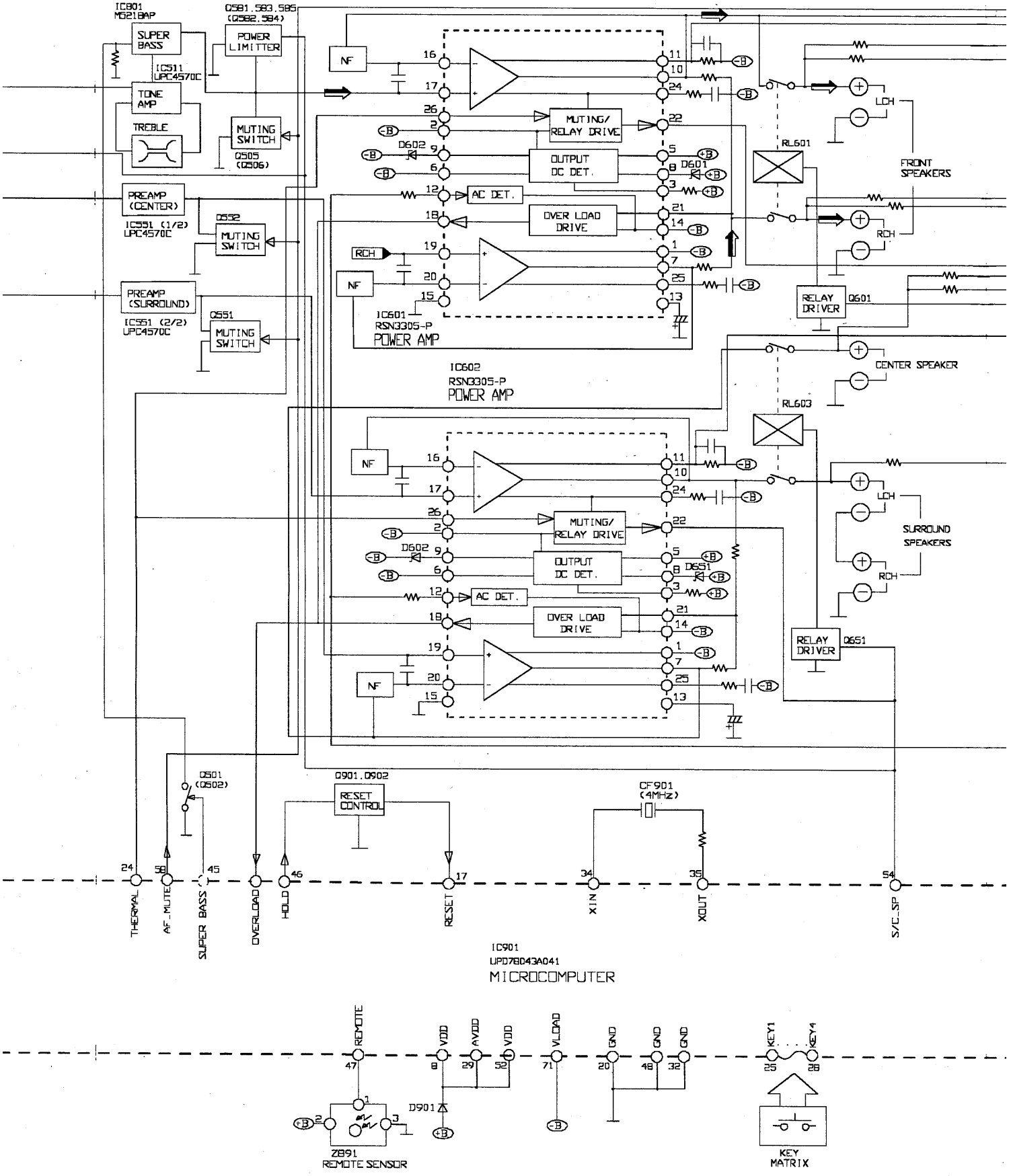


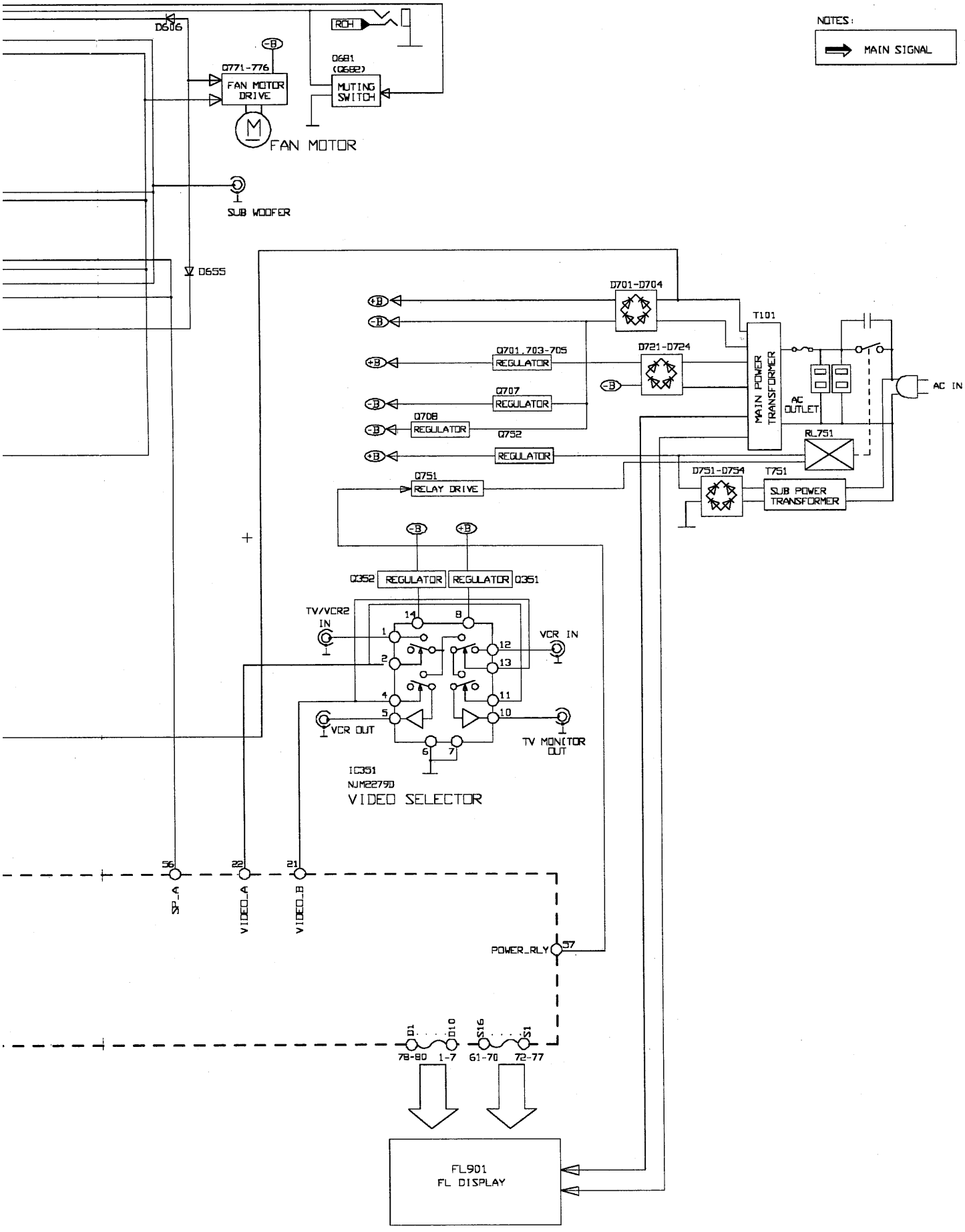
■ OVERLOAD DETECTION FUNCTION

The HIC protection circuit functions if any cord at a speaker terminal is short-circuited or if the unit overheats because of improper operation. At the same time, "OVERLOAD" scrolls across the FL display.
In this state, all keys remain in operative; if any key is pressed, "SWITCH OFF POWER" scrolls across the FL display.
If an overload occurs, immediately power off the unit and check the speaker connection, venting holes and cooling fans. After fixing any faults, power on the unit again and check for proper operation.
If no defects are found, or if the unit remains overload after it is power on again, check the circuit for faults.

■ Block Diagram




IC801
M5218AP
SUPER BASS
TONE AMP
TREBLE
IC511
UPC4570C
Q581,583,585
(Q582,584)
POWER LIMITTER
MUTING SWITCH
Q505
(Q506)
PREAMP (CENTER)
IC551 (1/2)
UPC4570C
Q552
MUTING SWITCH
PREAMP (SURROUND)
IC551 (2/2)
UPC4570C
Q551
MUTING SWITCH
NF
AC DET.
OVER LOAD DRIVE
MUTING/ RELAY DRIVE
OUTPUT DC DET.
D602
D601
RCH
IC601
RSN3305-P
POWER AMP
IC602
RSN3305-P
POWER AMP
RL601
RL603
RELAY DRIVER
Q601
Q651
D651
LCH
RCH
FRONT SPEAKERS
CENTER SPEAKER
SURROUND SPEAKERS
Q501
(Q502)
D901,D902
RESET CONTROL
CF901
(4MHz)
THERMAL
AF_MUTE
SUPER BASS
OVERLOAD
HOLD
RESET
XIN
XOUT
S/C_SP
IC901
UPD78043A041
MICROCOMPUTER
REMOTE
VDD
AVDD
VDD
VLOAD
GND
GND
GND
KEY1
KEY4
D901
Z891
REMOTE SENSOR
KEY MATRIX


NOTES:
MAIN SIGNAL
D606
RCH
Q681
(Q682)
MUTING SWITCH
Q771-776
FAN MOTOR DRIVE
FAN MOTOR
SUB WOOFER
D655
D701-D704
Q701,703-705
REGULATOR
Q707
REGULATOR
Q708
REGULATOR
Q752
REGULATOR
Q751
RELAY DRIVE
D721-D724
T101
MAIN POWER TRANSFORMER
AC OUTLET
AC IN
RL751
D751-D754
T751
SUB POWER TRANSFORMER
Q352
REGULATOR
REGULATOR
Q351
TV/VCR2 IN
VCR IN
VCR OUT
TV MONITOR OUT
IC351
NJM2279D
VIDEO SELECTOR
SP_A
VIDEO_A
VIDEO_B
POWER_RLY
78-80
1-7
61-70
72-77
FL901
FL DISPLAY

■ Terminal Functions Of ICs

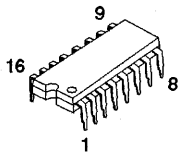
• IC901 (UPD78043A041) System Microprocessor

Pin No.	Mark	I/O	Function
1~7	D4~D10	O	Digit signal of FL display
8	VDD	I	Power supply terminal
9	SUR/OSD_CK	O	Serial clock signal
10	SUR/OSD_DT	O	Serial data signal
11	VIDEO_DET	–	Not used
12	SUR_CE	O	Chip enable signal
13	VOL_UP	O	Rotate control terminal of
14	VOL_DWN	O	volume motor
15	LOUDNESS	–	Not used
16	FM_STEREO	I	Stereo signal detect terminal
17	RESET	I	Reset detect terminal
18	SD	I	Received signal detect terminal
19	OSD_ST	–	Not used
20	GND	–	GND terminal
21	VIDEO_B	O	Video selector control terminal
22	VIDEO_A	O	
23	IF_DATA	I	Serial data signal
24	THERMAL	O	Mute control terminal
25~28	KEY1~KEY4	I	Key matrix detect terminal
29	AVDD	I	Power supply terminal
30	AVREF	I	Power supply terminal
31	OVERLOAD	I	Over load detect terminal
32	XT2	–	Not used
33	GND	–	GND terminal
34	XIN	I	Crystal oscillator terminal
35	XOUT	O	(4MHz)

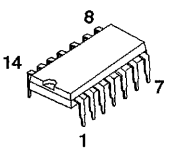
Pin No.	Mark	I/O	Function
36~40	SFC1~SFC5	–	Not used
41	TNR_CE	O	Chip enable signal
42	SEL/TNR_DT	O	Serial data signal
43	SEL/TNR_CK	O	Serial clock signal
44	TV/VCR2	–	Not used
45	ADAPTOR	–	Not used
46	HOLD	I	Hold signal input terminal
47	REMOTE	I	Remote control terminal
48	GND	–	GND terminal
49	SEL_ST	O	Level shift control terminal
50	HELP_LED	O	LED drive signal(HELP)
51	STANDBY_LED	–	Not used
52	VDD	I	Power supply terminal
53	REC_MUTE	–	Not used
54	S/C_SP	O	Surround and speaker select control terminal
55	SP_B	–	Not used
56	SP_A	O	Speaker select control terminal
57	POWER_RLY	O	Relay control terminal
58	AF_MUTE	O	Muting control terminal
59	LIMITTER	–	Not used
60	INIT_IN	–	Not used, connect to resistor
61~70	S16~S7	O	Segment signal of FL display
71	VLOAD	I	Power supply terminal
72~77	S6~S1	O	Segment signal of FL display
78~80	D1~D3	O	Digit signal of FL display

■ Terminal Guide of ICs, Transistors and Diodes

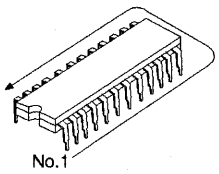
TC9214P



NJM2279D



TC9163N 28Pin



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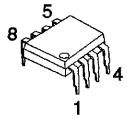

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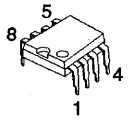
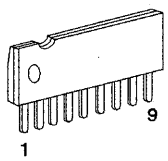


BA6218



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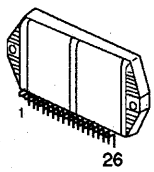
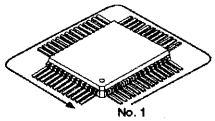
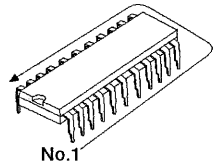


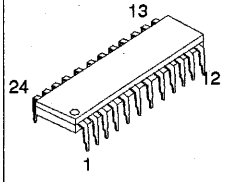
UPD78043A041
80 Pin



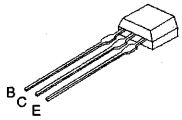
LA2785



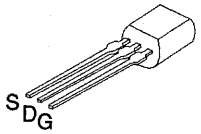
LV1010N

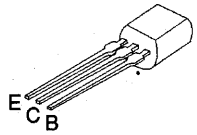


RVTDTC144YST
2SA933SSTA



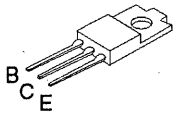
2SK301QTA
2SK301RSTA

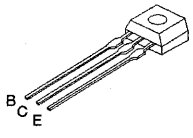




2SC3940AQSTA
2SB621ARTA
2SD592ARTA
2SA992E

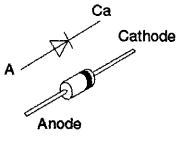
2SB1548PQAU
2SD2374PQAU

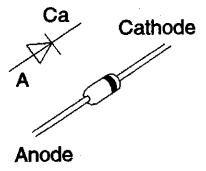
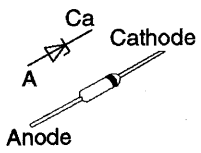




2SA1309ARTA
2SC3311ARTA
2SD1915FTA
UN421FTA
UN4119

1N5402BM21
SB360L6508



	RVD1SS133TA 1SR35200TB MA700ATA 1SS291TA MA167ATA
	MTZJ10CTA MTZJ3R9ATA MTZJ4R7BTA MTZJ6R2BTA MTZJ6R8BTA MTZJ5R6BTA MTZJ3R0ATA MTZJ30DTA MTZJ24DTA MTZJ15CTA MTZJ8R2BTA

■ Schematic Diagram

(All schematic diagrams may be modified at any time with the development of new technology)

Note :

- **S947** : Phono select switch
- **S949** : Power switch
- **S950** : Test signal ON/OFF switch
- **S952** : Center level increase switch
- **S953** : Surround level decrease switch
- **S954** : Center level decrease switch
- **S956** : Surround level increase switch
- **S960** : Tuner select switch
- **S961** : CD select switch
- **S962** : Tape monitor select switch
- **S963** : TV/VCR2 select switch
- **S964** : VCR1 select switch
- **S980** : Speakers on/off switch
- **S982** : Super Bass select switch
- **S983** : Dolby Pro Logic/SFC off on switch
- **S984** : Dolby Pro Logic mode select switch
- **S985** : Sound Field Control mode select switch
- **S986** : Center mode select switch
- **VR501-1 ~ VR501-4** : Volume control
- **VR502** : Balance control
- **VR511-1 ~ VR511-2** : Bass control
- **VR512-1 ~ VR512-2** : Treble control

• Signal line

: +B line

: Main signal line

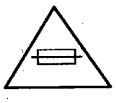
: –B line

•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.

•Importance 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 components, be sure to use only manufacturer's specified parts shown in the parts list.

Caution !
IC, LSI and VLSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.
•Cover the parts boxes made of plastics with aluminium foil.
•Ground the soldering iron.
•Do not touch the pins of IC, LSI or VLSI with fingers directly.
•Put a conductive mat on the work table.

CAUTION : FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE **F1 7.0A 125V FUSE.**



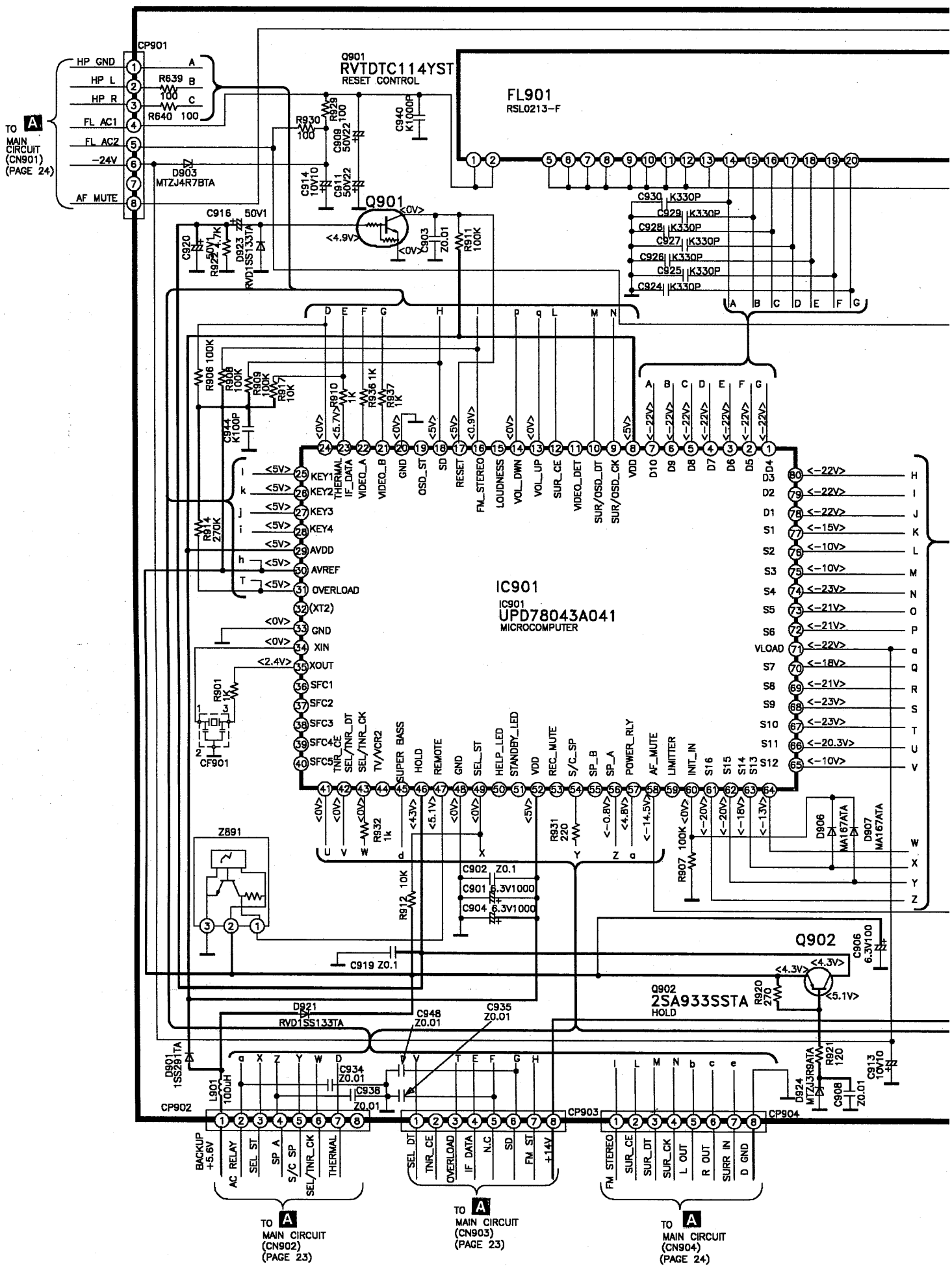
RISK OF FIRE-REPLACE FUSE AS MARKED.

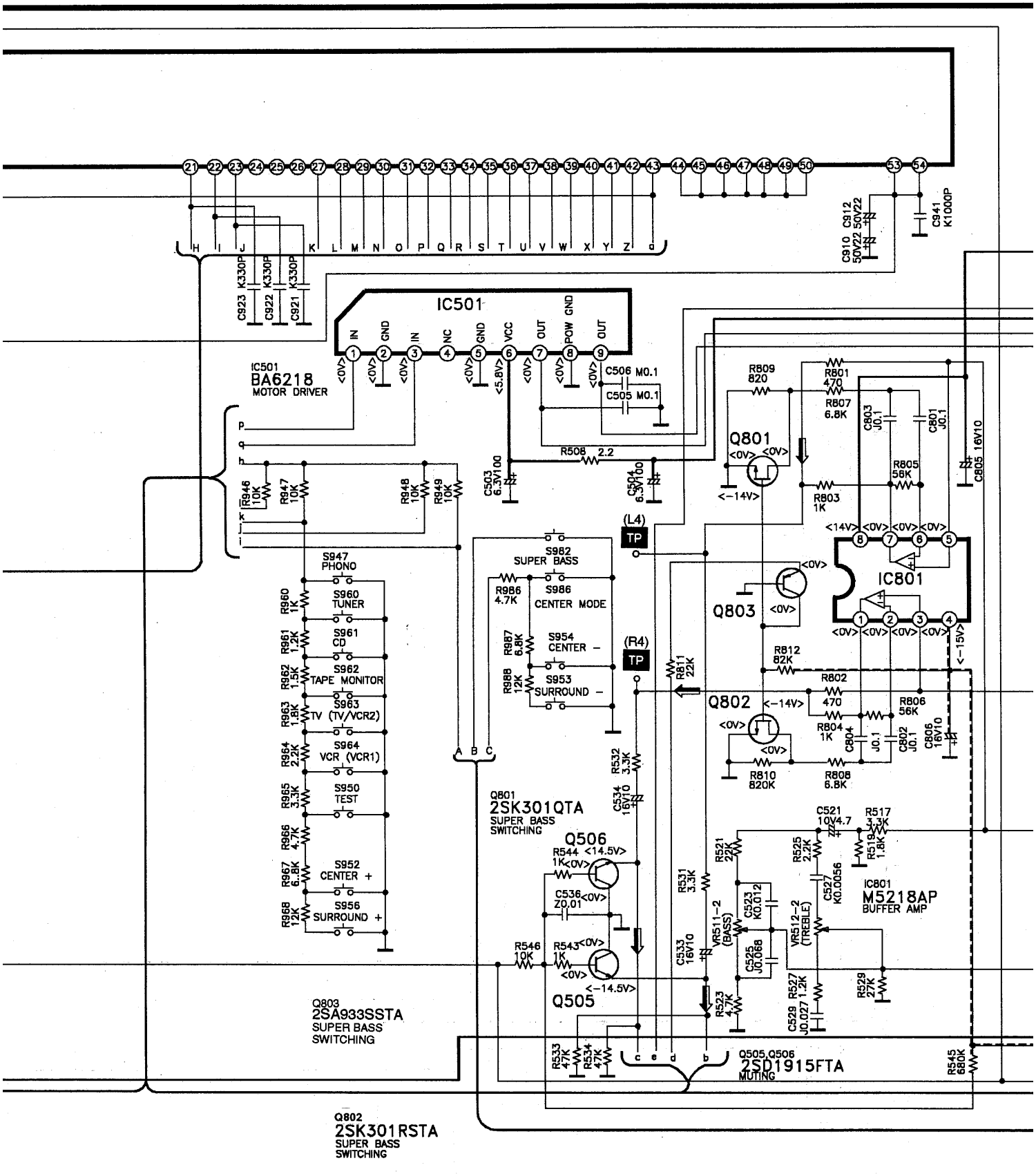
FUSE CAUTION

These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire harzard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

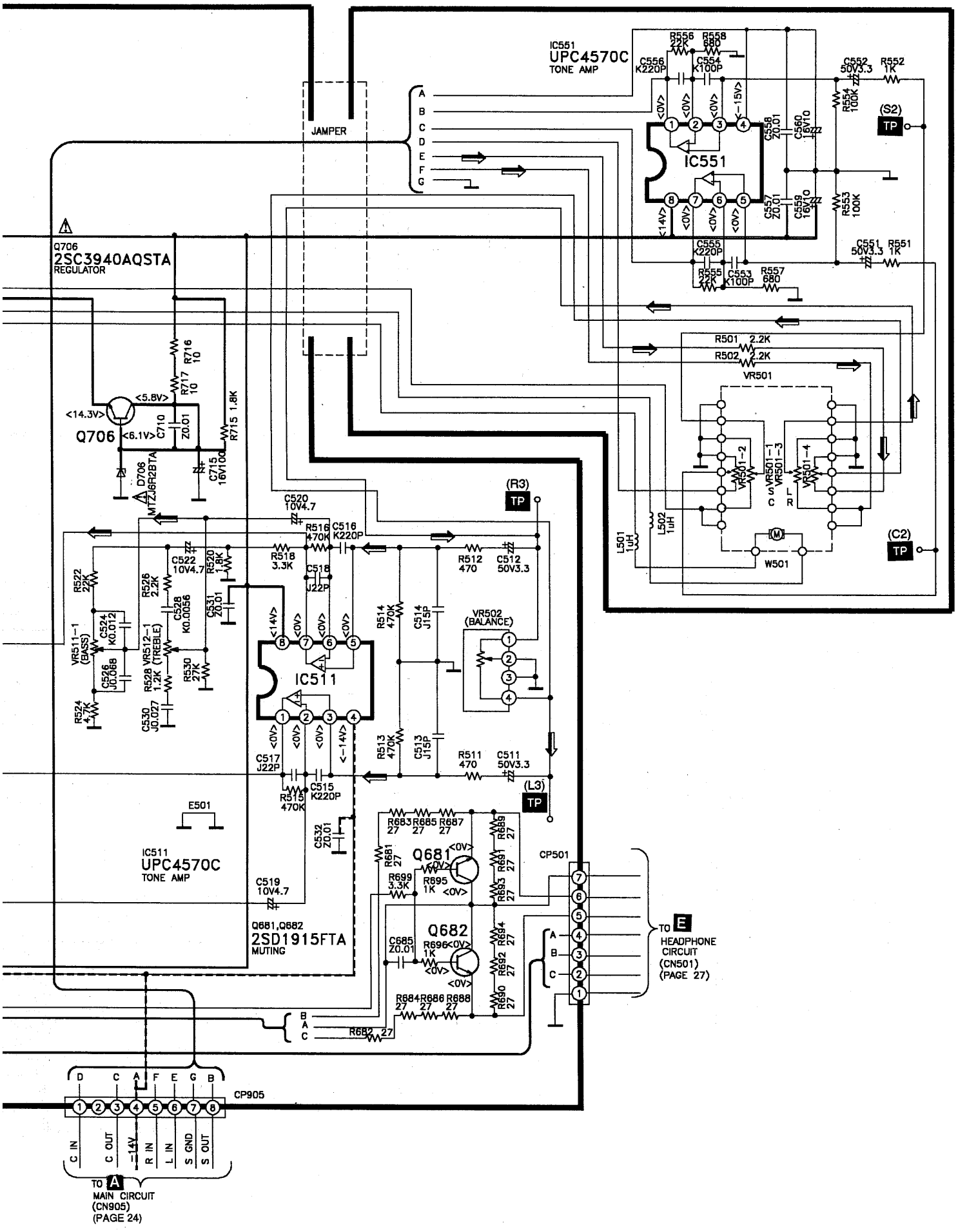
Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là qù le présent symbole est apposé.

B PANEL CIRCUIT

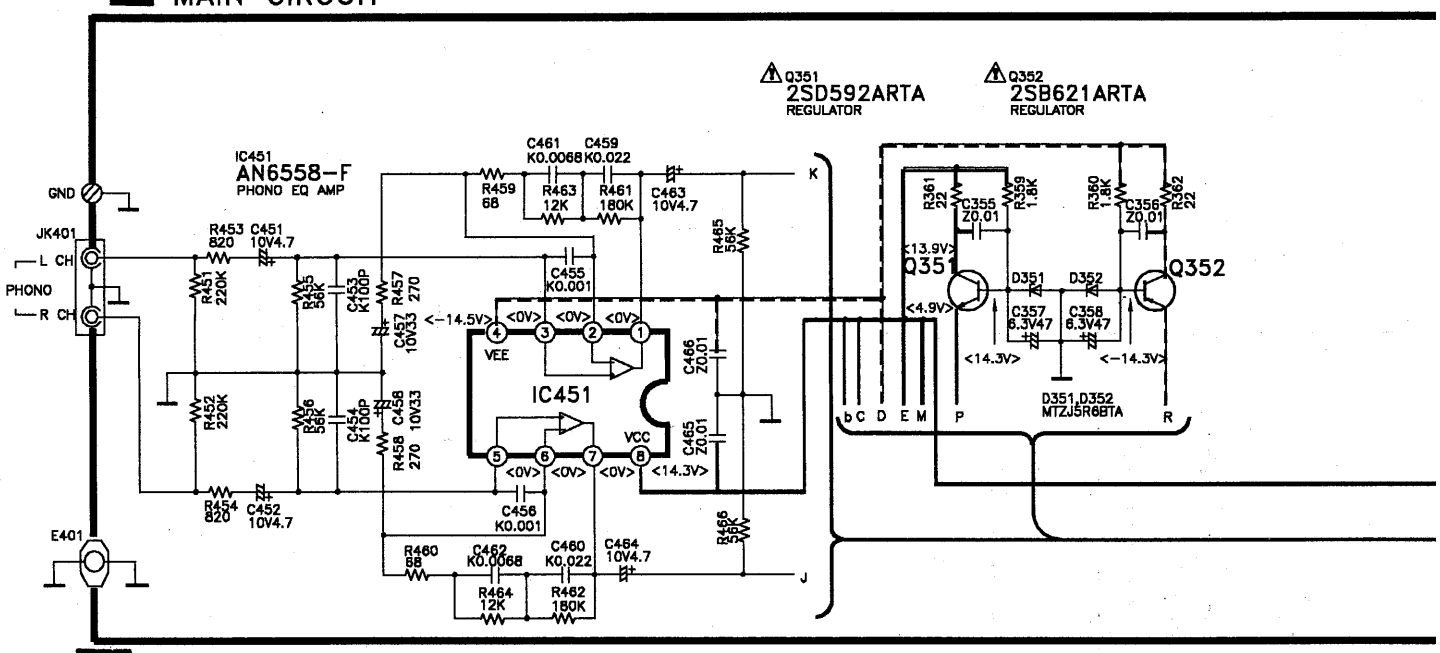



IC501
IC501
BA6218
MOTOR DRIVER
IN
GND
IN
NC
GND
VCC
OUT
POW GND
OUT
C506 M0.1
C505 M0.1
R508 2.2
C503 6.3V100
C504 6.3V100
R809 820
R801 470
R807 6.8K
Q801
R803 1K
R805 56K
C803 J0.1
C801 J0.1
C805 16V10
R946 10K
R947 10K
R948 10K
R949 10K
S947 PHONO
S960 TUNER
S961 CD
S962 TAPE MONITOR
S963 TV (TV/VCR2)
S964 VCR (VCR1)
S950 TEST
S952 CENTER +
S956 SURROUND +
S982 SUPER BASS
S986 CENTER MODE
S954 CENTER –
S953 SURROUND –
R986 4.7K
R987 6.8K
R988 12K
(L4)
TP
(R4)
TP
IC801
Q803
R812 82K
R802 470
Q802
R804 1K
R806 56K
R808 6.8K
R810 820K
C804 J0.1
C802 J0.1
C806 16V10
R811 22K
R532 3.3K
C534 16V10
Q801
2SK301QTA
SUPER BASS
SWITCHING
Q506
R544 1K
C536 Z0.01
R546 10K
R543 1K
Q505
C521 10V4.7
R517 3.3K
R519 1.8K
R521 22K
R525 2.2K
C527 K0.0056
IC801
M5218AP
BUFFER AMP
R531 3.3K
VR511-2 (BASS)
C523 K0.012
VR512-2 (TREBLE)
C525 J0.068
C533 16V10
R523 4.7K
C529 J0.027
R527 1.2K
R529 27K
R533 47K
R534 47K
Q505,Q506
2SD1915FTA
MUTING
R545 680K
Q803
2SA933SSTA
SUPER BASS
SWITCHING
Q802
2SK301RSTA
SUPER BASS
SWITCHING

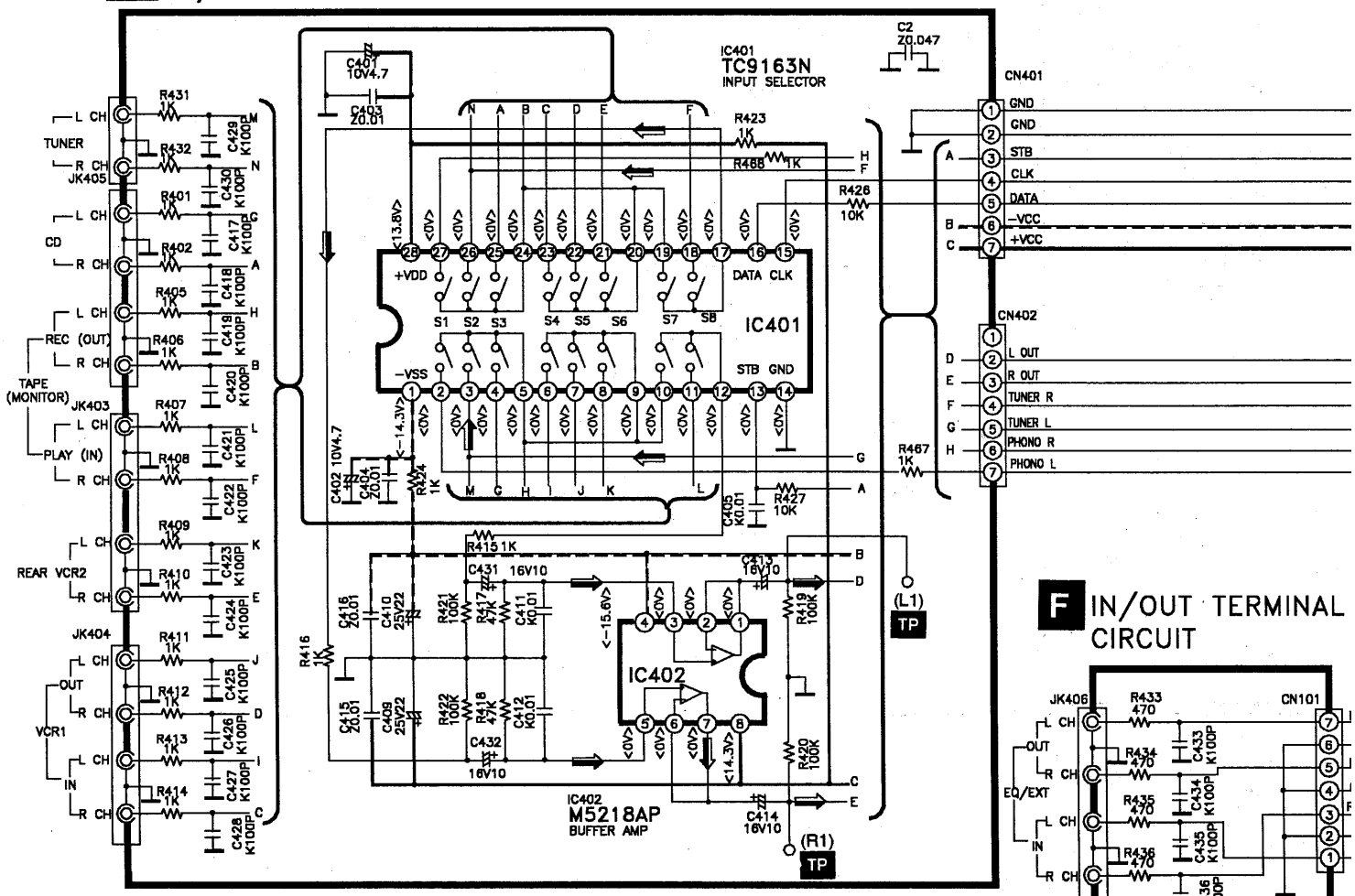
C MOTOR CIRCUIT



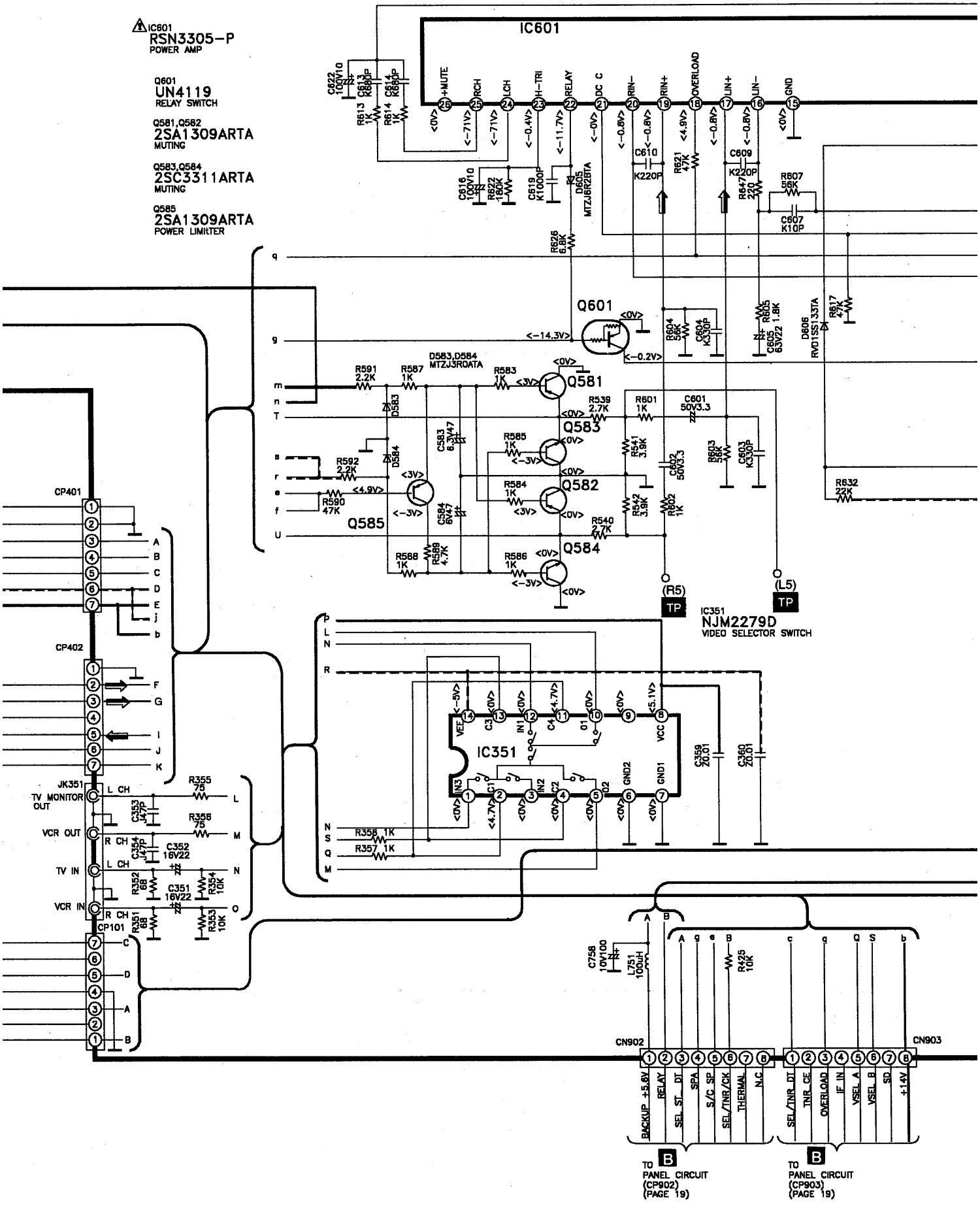
A MAIN CIRCUIT

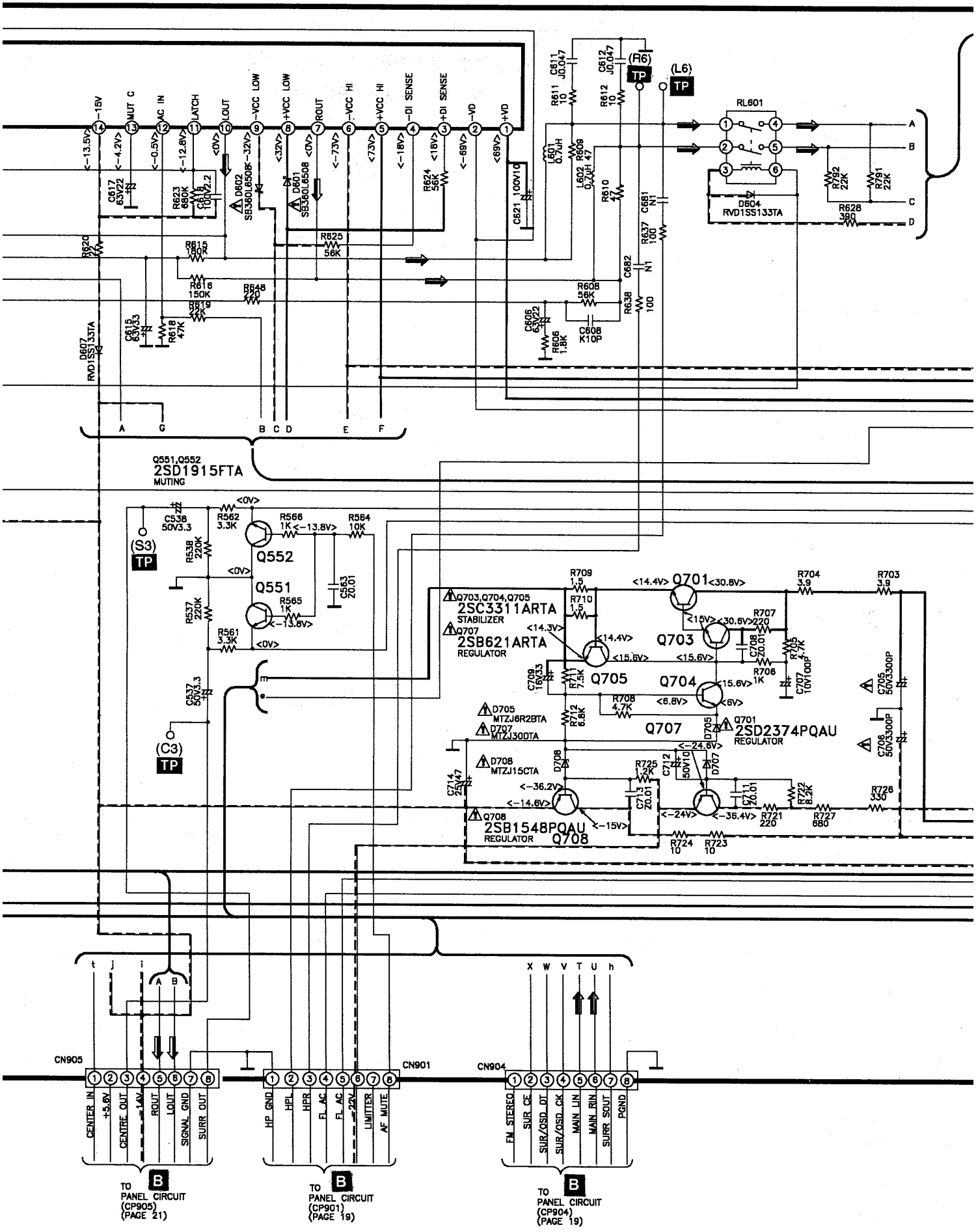


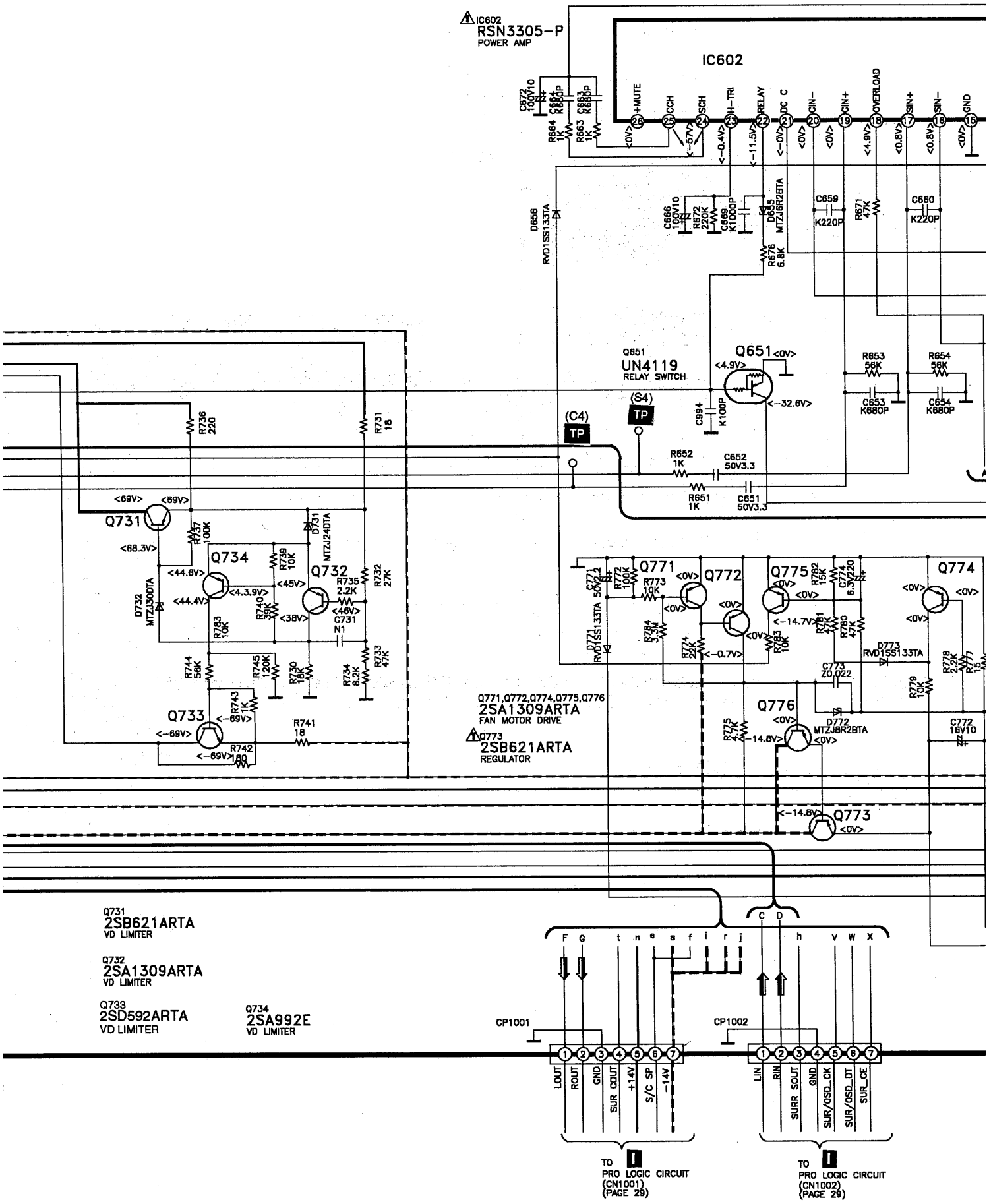
H IN/OUT TERMINAL CIRCUIT

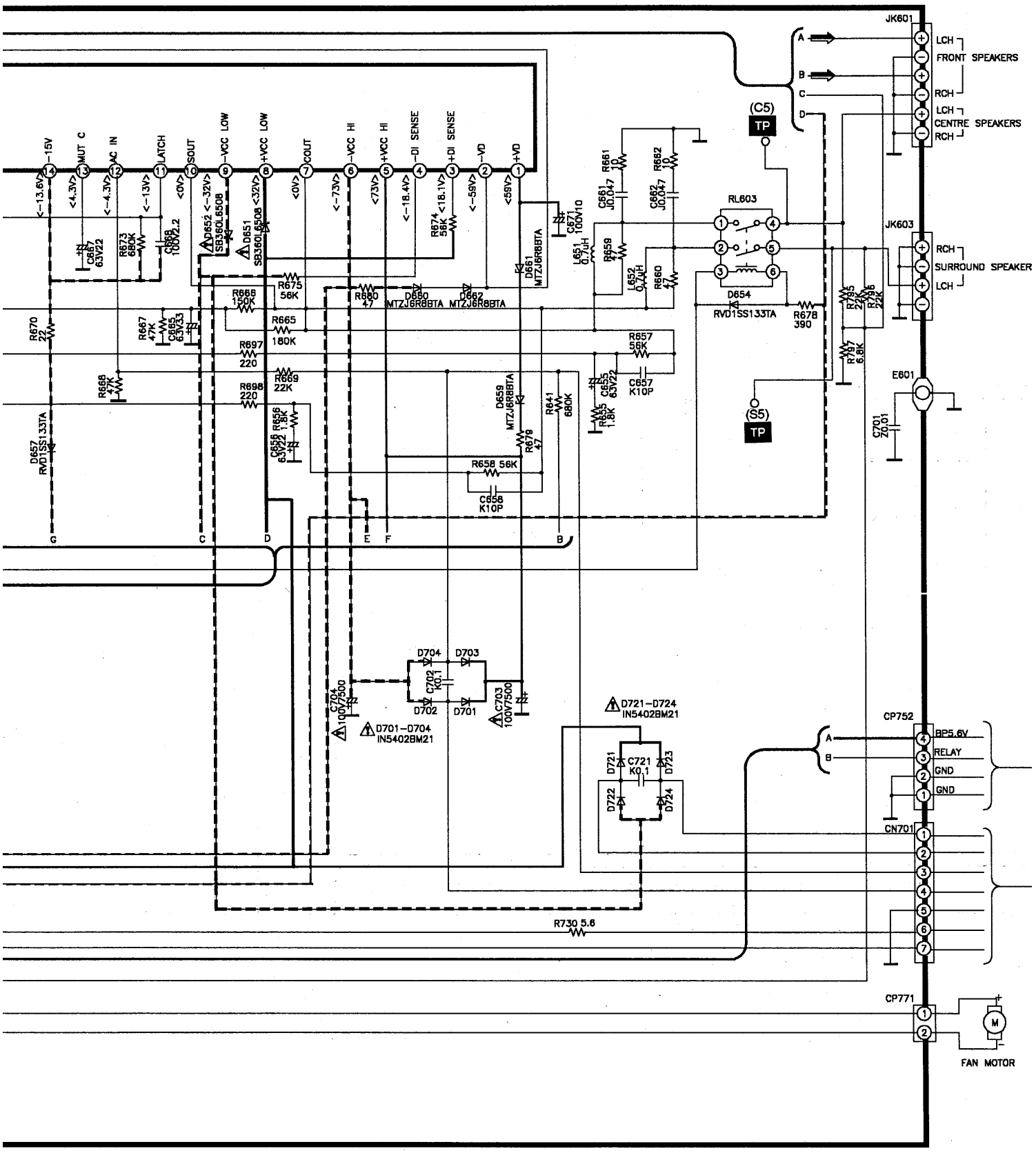


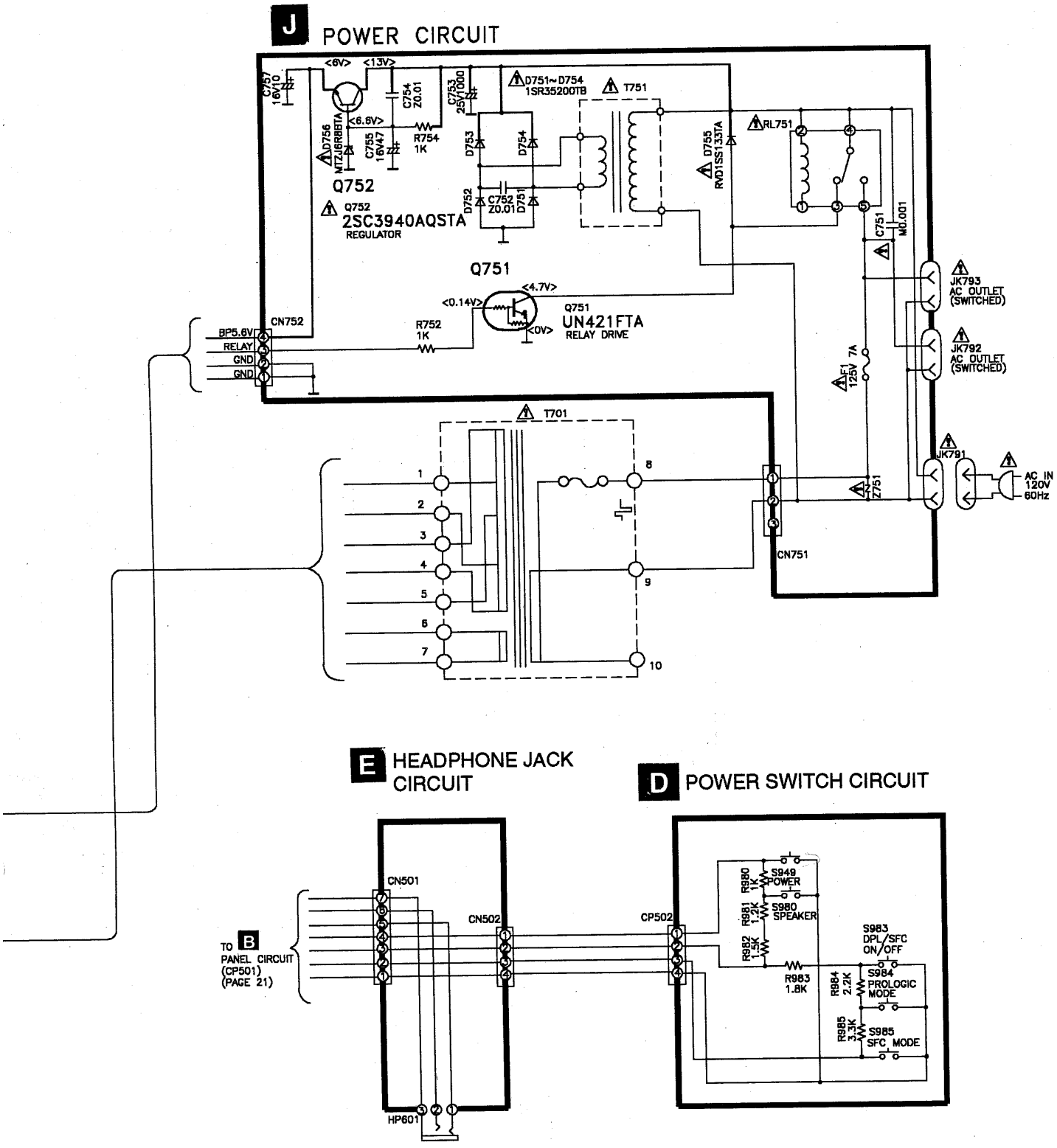
F IN/OUT TERMINAL CIRCUIT


IC601
RSN3305-P
POWER AMP
Q601
UN4119
RELAY SWITCH
Q581,Q582
2SA1309ARTA
MUTING
Q583,Q584
2SC3311ARTA
MUTING
Q585
2SA1309ARTA
POWER LIMITER
+MUTE
RCH
LCH
H-TRI
RELAY
DC C
RIN-
RIN+
OVERLOAD
LIN+
LIN-
GND
Q601
Q581
Q583
Q582
Q584
Q585
D583,D584
MTZJ3R0ATA
D605
MTZJ6R2BTA
D606
RVD1SS133TA
CP401
CP402
CP101
JK351
TV MONITOR OUT
VCR OUT
TV IN
VCR IN
L CH
R CH
IC351
NJM2279D
VIDEO SELECTOR SWITCH
VEE
VCC
GND1
GND2
IN1
IN2
IN3
(R5)
(L5)
TP
CN902
CN903
BACKUP +5.6V
RELAY
SEL_ST_DT
SPA
S/C SP
SEL/TNR/CK
THERMAL
N.C
SEL/TNR_DT
TNR_CE
OVERLOAD
IF IN
VSEL A
VSEL B
SD
+14V
TO B PANEL CIRCUIT (CP902) (PAGE 19)
TO B PANEL CIRCUIT (CP903) (PAGE 19)

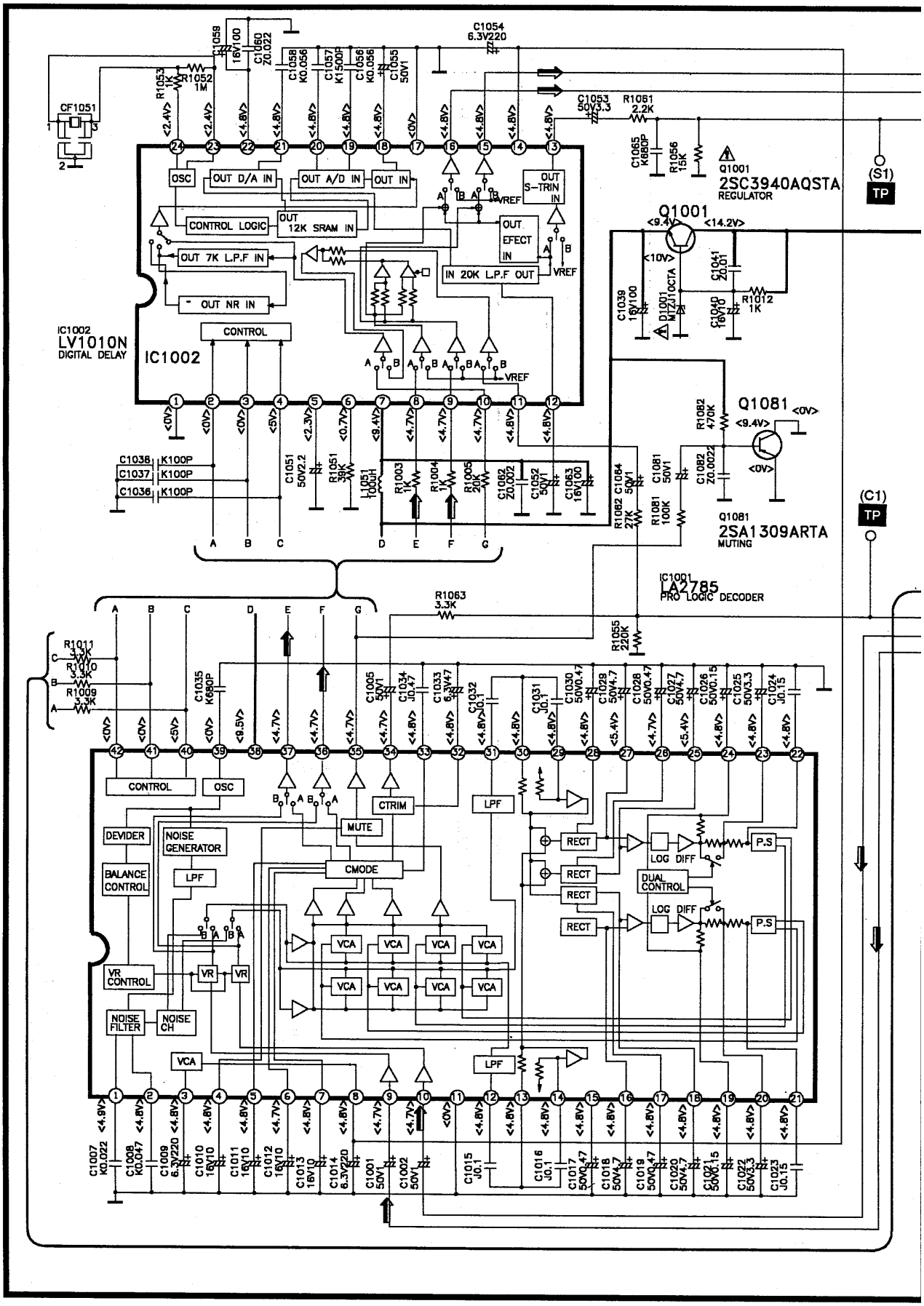

-15V
MUT C
AC IN
LATCH
LOUT
-VCC LOW
+VCC LOW
ROUT
-VCC HI
+VCC HI
-DI SENSE
+DI SENSE
-VD
+VD
RL601
D604 RVD1SS133TA
D607 RVD1SS133TA
D602 SB360L6508
D601 SB360L6508
Q551,Q552 2SD1915FTA MUTING
Q552
Q551
Q703,Q704,Q705 2SC3311ARTA STABILIZER
Q707 2SB621ARTA REGULATOR
Q705
Q704
Q703
Q701
Q701 2SD2374PQAU REGULATOR
Q707
Q708 2SB1548PQAU REGULATOR
Q708
D705 MTZJ6R2BTA
D707 MTZJ30DTA
D708 MTZJ15CTA
(S3) TP
(C3) TP
(R6) TP
(L6) TP
CN905
CN901
CN904
CENTER_IN
+5.6V
CENTRE_OUT
-14V
ROUT
LOUT
SIGNAL_GND
SURR_OUT
HP_GND
HPL
HPR
FL_AC
FL_AC
22V
LIMITTER
AF_MUTE
FM_STEREO
SUR_CE
SUR/OSD_DT
SUR/OSD_CK
MAIN_LIN
MAIN_RIN
SURR_SOUT
PGND
TO B PANEL CIRCUIT (CP905) (PAGE 21)
TO B PANEL CIRCUIT (CP901) (PAGE 19)
TO B PANEL CIRCUIT (CP904) (PAGE 19)

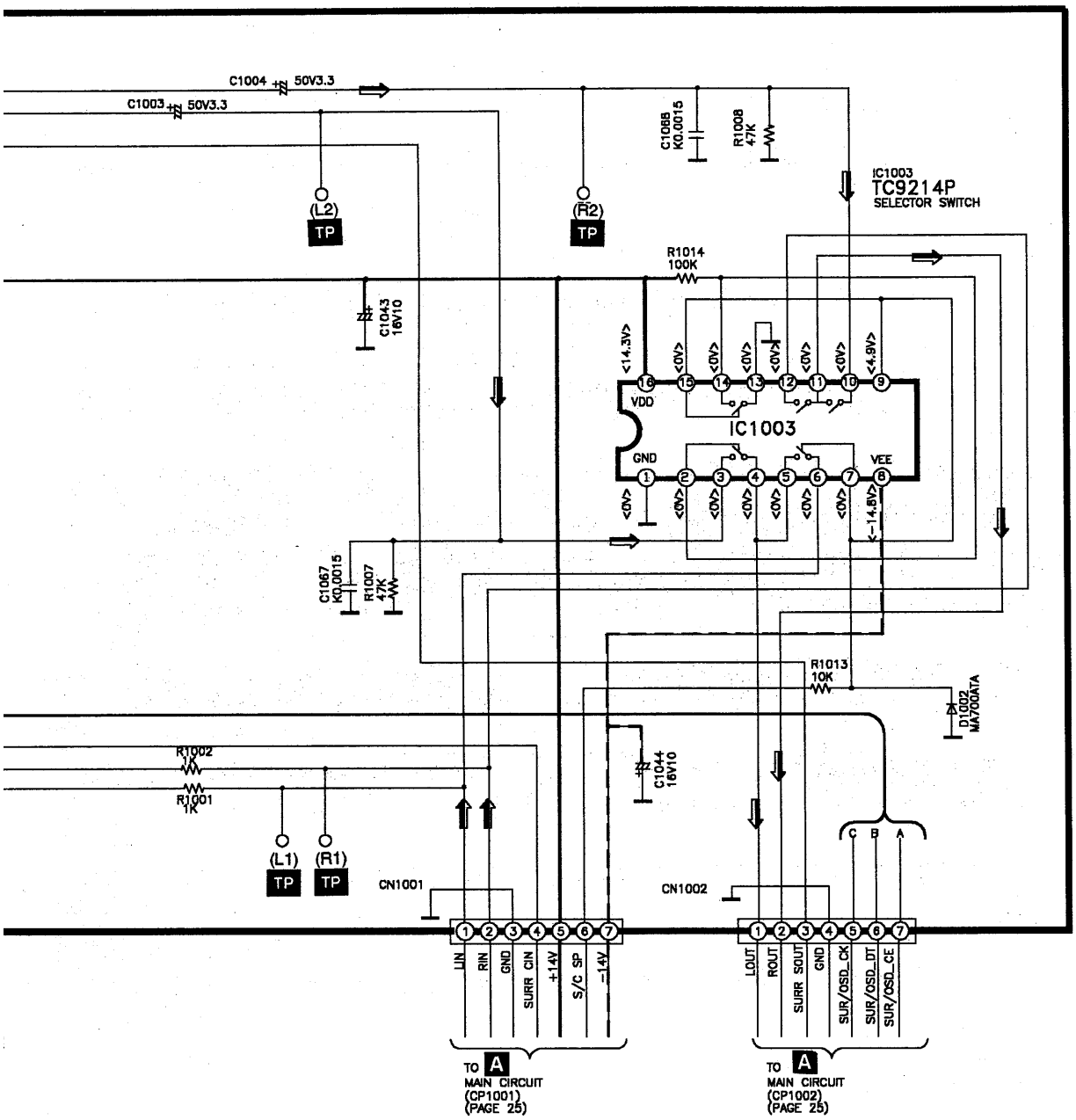

IC602
RSN3305-P
POWER AMP
IC602
Q651
UN4119
RELAY SWITCH
Q731
Q732
Q733
Q734
Q771
Q772
Q773
Q774
Q775
Q776
Q771,Q772,Q774,Q775,Q776
2SA1309ARTA
FAN MOTOR DRIVE
Q773
2SB621ARTA
REGULATOR
Q731
2SB621ARTA
VD LIMITER
Q732
2SA1309ARTA
VD LIMITER
Q733
2SD592ARTA
VD LIMITER
Q734
2SA992E
VD LIMITER
CP1001
CP1002
LOUT
ROUT
GND
SUR COUT
+14V
S/C SP
-14V
LIN
RIN
SURR SOUT
GND
SUR/OSD_CK
SUR/OSD_DT
SUR_CE
TO PRO LOGIC CIRCUIT (CN1001) (PAGE 29)
TO PRO LOGIC CIRCUIT (CN1002) (PAGE 29)


JK601
LCH
FRONT SPEAKERS
RCH
LCH
CENTRE SPEAKERS
RCH
JK603
RCH
SURROUND SPEAKER
LCH
(C5)
TP
(S5)
TP
RL603
RVD1SS133TA
E601
CP752
BP5.6V
RELAY
GND
GND
CN701
CP771
FAN MOTOR
D721–D724
IN5402BM21
D701–D704
IN5402BM21
R730 5.6
R658 56K
C658
K10P
R657
56K
C657
K10P


J POWER CIRCUIT
<6V>
<13V>
C757 16V10
C754 Z0.01
C753 25V1000
D751~D754 1SR35200TB
T751
D756 MTZJ6RBBTA
<6.6V>
C755 16V47
R754 1K
D753
D754
RL751
D755 RVD1SS133TA
Q752
Q752 2SC3940AQSTA
REGULATOR
C752 Z0.01
D752
D751
C751 M0.001
Q751
<4.7V>
<0.14V>
<0V>
Q751 UN421FTA
RELAY DRIVE
R752 1K
CN752
BP5.6V
RELAY
GND
GND
JK793 AC OUTLET (SWITCHED)
JK792 AC OUTLET (SWITCHED)
F1 125V 7A
T701
JK791
AC IN 120V 60Hz
CN751
E HEADPHONE JACK CIRCUIT
D POWER SWITCH CIRCUIT
CN501
CN502
CP502
TO B PANEL CIRCUIT (CP501) (PAGE 21)
HP601
R980 1K
S949 POWER
R981 1.2K
S980 SPEAKER
R982 1.5K
R983 1.8K
S983 DPL/SFC ON/OFF
R984 2.2K
S984 PROLOGIC MODE
R985 3.3K
S985 SFC MODE

I PRO LOGIC CIRCUIT

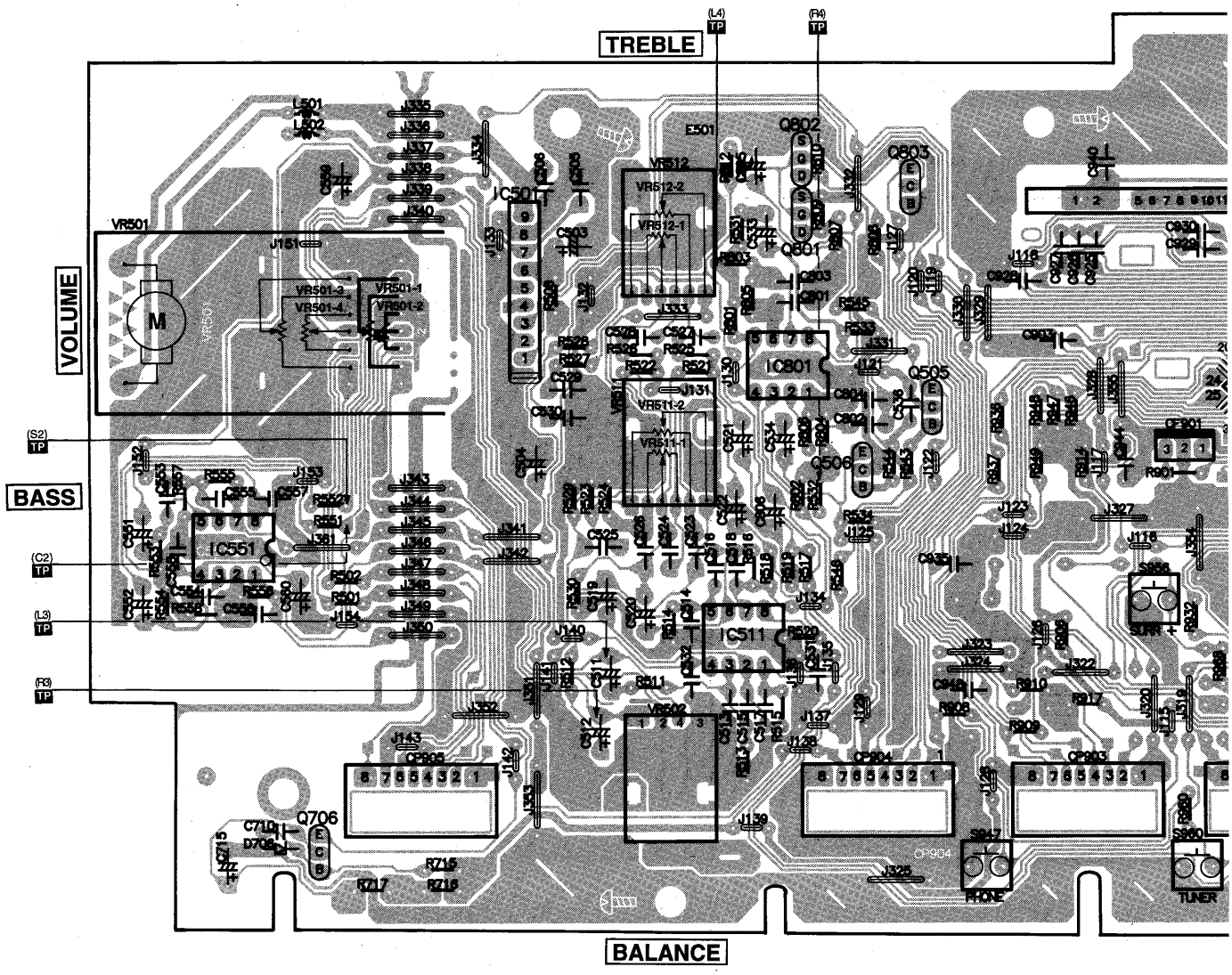



C1004 50V3.3
C1003 50V3.3
(L2) TP
(R2) TP
C1068 K0.0015
R1008 47K
IC1003
TC9214P
SELECTOR SWITCH
R1014 100K
C1043 16V10
<14.3V>
<0V>
<4.9V>
VDD
IC1003
GND
VEE
<-14.6V>
C1067 K0.0015
R1007 47K
R1013 10K
D1002 MA700ATA
R1002
R1001 1K
C1044 16V10
(L1) TP
(R1) TP
CN1001
CN1002
C B A
LIN RIN GND SURR CIN +14V S/C SP -14V
LOUT ROUT SURR SOUT GND SUR/OSD_CK SUR/OSD_DT SUR/OSD_CE
TO A MAIN CIRCUIT (CP1001) (PAGE 25)
TO A MAIN CIRCUIT (CP1002) (PAGE 25)

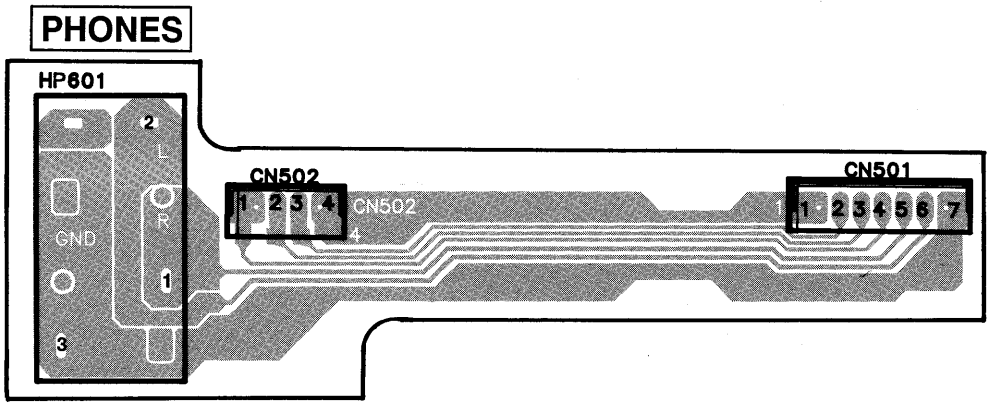
■ Printed Circuit Board

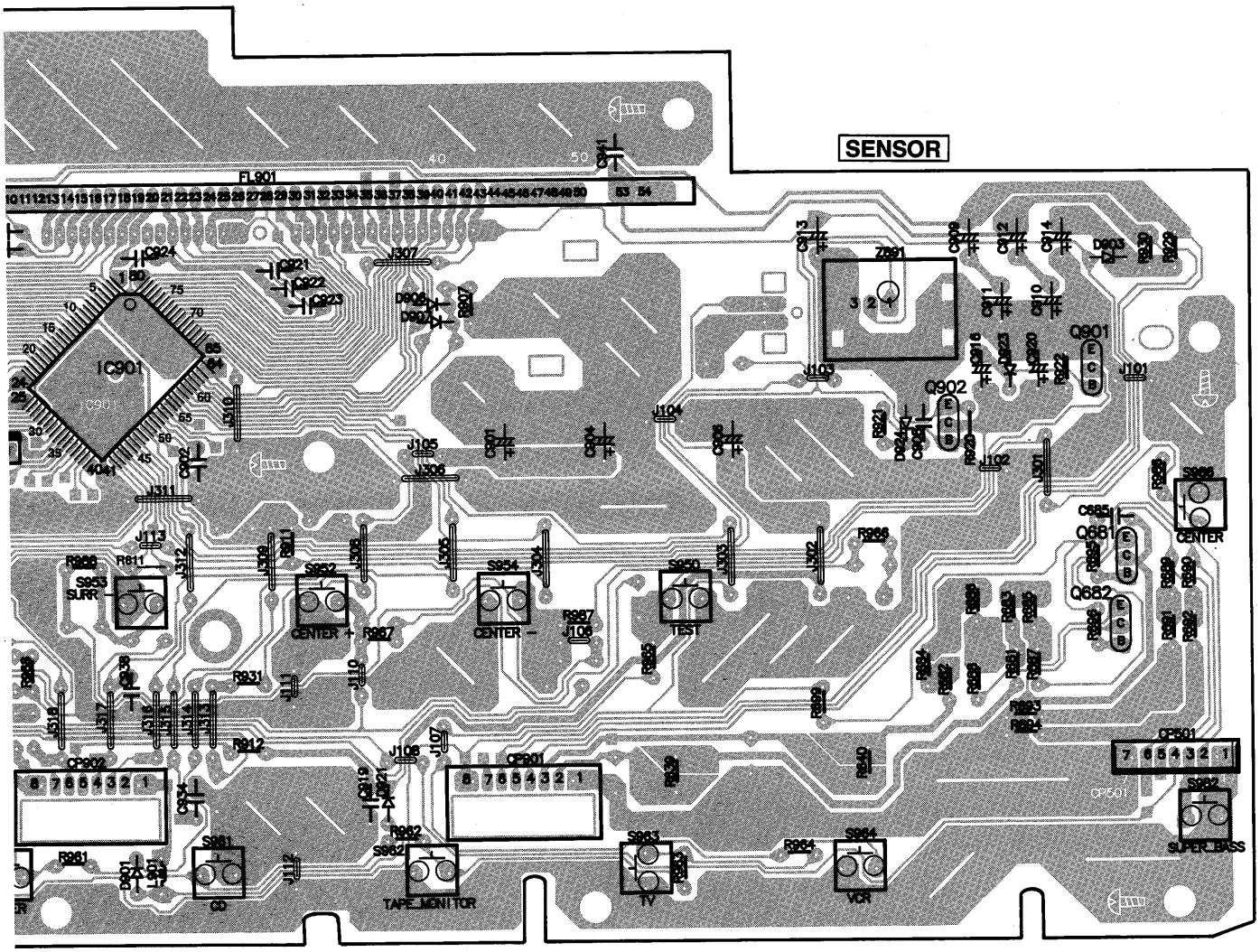
C MOTOR P.C.B. (REP2333B-S)

B PANEL P.C.B. (REP2333B-S)

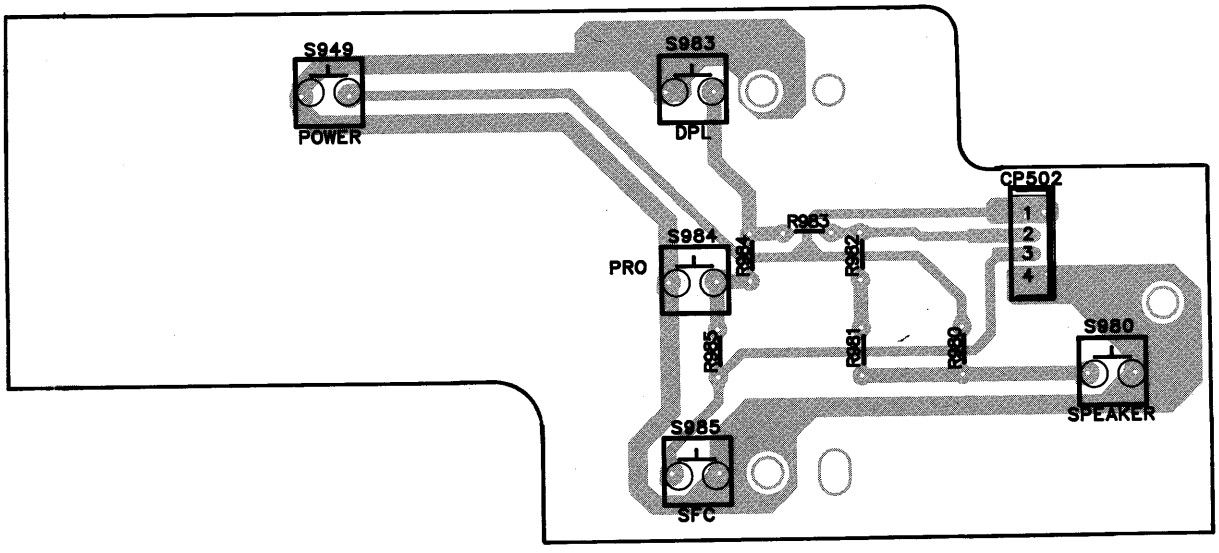


E HEADPHONE JACK P.C.B. (REP2333B-S)

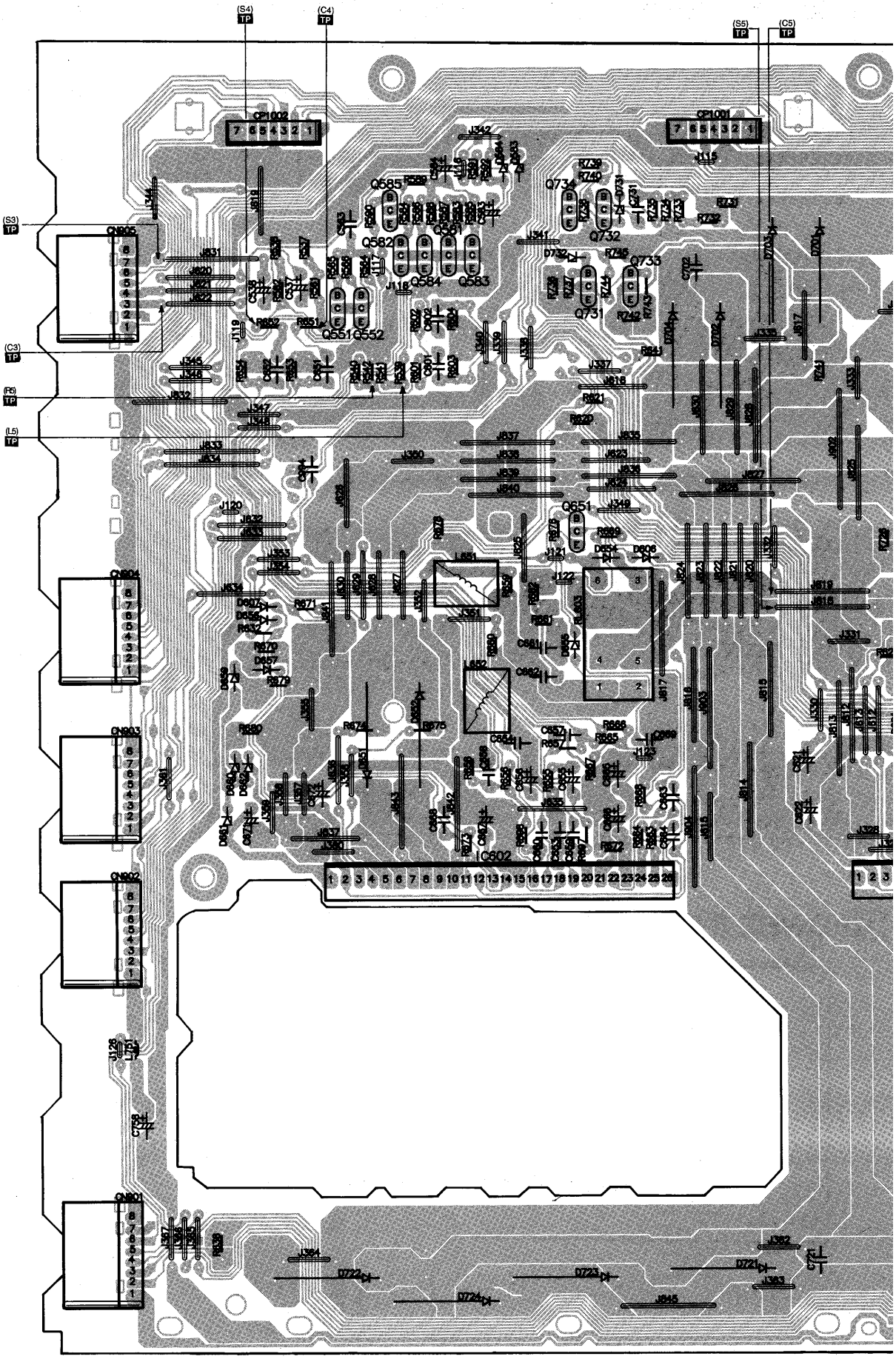


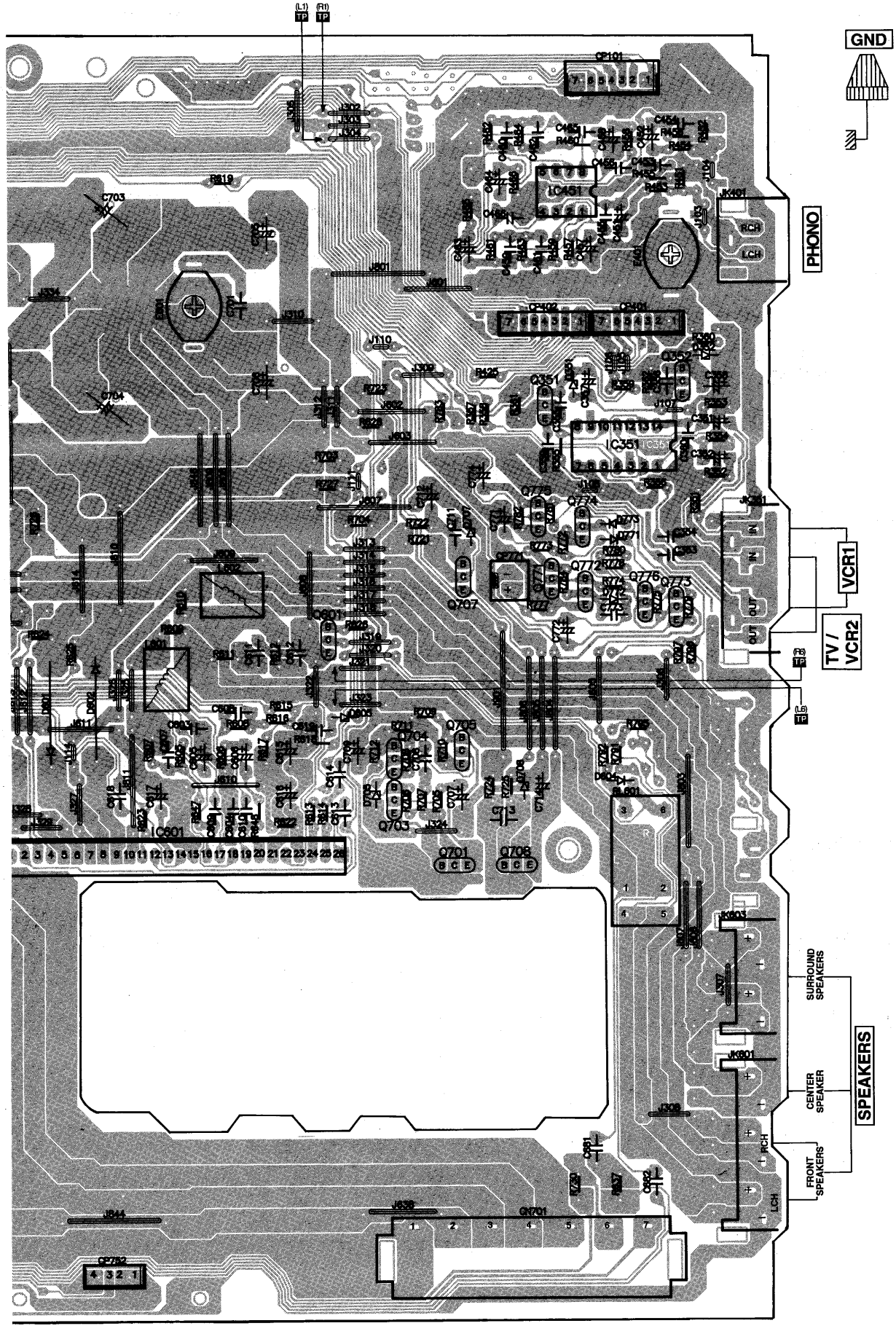


D POWER SWITCH P.C.B. (REP2333B-S)

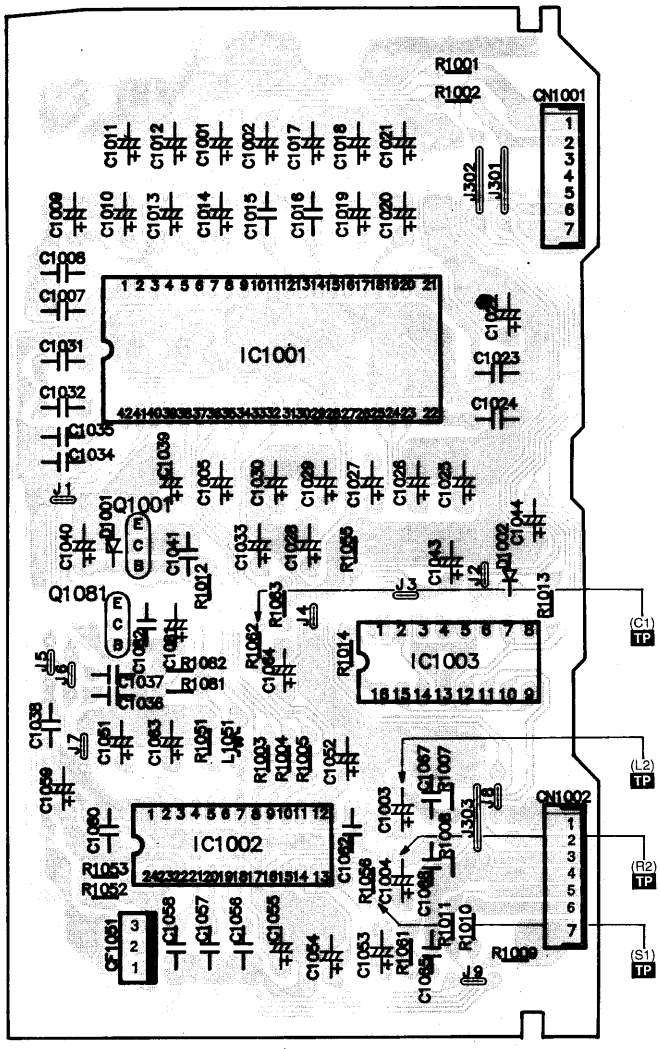


A MAIN P.C.B. (REP2332B-M)

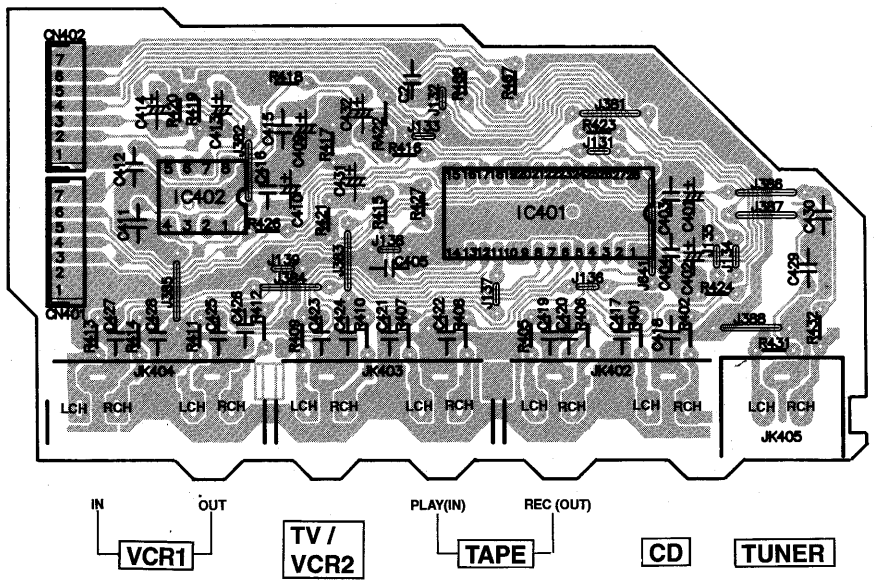



GND
PHONO
VCR1
TV / VCR2
SURROUND SPEAKERS
CENTER SPEAKER
FRONT SPEAKERS
SPEAKERS
RCH
LCH
IN
OUT
(L1)
(R1)
(L6)
(R6)
TP
CP101
CP402
CP401
CP752
JK401
JK201
JK501
JK601
JK603
IC451
IC351
IC601
Q351
Q352
Q701
Q703
Q704
Q705
Q706
Q707
Q771
Q772
Q773
Q774
Q775
Q776
GN701

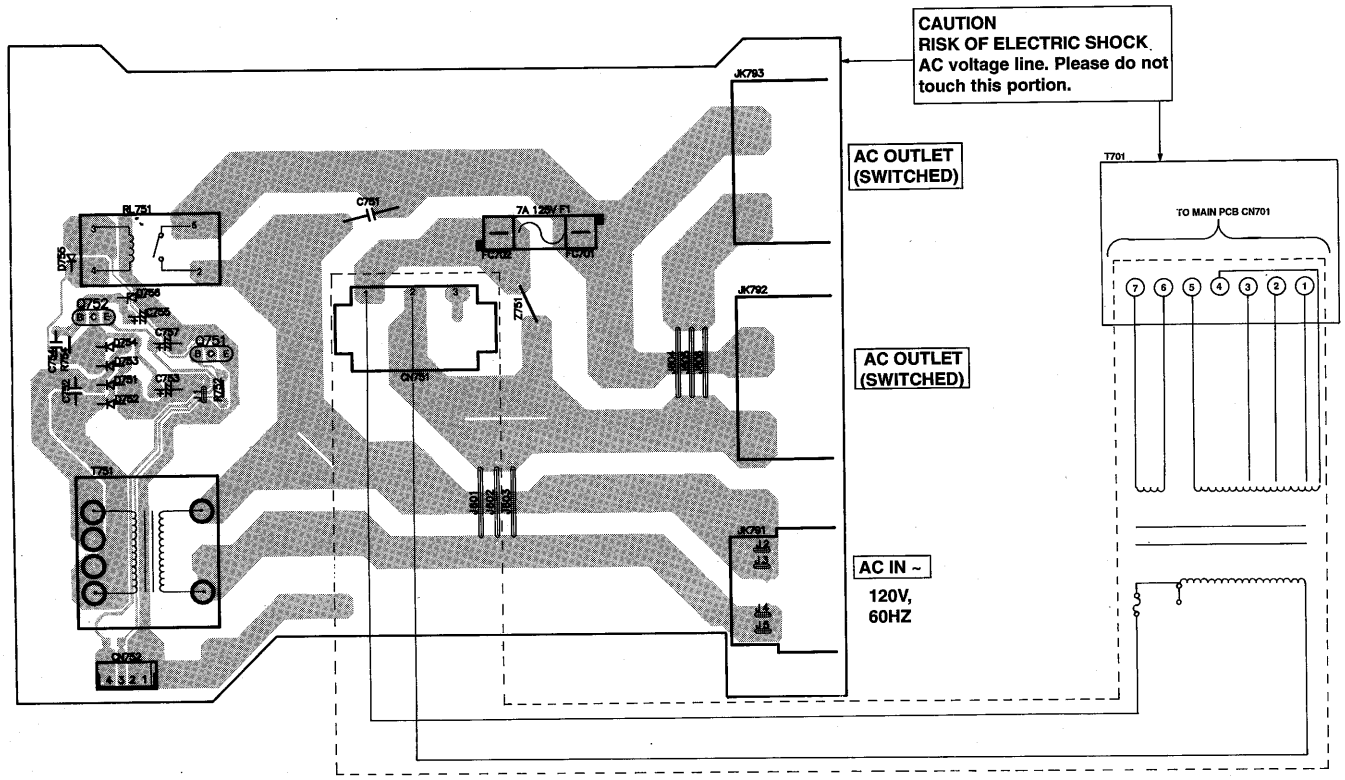
I PRO LOGIC P.C.B. (REP2241A-T)



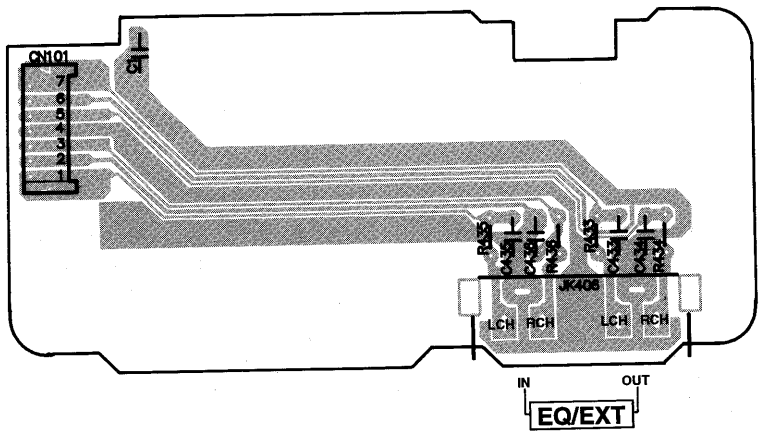
H IN/OUT TERMINAL P.C.B. (REP2332B-M)



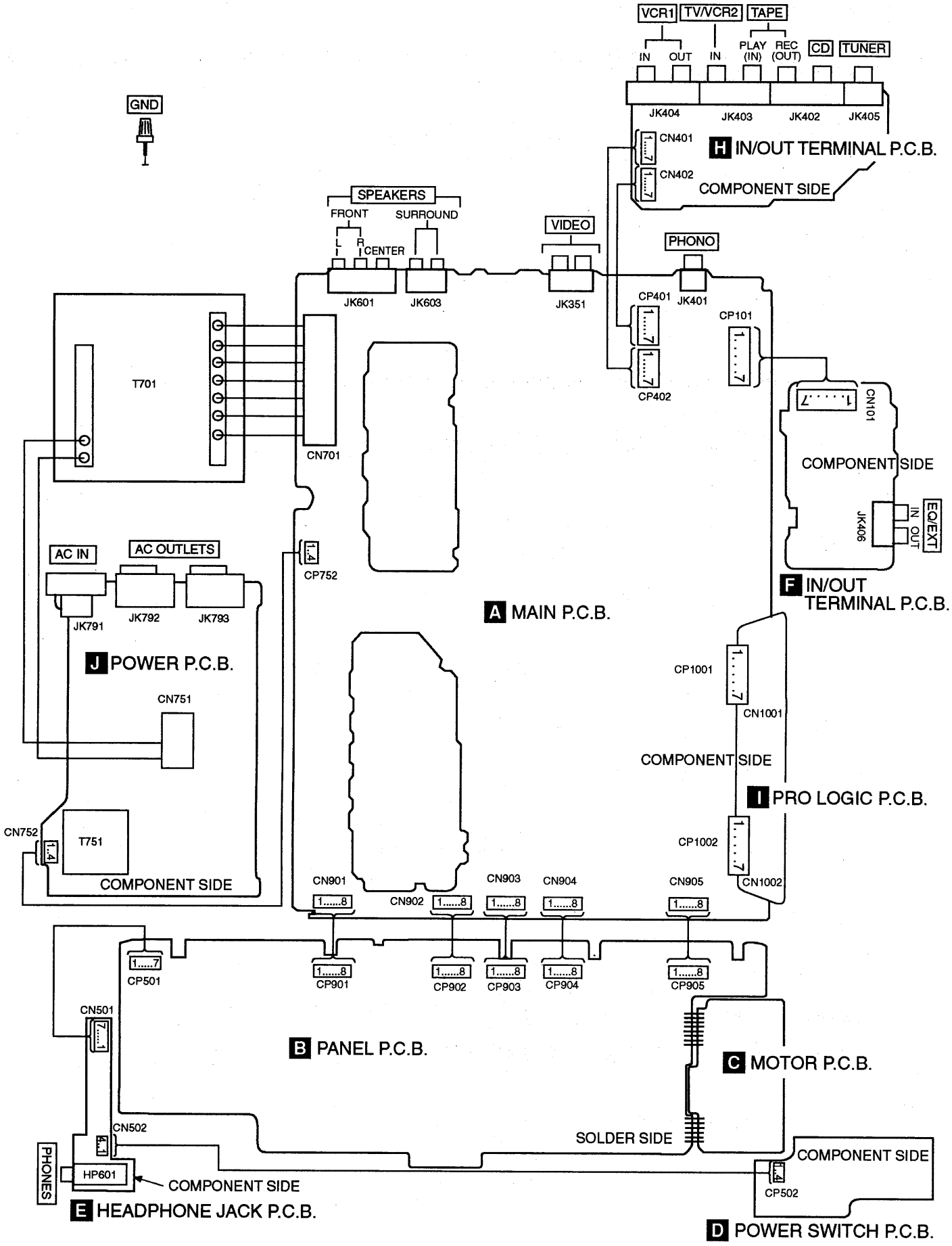
J POWER P.C.B. (REP2334B-P)



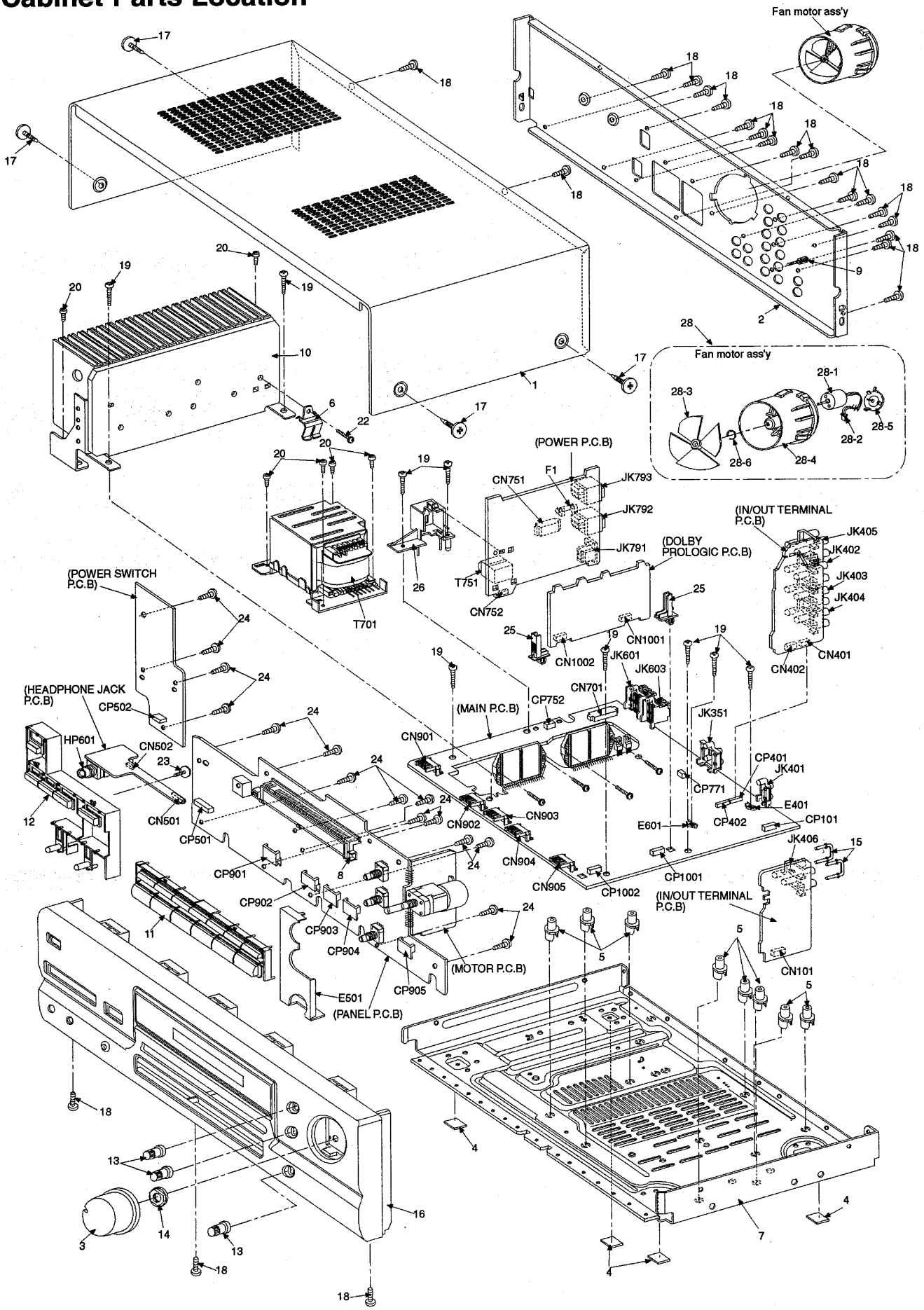
F IN/OUT TERMINAL P.C.B. (REP2332B-M)



■ Wiring Connection Diagram



■ 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 components, be sure to use only manufacturer's specified parts shown in the parts list.
* The parenthesized in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indication can be used for all areas.
* [M] in Remarks column indicates parts that are supplied by **MESA**.
* [MAV] in Remarks column indicates parts that are supplied by **MAV**.
* Remote Control Unit : Supply period for three years from terminal of production.
* The "(SF)" mark denotes the standard part.

Ref No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	RKM0325B-K	CABINET	[MAV]
2	RGR0237A-A	REAR PANEL	[MAV]
3	RGW0243B-K	VOLUME KNOB	[MAV]
4	SKL293	LEG CUSHION	
5	RKQ0089	PCB HOLDER	
6	RMC0158-S	TR FIXTURE	[M]
7	RMK0313	BOTTOM CHASSIS	[MAV]
8	RMN0372	FL HOLDER	[MAV]
9	SNE2123	EARTH TERMINAL	
10	RXX0166	HEAT SINK UNIT	[MAV]
11	RGU1365-K	SELECTOR BUTTON	[MAV]
12	RGU1366-K	FUNCTION BUTTON	[MAV]
13	RGW0216-K	TONE KNOB	
14	RHN90001	M9 NUT	
15	SJP9205-2T	SHORT PIN	
16	RFKGSUG96PPK	FRONT PANEL ASS'Y	[MAV]
17	SNE2129-1	SCREW (CAB.)	
18	XTBS3+8JFZ1	SCREW	
19	XTB3+20JFZ	SCREW	
20	XTB3+8FFZ	SCREW	
22	XTW3+15T	SCREW	
23	RHD26016	SCREW	
24	XTBS26+10J	SCREW	
25	RMN0203	PCB SUPPORT	
26	RMN0312	TRANS HOLDER	
28	RYQ0173-K	FAN UNIT	[MAV]
28-1	MDN-4RB4MRC	MOTOR	
28-2	REX0811	CONNECTOR UNIT	[MAV]
28-3	SHE232	64MM FAN	
28-4	SHE233-1	FAN CASE	
28-5	SHE234	FAN CASE COVER	
28-6	SUS271	MOTOR SPRING	
		INTEGRATED CIRCUITS	
IC351	NJM2279D	IC, VIDEO SELECTOR SW	
IC401	TC9163N	IC, SELECTOR	

Ref No.	Part No.	Part Name & Description	Remarks
IC402	M5218AP	IC, BUFFER AMP	
IC451	AN6558-F	IC, OP AMP	[M]
IC501	BA6218	IC, MOTOR DRIVER	
IC511	UPC4570C	IC, TONE CONTROL	
IC551	UPC4570C	IC, TONE CONTROL	
IC601	RSN3305-P	IC, HIC	[MAV]⚠
IC602	RSN3305-P	IC, HIC	[MAV]⚠
IC801	M5218AP	IC, BUFFER AMP	
IC901	UPD78043A041	IC, MICRO COMPUTER	[MAV]
IC1001	LA2785	IC, PRO LOGIC DECODER	
IC1002	LV1010N	IC, DIGITAL DELAY	
IC1003	TC9214P	IC, SELECTOR SWITCH	
		TRANSISTORS	
Q351	2SD592ARTA	TRANSISTOR	⚠
Q352	2SB621ARTA	TRANSISTOR	⚠
Q505	2SD1915FTA	TRANSISTOR	
Q506	2SD1915FTA	TRANSISTOR	
Q551	2SD1915FTA	TRANSISTOR	
Q552	2SD1915FTA	TRANSISTOR	
Q581	2SA1309ARTA	TRANSISTOR	
Q582	2SA1309ARTA	TRANSISTOR	
Q583	2SC3311ARTA	TRANSISTOR	
Q584	2SC3311ARTA	TRANSISTOR	
Q585	2SA1309ARTA	TRANSISTOR	
Q601	UN4119	TRANSISTOR	
Q651	UN4119	TRANSISTOR	
Q681	2SD1915FTA	TRANSISTOR	
Q682	2SD1915FTA	TRANSISTOR	
Q701	2SD2374PQAU	TRANSISTOR	⚠
Q703	2SC3311ARTA	TRANSISTOR	⚠
Q704	2SC3311ARTA	TRANSISTOR	⚠
Q705	2SC3311ARTA	TRANSISTOR	⚠
Q706	2SC3940AQSTA	TRANSISTOR	⚠
Q707	2SB621ARTA	TRANSISTOR	⚠
Q708	2SB1548PQAU	TRANSISTOR	⚠
Q731	2SB621ARTA	TRANSISTOR	
Q732	2SA1309ARTA	TRANSISTOR	

Ref No.	Part No.	Part Name & Description	Remarks
Q733	2SD592ARTA	TRANSISTOR	
Q734	2SA992E	TRANSISTOR	
Q751	UN421FTA	TRANSISTOR	
Q752	2SC3940AQSTA	TRANSISTOR	⚠
Q771	2SA1309ARTA	TRANSISTOR	
Q772	2SA1309ARTA	TRANSISTOR	
Q773	2SB621ARTA	TRANSISTOR	⚠
Q774	2SA1309ARTA	TRANSISTOR	
Q775	2SA1309ARTA	TRANSISTOR	
Q776	2SA1309ARTA	TRANSISTOR	
Q801	2SK301QTA	TRANSISTOR	[M]
Q802	2SK301RSTA	TRANSISTOR	
Q803	2SA933SSTA	TRANSISTOR	
Q901	RVTDTC114YST	TRANSISTOR	
Q902	2SA933SSTA	TRANSISTOR	
Q1001	2SC3940AQSTA	TRANSISTOR	⚠
Q1081	2SA1309ARTA	TRANSISTOR	
		DIODES	
D351	MTZJ5R6BTA	DIODE	
D352	MTZJ5R6BTA	DIODE	
D583	MTZJ3R0ATA	DIODE	[MAV]
D584	MTZJ3R0ATA	DIODE	[MAV]
D601	SB360L6508	DIODE	⚠
D602	SB360L6508	DIODE	⚠
D604	RVD1SS133TA	DIODE	
D605	MTZJ6R2BTA	DIODE	
D606	RVD1SS133TA	DIODE	
D607	RVD1SS133TA	DIODE	
D651	SB360L6508	DIODE	⚠
D652	SB360L6508	DIODE	⚠
D654	RVD1SS133TA	DIODE	
D655	MTZJ6R2BTA	DIODE	
D656	RVD1SS133TA	DIODE	
D657	RVD1SS133TA	DIODE	
D659	MTZJ6R8BTA	DIODE	
D660	MTZJ6R8BTA	DIODE	
D661	MTZJ6R8BTA	DIODE	

Ref No.	Part No.	Part Name & Description	Remarks
D662	MTZJ6R8BTA	DIODE	
D701	1N5402BM21	DIODE	⚠
D702	1N5402BM21	DIODE	⚠
D703	1N5402BM21	DIODE	⚠
D704	1N5402BM21	DIODE	⚠
D705	MTZJ6R2BTA	DIODE	⚠
D706	MTZJ6R2BTA	DIODE	⚠
D707	MTZJ30DTA	DIODE	⚠
D708	MTZJ15CTA	DIODE	⚠
D721	1N5402BM21	DIODE	⚠
D722	1N5402BM21	DIODE	⚠
D723	1N5402BM21	DIODE	⚠
D724	1N5402BM21	DIODE	⚠
D731	MTZJ24DTA	DIODE	
D732	MTZJ30DTA	DIODE	
D751	1SR35200TB	DIODE	⚠
D752	1SR35200TB	DIODE	⚠
D753	1SR35200TB	DIODE	⚠
D754	1SR35200TB	DIODE	⚠
D755	RVD1SS133TA	DIODE	⚠
D756	MTZJ6R8BTA	DIODE	⚠
D771	RVD1SS133TA	DIODE	
D772	MTZJ8R2BTA	DIODE	[M]
D773	RVD1SS133TA	DIODE	
D901	1SS291TA	DIODE	
D903	MTZJ4R7BTA	DIODE	
D906	MA167ATA	DIODE	
D907	MA167ATA	DIODE	
D921	RVD1SS133TA	DIODE	
D923	RVD1SS133TA	DIODE	
D924	MTZJ3R9ATA	DIODE	
D1001	MTZJ10CTA	DIODE	⚠
D1002	MA700ATA	DIODE	
		VARIABLE RESISTORS	
VR501	RRV24B02B16A	VR, MOTOR VOLUME	[MAV]
VR502	EVJ02QF04G15	VR, BALANCE CONTROL	
VR511	EVJYA1FA5C15	VR, BASS CONTROL	
VR512	EVJYA1FA5C15	VR, TREBLE CONTROL	
		SWITCHES	
S947	EVQ21405R	SW, PHONO	
S949	EVQ21405R	SW, POWER	
S950	EVQ21405R	SW, TEST SIGNAL	
S952	EVQ21405R	SW, CENTER LEVEL	
S953	EVQ21405R	SW, SORROUND LEVEL	

Ref No.	Part No.	Part Name & Description	Remarks
S954	EVQ21405R	SW, CENTER LEVEL	
S956	EVQ21405R	SW, SURROUND LEVEL	
S960	EVQ21405R	SW, TUNER	
S961	EVQ21405R	SW, CD	
S962	EVQ21405R	SW, TAPE MONITOR	
S963	EVQ21405R	SW, TV/VCR2	
S964	EVQ21405R	SW, VCR1	
S980	EVQ21405R	SW, SPEAKERS	
S982	EVQ21405R	SW, SUPER BASS	
S983	EVQ21405R	SW, DPL/SFC OFF/ON	
S984	EVQ21405R	SW, DOLBY PRO LOGIC	
S985	EVQ21405R	SW, SOUND FIELD CON.	
S986	EVQ21405R	SW, CENTER MODE	
		CONNECTORS	
CN101	RJU057W007	CONNECTOR (7P)	
CN401	RJU100W07	7P CONNECTOR	[MAV]
CN402	RJU100W07	7P CONNECTOR	[MAV]
CN501	RJU100W07	7P CONNECTOR	[MAV]
CN502	RJU100W04	SOCKET (4P)	[MAV]
CN701	SJS702-1	7P CONNECTOR	
CN751	SJS305-1	CONNECTOR (3P)	
CN752	RJU100W04	SOCKET (4P)	[MAV]
CN901	RJU003K008M1	BOARD IN CONNECTOR	
CN902	RJU003K008M1	BOARD IN CONNECTOR	
CN903	RJU003K008M1	BOARD IN CONNECTOR	
CN904	RJU003K008M1	BOARD IN CONNECTOR	
CN905	RJU003K008M1	BOARD IN CONNECTOR	
CN1001	RJU100W07	7P CONNECTOR	[MAV]
CN1002	RJU100W07	7P CONNECTOR	[MAV]
CP101	RJT057W007-1	7P CONNECTOR	
CP401	RJT100W07	7P CONNECTOR	[MAV]
CP402	RJT100W07	7P CONNECTOR	[MAV]
CP501	RJT100W07	7P CONNECTOR	[MAV]
CP502	RJT100W04	CONNECTOR (4P)	[MAV]
CP752	RJT100W04	CONNECTOR (4P)	[MAV]
CP771	SJT3213	CONNECTOR (FAN)	
CP901	RJT003K008M1	8P CONNECTOR	
CP902	RJT003K008M1	8P CONNECTOR	
CP903	RJT003K008M1	8P CONNECTOR	
CP904	RJT003K008M1	8P CONNECTOR	
CP905	RJT003K008M1	8P CONNECTOR	
CP1001	RJT100W07	7P CONNECTOR	[MAV]
CP1002	RJT100W07	7P CONNECTOR	[MAV]

Ref No.	Part No.	Part Name & Description	Remarks
		COILS & TRANSFORMERS	
L501	RLQZP1R0KT-Y	AXIAL COIL	
L502	RLQZP1R0KT-Y	AXIAL COIL	
L601	RLQYR73M	CHOKE COIL	
L602	RLQYR73M	CHOKE COIL	
L651	RLQYR73M	CHOKE COIL	
L652	RLQYR73M	CHOKE COIL	
L751	RLQB101KTA-Y	CHOKE COIL	
L901	RLQB101KTA-Y	CHOKE COIL	
L1051	RLQB101KTA-Y	CHOKE COIL	
T701	RTP1P5C024-V	POWER TRANSFORMER	[MAV]⚠
T751	RTP1H5C001-V	POWER TRANSFORMER	⚠
		COMPONENT COMBINATION	
Z751	ERZV10V511CS	ZNR	⚠
Z891	RCDSPS4242N	REMOTE SENSOR	
		CERAMIC FILTERS	
CF901	RVBCST4R00MT	CERAMIC CAP	
CF1051	EF0EC8004T4	CERAMIC OSCILLATOR	
		DISPLAY TUBE	
FL901	RSL0213-F	FL DISPLAY	[MAV]
		FUSES	
F1	XBA1C70NBAU	FUSE	[MAV]⚠
		FUSE CLIPS	
FC701	EYF52BC	FUSE HOLDER	
FC702	EYF52BC	FUSE HOLDER	
		JACKS	
JK351	SJF3069-3N	JK, RCA PIN JACK	
JK401	SJF3068-7N	JK, RCA TERMINAL	
JK402	SJF3069N	JK, LINE IN JACK	
JK403	SJF3069N	JK, LINE IN JACK	
JK404	SJF3069N	JK, LINE IN JACK	
JK405	SJF3068-7N	JK, RCA TERMINAL	
JK406	SJF3069N	JK, LINE IN JACK	
JK601	RJH5601	JK, SP TERMINAL	
JK603	RJR0054	JK, SP TERMINAL	

Ref No.	Part No.	Part Name & Description	Remarks
JK791	SJS9237	JK, AC INLET	⚠
JK792	RJS2A2302	JK, AC OUTLET	⚠
JK793	RJS2A2302	JK, AC OUTLET	⚠
		RELAYS	
RL601	RSY0022M-0	24VSP RELAY	
RL603	RSY0022M-0	24VSP RELAY	
RL751	RSY0019M-0	12V TV-5 RELAY	⚠

Ref No.	Part No.	Part Name & Description	Remarks
		HEADPHONE	
HP601	RJJ63TS01	HEADPHONES JACK	
		EARTH TERMINAL	
E401	SNE1004-2	EARTH TERMINAL	
E501	RSC0445	TONE SHIELD PLATE	[MAV]
E601	SNE1004-2	EARTH TERMINAL	

Ref No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPG2779	PACKING CASE	[MAV]
P2	RPFX0005	MIRAMAT BAG	[M]
P3	RPN0952	POLYFOAM	[MAV]

■ Resistors & Capacitors

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 components, be sure to use only manufacturer's specified parts shown in the parts list.
* Capacitor values are in microfarad (μF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
* Resistors values are in ohms, unless specified otherwise, 1k=1,000(OHM), 1M=1,000k(OHM)

Ref No.	Part No.	Values & Remarks
		RESISTORS
R351	ERDS2TJ680T	68 1/4W
R352	ERDS2TJ680T	68 1/4W
R353	ERDS2TJ103T	10K 1/4W
R354	ERDS2TJ103T	10K 1/4W
R355	ERDS2TJ750T	75 1/4W
R356	ERDS2TJ750T	75 1/4W
R357	ERDS2TJ102T	1K 1/4W
R358	ERDS2TJ102T	1K 1/4W
R359	ERDS2TJ182T	1.8K 1/4W
R360	ERDS2TJ182T	1.8K 1/4W
R361	ERD2FCVG220T	22 1/4W
R362	ERD2FCVG220T	22 1/4W
R401	ERDS2TJ102T	1K 1/4W
R402	ERDS2TJ102T	1K 1/4W
R405	ERDS2TJ102T	1K 1/4W
R406	ERDS2TJ102T	1K 1/4W
R407	ERDS2TJ102T	1K 1/4W
R408	ERDS2TJ102T	1K 1/4W
R409	ERDS2TJ102T	1K 1/4W
R410	ERDS2TJ102T	1K 1/4W
R411	ERDS2TJ102T	1K 1/4W
R412	ERDS2TJ102T	1K 1/4W
R413	ERDS2TJ102T	1K 1/4W
R414	ERDS2TJ102T	1K 1/4W
R415	ERDS2TJ102T	1K 1/4W
R416	ERDS2TJ102T	1K 1/4W
R417	ERDS2TJ473T	47K 1/4W
R418	ERDS2TJ473T	47K 1/4W
R419	ERDS2TJ104T	100K 1/4W

Ref No.	Part No.	Values & Remarks
R420	ERDS2TJ104T	100K 1/4W
R421	ERDS2TJ104T	100K 1/4W
R422	ERDS2TJ104T	100K 1/4W
R423	ERDS2TJ102T	1K 1/4W
R424	ERDS2TJ102T	1K 1/4W
R425	ERDS2TJ103T	10K 1/4W
R426	ERDS2TJ103T	10K 1/4W
R427	ERDS2TJ103T	10K 1/4W
R431	ERDS2TJ102T	1K 1/4W
R432	ERDS2TJ102T	1K 1/4W
R433	ERDS2TJ471T	470 1/4W
R434	ERDS2TJ471T	470 1/4W
R435	ERDS2TJ471T	470 1/4W
R436	ERDS2TJ471T	470 1/4W
R451	ERDS2TJ224T	220K 1/4W
R452	ERDS2TJ224T	220K 1/4W
R453	ERDS2TJ821T	820 1/4W
R454	ERDS2TJ821T	820 1/4W
R455	ERDS2TJ563T	56K 1/4W
R456	ERDS2TJ563T	56K 1/4W
R457	ERDS2TJ271T	270 1/4W
R458	ERDS2TJ271T	270 1/4W
R459	ERDS2TJ680T	68 1/4W
R460	ERDS2TJ680T	68 1/4W
R461	ERDS2TJ184T	180K 1/4W
R462	ERDS2TJ184T	180K 1/4W
R463	ERDS2TJ123T	12K 1/4W
R464	ERDS2TJ123T	12K 1/4W
R465	ERDS2TJ563T	56K 1/4W
R466	ERDS2TJ563T	56K 1/4W
R467	ERDS2TJ102T	1K 1/4W

Ref No.	Part No.	Values & Remarks
R468	ERDS2TJ102T	1K 1/4W
R501	ERDS2TJ102T	1K 1/4W
R502	ERDS2TJ102T	1K 1/4W
R508	ERDS1FVJ2R2T	2.2 1/2W
R511	ERDS2TJ471T	470 1/4W
R512	ERDS2TJ471T	470 1/4W
R513	ERDS2TJ474T	470K 1/4W
R514	ERDS2TJ474T	470K 1/4W
R515	ERDS2TJ474T	470K 1/4W
R516	ERDS2TJ474T	470K 1/4W
R517	ERDS2TJ332T	3.3K 1/4W
R518	ERDS2TJ332T	3.3K 1/4W
R519	ERDS2TJ182T	1.8K 1/4W
R520	ERDS2TJ182T	1.8K 1/4W
R521	ERDS2TJ223T	22K 1/4W
R522	ERDS2TJ223T	22K 1/4W
R523	ERDS2TJ472T	4.7K 1/4W
R524	ERDS2TJ472T	4.7K 1/4W
R525	ERDS2TJ222T	2.2K 1/4W
R526	ERDS2TJ222T	2.2K 1/4W
R527	ERDS2TJ122T	1.2K 1/4W
R528	ERDS2TJ122T	1.2K 1/4W
R529	ERDS2TJ273T	27K 1/4W
R530	ERDS2TJ273T	27K 1/4W
R531	ERDS2TJ332T	3.3K 1/4W
R532	ERDS2TJ332T	3.3K 1/4W
R533	ERDS2TJ473T	47K 1/4W
R534	ERDS2TJ473T	47K 1/4W
R537	ERDS2TJ224T	220K 1/4W
R538	ERDS2TJ224T	220K 1/4W
R539	ERDS2TJ272T	2.7K 1/4W

Ref No.	Part No.	Values & Remarks
R540	ERDS2TJ272T	2.7K 1/4W
R541	ERDS2TJ392T	3.9K 1/4W
R542	ERDS2TJ392T	3.9K 1/4W
R543	ERDS2TJ102T	1K 1/4W
R544	ERDS2TJ102T	1K 1/4W
R545	ERDS2TJ684T	680K 1/4W
R546	ERDS2TJ103T	10K 1/4W
R551	ERDS2TJ102T	1K 1/4W
R552	ERDS2TJ102T	1K 1/4W
R553	ERDS2TJ104T	100K 1/4W
R554	ERDS2TJ104T	100K 1/4W
R555	ERDS2TJ223T	22K 1/4W
R556	ERDS2TJ223T	22K 1/4W
R557	ERDS2TJ681T	680 1/4W
R558	ERDS2TJ681T	680 1/4W
R561	ERDS2TJ332T	3.3K 1/4W
R562	ERDS2TJ332T	3.3K 1/4W
R564	ERDS2TJ103T	10K 1/4W
R565	ERDS2TJ102T	1K 1/4W
R566	ERDS2TJ102T	1K 1/4W
R583	ERDS2TJ102T	1K 1/4W
R584	ERDS2TJ102T	1K 1/4W
R585	ERDS2TJ102T	1K 1/4W
R586	ERDS2TJ102T	1K 1/4W
R587	ERDS2TJ102T	1K 1/4W
R588	ERDS2TJ102T	1K 1/4W
R589	ERDS2TJ472T	4.7K 1/4W
R590	ERDS2TJ473T	47K 1/4W
R591	ERDS2TJ222T	2.2K 1/4W
R592	ERDS2TJ222T	2.2K 1/4W
R601	ERDS2TJ102T	1K 1/4W

Ref No.	Part No.	Values & Remarks
R602	ERDS2TJ102T	1K 1/4W
R603	ERDS2TJ563T	56K 1/4W
R604	ERDS2TJ563T	56K 1/4W
R605	ERDS2TJ182T	1.8K 1/4W
R606	ERDS2TJ182T	1.8K 1/4W
R607	ERDS2TJ563T	56K 1/4W
R608	ERDS2TJ563T	56K 1/4W
R609	ERDS2TJ470T	47 1/4W
R610	ERDS2TJ470T	47 1/4W
R611	ERDS1FVJ100T	10 1/2W
R612	ERDS1FVJ100T	10 1/2W
R613	ERDS2TJ102T	1K 1/4W
R614	ERDS2TJ102T	1K 1/4W
R615	ERDS2TJ184T	180K 1/4W
R616	ERDS2TJ154T	150K 1/4W
R617	ERDS2TJ473T	47K 1/4W
R618	ERDS2TJ473T	47K 1/4W
R619	ERDS2TJ223T	22K 1/4W
R620	ERD25FVJ220T	22 1/4W
R621	ERDS2TJ473T	47K 1/4W
R622	ERDS2TJ184T	180K 1/4W
R623	ERDS2TJ684T	680K 1/4W
R624	ERDS2TJ563T	56K 1/4W
R625	ERDS2TJ563T	56K 1/4W
R626	ERDS2TJ682T	6.8K 1/4W
R628	ERDS1FVJ391T	390 1/2W
R632	ERDS2TJ223T	22K 1/4W
R637	ERG1SJ101E	100 1W
R638	ERG1SJ101E	100 1W
R639	ERG1SJ101E	100 1W
R640	ERG1SJ101E	100 1W
R641	ERDS2TJ684T	680K 1/4W
R647	ERDS2TJ221T	220 1/4W
R648	ERDS2TJ221T	220 1/4W
R651	ERDS2TJ102T	1K 1/4W
R652	ERDS2TJ102T	1K 1/4W
R653	ERDS2TJ563T	56K 1/4W
R654	ERDS2TJ563T	56K 1/4W
R655	ERDS2TJ182T	1.8K 1/4W
R656	ERDS2TJ182T	1.8K 1/4W
R657	ERDS2TJ563T	56K 1/4W
R658	ERDS2TJ563T	56K 1/4W
R659	ERDS2TJ470T	47 1/4W
R660	ERDS2TJ470T	47 1/4W
R661	ERDS1FVJ100T	10 1/2W
R662	ERDS1FVJ100T	10 1/2W
R663	ERDS2TJ102T	1K 1/4W
R664	ERDS2TJ102T	1K 1/4W

Ref No.	Part No.	Values & Remarks
R665	ERDS2TJ184T	180K 1/4W
R666	ERDS2TJ154T	150K 1/4W
R667	ERDS2TJ473T	47K 1/4W
R668	ERDS2TJ473T	47K 1/4W
R669	ERDS2TJ223T	22K 1/4W
R670	ERD25FVJ220T	22 1/4W
R671	ERDS2TJ473T	47K 1/4W
R672	ERDS2TJ224T	220K 1/4W
R673	ERDS2TJ684T	680K 1/4W
R674	ERDS2TJ563T	56K 1/4W
R675	ERDS2TJ563T	56K 1/4W
R676	ERDS2TJ682T	6.8K 1/4W
R678	ERDS1FVJ391T	390 1/2W
R679	ERD25FVJ470T	47 1/4W
R680	ERD25FVJ470T	47 1/4W
R681	ERDS2TJ270T	27 1/4W
R682	ERDS2TJ270T	27 1/4W
R683	ERDS2TJ270T	27 1/4W
R684	ERDS2TJ270T	27 1/4W
R685	ERDS2TJ270T	27 1/4W
R686	ERDS2TJ270T	27 1/4W
R687	ERDS2TJ270T	27 1/4W
R688	ERDS2TJ270T	27 1/4W
R689	ERDS2TJ270T	27 1/4W
R690	ERDS2TJ270T	27 1/4W
R691	ERDS2TJ270T	27 1/4W
R692	ERDS2TJ270T	27 1/4W
R693	ERDS2TJ270T	27 1/4W
R694	ERDS2TJ270T	27 1/4W
R695	ERDS2TJ102T	1K 1/4W
R696	ERDS2TJ102T	1K 1/4W
R697	ERDS2TJ221T	220 1/4W
R698	ERDS2TJ221T	220 1/4W
R699	ERDS2TJ332T	3.3K 1/4W
R703	ERDS1FVJ3R9T	3.9 1/2W
R704	ERDS1FVJ3R9T	3.9 1/2W
R705	ERDS2TJ472T	4.7K 1/4W
R706	ERDS2TJ102T	1K 1/4W
R707	ERD25FVJ221T	220 1/4W
R708	ERDS2TJ472T	4.7K 1/4W
R709	ERDS2TJ1R5T	1.5 1/4W
R710	ERDS2TJ1R5T	1.5 1/4W
R711	ERDS2TJ752T	7.5K 1/4W
R712	ERDS2TJ682T	6.8K 1/4W
R715	ERDS2TJ182T	1.8K 1/4W
R716	ERDS1FVJ100T	10 1/2W
R717	ERDS1FVJ100T	10 1/2W
R721	ERDS1FVJ221T	220 1/2W

Ref No.	Part No.	Values & Remarks
R722	ERDS2TJ822T	8.2K 1/4W
R723	ERDS1FVJ100T	10 1/2W
R724	ERDS1FVJ100T	10 1/2W
R725	ERDS2TJ122T	1.2K 1/4W
R726	ERD25FVJ331T	330 1/4W
R727	ERDS1FVJ681T	680 1/2W
R730	ERDS1FVJ5R6T	5.6 1/2W
R731	ERD25FVJ180T	18 1/4W
R732	ERDS2TJ273T	27K 1/4W
R733	ERDS2TJ473T	47K 1/4W
R734	ERDS2TJ822T	8.2K 1/4W
R735	ERDS2TJ222T	2.2K 1/4W
R736	ERD25FVJ221T	220 1/4W
R737	ERDS2TJ104T	100K 1/4W
R738	ERDS2TJ183T	18K 1/4W
R739	ERDS2TJ103T	10K 1/4W
R740	ERDS2TJ393T	39K 1/4W
R741	ERD25FVJ180T	18 1/4W
R742	ERD25FJ181	180 1/4W
R743	ERDS2TJ102T	1K 1/4W
R744	ERDS2TJ563T	56K 1/4W
R745	ERDS2TJ124T	120K 1/4W
R752	ERDS2TJ102T	1K 1/4W
R754	ERDS2TJ102T	1K 1/4W
R772	ERDS2TJ104T	100K 1/4W
R773	ERDS2TJ103T	10K 1/4W
R774	ERDS2TJ223T	22K 1/4W
R775	ERDS2TJ472T	4.7K 1/4W
R777	ERDS2TJ150T	15 1/4W
R778	ERDS2TJ222T	2.2K 1/4W
R779	ERDS2TJ103T	10K 1/4W
R780	ERDS2TJ473T	47K 1/4W
R781	ERDS2TJ473T	47K 1/4W
R782	ERDS2TJ153T	15K 1/4W
R783	ERDS2TJ103T	10K 1/4W
R784	ERDS2TJ335T	3.3M 1/4W
R791	ERDS2TJ223T	22K 1/4W
R792	ERDS2TJ223T	22K 1/4W
R795	ERDS2TJ223T	22K 1/4W
R796	ERDS2TJ223T	22K 1/4W
R797	ERDS2TJ682T	6.8K 1/4W
R801	ERDS2TJ471T	470 1/4W
R802	ERDS2TJ471T	470 1/4W
R803	ERDS2TJ102T	1K 1/4W
R804	ERDS2TJ102T	1K 1/4W
R805	ERDS2TJ563T	56K 1/4W
R806	ERDS2TJ563T	56K 1/4W
R807	ERDS2TJ682T	6.8K 1/4W

Ref No.	Part No.	Values & Remarks
R808	ERDS2TJ682T	6.8K 1/4W
R809	ERDS2TJ824T	820K 1/4W
R810	ERDS2TJ824T	820K 1/4W
R811	ERDS2TJ223T	22K 1/4W
R812	ERDS2TJ823T	82K 1/4W
R901	ERDS2TJ102T	1K 1/4W
R906	ERDS2TJ104T	100K 1/4W
R907	ERDS2TJ104T	100K 1/4W
R908	ERDS2TJ104T	100K 1/4W
R909	ERDS2TJ104T	100K 1/4W
R910	ERDS2TJ102T	1K 1/4W
R911	ERDS2TJ104T	100K 1/4W
R912	ERDS2TJ103T	10K 1/4W
R914	ERDS2TJ274T	270K 1/4W
R917	ERDS2TJ103T	10K 1/4W
R920	ERDS2TJ271T	270 1/4W
R921	ERDS2TJ121T	120 1/4W
R922	ERDS2TJ472T	4.7K 1/4W
R929	ERDS2TJ101T	100 1/4W
R930	ERDS2TJ101T	100 1/4W
R931	ERDS2TJ221T	220 1/4W
R932	ERDS2TJ102T	1K 1/4W
R936	ERDS2TJ102T	1K 1/4W
R937	ERDS2TJ102T	1K 1/4W
R946	ERDS2TJ103T	10K 1/4W
R947	ERDS2TJ103T	10K 1/4W
R948	ERDS2TJ103T	10K 1/4W
R949	ERDS2TJ103T	10K 1/4W
R960	ERDS2TJ102T	1K 1/4W
R961	ERDS2TJ122T	1.2K 1/4W
R962	ERDS2TJ152T	1.5K 1/4W
R963	ERDS2TJ182T	1.8K 1/4W
R964	ERDS2TJ222T	2.2K 1/4W
R965	ERDS2TJ332T	3.3K 1/4W
R966	ERDS2TJ472T	4.7K 1/4W
R967	ERDS2TJ682T	6.8K 1/4W
R968	ERDS2TJ123T	12K 1/4W
R980	ERDS2TJ102T	1K 1/4W
R981	ERDS2TJ122T	1.2K 1/4W
R982	ERDS2TJ152T	1.5K 1/4W
R983	ERDS2TJ182T	1.8K 1/4W
R984	ERDS2TJ222T	2.2K 1/4W
R985	ERDS2TJ332T	3.3K 1/4W
R986	ERDS2TJ472T	4.7K 1/4W
R987	ERDS2TJ682T	6.8K 1/4W
R988	ERDS2TJ123T	12K 1/4W
R1001	ERDS2TJ102T	1K 1/4W
R1002	ERDS2TJ102T	1K 1/4W

Ref No.	Part No.	Values & Remarks
R1003	ERDS2TJ102T	1K 1/4W
R1004	ERDS2TJ102T	1K 1/4W
R1005	ERDS2TJ203T	20K 1/4W
R1007	ERDS2TJ473T	47K 1/4W
R1008	ERDS2TJ473T	47K 1/4W
R1009	ERDS2TJ332T	3.3K 1/4W
R1010	ERDS2TJ332T	3.3K 1/4W
R1011	ERDS2TJ332T	3.3K 1/4W
R1012	ERDS2TJ102T	1K 1/4W
R1013	ERDS2TJ103T	10K 1/4W
R1014	ERDS2TJ104T	100K 1/4W
R1051	ERDS2TJ393T	39K 1/4W
R1052	ERDS2TJ105T	1M 1/4W
R1053	ERDS2TJ102T	1K 1/4W
R1055	ERDS2TJ224T	220K 1/4W
R1056	ERDS2TJ153T	15K 1/4W
R1061	ERDS2TJ222T	2.2K 1/4W
R1062	ERDS2TJ273T	27K 1/4W
R1063	ERDS2TJ332T	3.3K 1/4W
R1081	ERDS2TJ104T	100K 1/4W
R1082	ERDS2TJ474T	470K 1/4W
		CAPACITORS
C1	ECKR1H473ZF5	0.047 50V
C2	ECKR1H473ZF5	0.047 50V
C351	ECEA1CKA220B	22 16V
C352	ECEA1CKA220B	22 16V
C353	ECBT1H470J5	47P 50V
C354	ECBT1H470J5	47P 50V
C355	ECBT1E103ZF5	0.01 25V
C356	ECBT1E103ZF5	0.01 25V
C357	ECEA0JKA470B	47 6.3V
C358	ECEA0JKA470B	47 6.3V
C359	ECBT1E103ZF5	0.01 25V
C360	ECBT1E103ZF5	0.01 25V
C401	ECEA1VKA4R7B	4.7 10V
C402	ECEA1VKA4R7B	4.7 10V
C403	ECBT1E103ZF5	0.01 25V
C404	ECBT1E103ZF5	0.01 25V
C405	ECBT1H101KB5	100P 50V
C409	ECEA1EKA220B	22 25V
C410	ECEA1EKA220B	22 25V
C411	ECBT1H101KB5	100P 50V
C412	ECBT1H101KB5	100P 50V
C413	ECEA1CU100B	10 16V
C414	ECEA1CU100B	10 16V
C415	ECBT1E103ZF5	0.01 25V

Ref No.	Part No.	Values & Remarks
C416	ECBT1E103ZF5	0.01 25V
C417	ECBT1H101KB5	100P 50V
C418	ECBT1H101KB5	100P 50V
C419	ECBT1H101KB5	100P 50V
C420	ECBT1H101KB5	100P 50V
C421	ECBT1H101KB5	100P 50V
C422	ECBT1H101KB5	100P 50V
C423	ECBT1H101KB5	100P 50V
C424	ECBT1H101KB5	100P 50V
C425	ECBT1H101KB5	100P 50V
C426	ECBT1H101KB5	100P 50V
C427	ECBT1H101KB5	100P 50V
C428	ECBT1H101KB5	100P 50V
C429	ECBT1H101KB5	100P 50V
C430	ECBT1H101KB5	100P 50V
C431	ECEA1CU100B	10 16V
C432	ECEA1CU100B	10 16V
C433	ECBT1H101KB5	100P 50V
C434	ECBT1H101KB5	100P 50V
C435	ECBT1H101KB5	100P 50V
C436	ECBT1H101KB5	100P 50V
C451	ECEA1VKA4R7B	4.7 10V
C452	ECEA1VKA4R7B	4.7 10V
C453	ECBT1H101KB5	100P 50V
C454	ECBT1H101KB5	100P 50V
C455	ECBT1H102KB5	1000P 50V
C456	ECBT1H102KB5	1000P 50V
C457	ECEA1AKA330B	33 10V
C458	ECEA1AKA330B	33 10V
C459	ECFR1E223KR	0.022 25V
C460	ECFR1E223KR	0.022 25V
C461	ECFR1E682KR	6800P 25V
C462	ECFR1E682KR	6800P 25V
C463	ECEA1VKA4R7B	4.7 10V
C464	ECEA1VKA4R7B	4.7 10V
C465	ECBT1E103ZF5	0.01 25V
C466	ECBT1E103ZF5	0.01 25V
C503	ECEA0JKA101B	100 6.3V
C504	ECEA0JKA101B	100 6.3V
C505	ECFR1C104MR	0.1 16V
C506	ECFR1C104MR	0.1 16V
C511	ECEA1HKA3R3B	3.3 50V
C512	ECEA1HKA3R3B	3.3 50V
C513	ECBT1H150J5	15P 50V
C514	ECBT1H150J5	15P 50V
C515	ECBT1H221KB5	220P 50V
C516	ECBT1H221KB5	220P 50V
C517	ECBT1H220J5	22P 50V

Ref No.	Part No.	Values & Remarks
C518	ECBT1H220J5	22P 50V
C519	ECEA1VKA4R7B	4.7 10V
C520	ECEA1VKA4R7B	4.7 10V
C521	ECEA1VKA4R7B	4.7 10V
C522	ECEA1VKA4R7B	4.7 10V
C523	ECFR1E123KR	0.012 25V
C524	ECFR1E123KR	0.012 25V
C525	ECQV1H683JZ3	0.068 50V
C526	ECQV1H683JZ3	0.068 50V
C527	ECBT1C562KR5	5600P 16V
C528	ECBT1C562KR5	5600P 16V
C529	ECQB1H273JF3	0.027 50V
C530	ECQB1H273JF3	0.027 50V
C531	ECBT1E103ZF5	0.01 25V
C532	ECBT1E103ZF5	0.01 25V
C533	ECEA1CKA100B	10 16V
C534	ECEA1CKA100B	10 16V
C536	ECBT1E103ZF5	0.01 25V
C537	ECEA1HU3R3B	3.3 50V
C538	ECEA1HU3R3B	3.3 50V
C551	ECEA1HKA3R3B	3.3 50V
C552	ECEA1HKA3R3B	3.3 50V
C553	ECBT1H101KB5	100P 50V
C554	ECBT1H101KB5	100P 50V
C555	ECBT1H221KB5	220P 50V
C556	ECBT1H221KB5	220P 50V
C557	ECBT1E103ZF5	0.01 25V
C558	ECBT1E103ZF5	0.01 25V
C559	ECEA1CKA100B	10 16V
C560	ECEA1CKA100B	10 16V
C563	ECBT1E103ZF5	0.01 25V
C583	ECEA0JKA470B	47 6.3V
C584	ECEA0JKA470B	47 6.3V
C601	ECEA1HKN3R3B	3.3 50V
C602	ECEA1HKN3R3B	3.3 50V
C603	ECBT1H331KB5	330P 50V
C604	ECBT1H331KB5	330P 50V
C605	ECEA1JU220B	22 63V
C606	ECEA1JU220B	22 63V
C607	ECCR1H100K5	10P 50V
C608	ECCR1H100K5	10P 50V
C609	ECBT1H221KB5	220P 50V
C610	ECBT1H221KB5	220P 50V
C611	ECQV1H473JZ3	0.047 50V
C612	ECQV1H473JZ3	0.047 50V
C613	ECBT1H681KB5	680P 50V
C614	ECBT1H681KB5	680P 50V
C615	ECEA1JU330	33 63V

Ref No.	Part No.	Values & Remarks
C616	ECEA2AU100B	10 100V
C617	ECEA1JU220B	22 63V
C618	ECEA2AN2R2SB	2.2 100V
C619	ECBT1H102KB5	1000P 50V
C621	ECEA2AU100B	10 100V
C622	ECEA2AU100B	10 100V
C651	ECEA1HKN3R3B	3.3 50V
C652	ECEA1HKN3R3B	3.3 50V
C653	ECBT1H681KB5	680P 50V
C654	ECBT1H681KB5	680P 50V
C655	ECEA1JU220B	22 63V
C656	ECEA1JU220B	22 63V
C657	ECCR1H100K5	10P 50V
C658	ECCR1H100K5	10P 50V
C659	ECBT1H221KB5	220P 50V
C660	ECBT1H221KB5	220P 50V
C661	ECQV1H473JZ3	0.047 50V
C662	ECQV1H473JZ3	0.047 50V
C663	ECBT1H681KB5	680P 50V
C664	ECBT1H681KB5	680P 50V
C665	ECEA1JU330	33 63V
C666	ECEA2AU100B	10 100V
C667	ECEA1JU220B	22 63V
C668	ECEA2AN2R2SB	2.2 100V
C669	ECBT1H102KB5	1000P 50V
C671	ECEA2AU100B	10 100V
C672	ECEA2AU100B	10 100V
C681	ECEA1HN100SB	10 50V
C682	ECEA1HN100SB	10 50V
C685	ECBT1E103ZF5	0.01 25V
C701	ECBT1E103ZF5	0.01 25V
C702	ECQE2104KF3	0.1 1
C703	ECES1KV752UX	7500 100V[MAV] ⚠
C704	ECES1KV752UX	7500 100V[MAV] ⚠
C705	ECEA1HM332EV	3300 50V[M] ⚠
C706	ECEA1HM332EV	3300 50V[M] ⚠
C707	ECA1VM101B	100P 10V
C708	ECKR1H103ZF5	0.01 50V
C709	ECEA1CKA330B	33 16V
C710	ECBT1E103ZF5	0.01 25V
C711	ECKR1H103ZF5	0.01 50V
C712	ECEA1HKA100B	10 50V
C713	ECBT1E103ZF5	0.01 25V
C714	ECEA1EKA470B	47 25V
C715	ECEA1CKA101B	100 16V
C721	ECQE2104KF3	0.1 250V
C731	ECEA1HKN010B	1 50V
C751	ECKWNS102MBM	0.001 400V ⚠

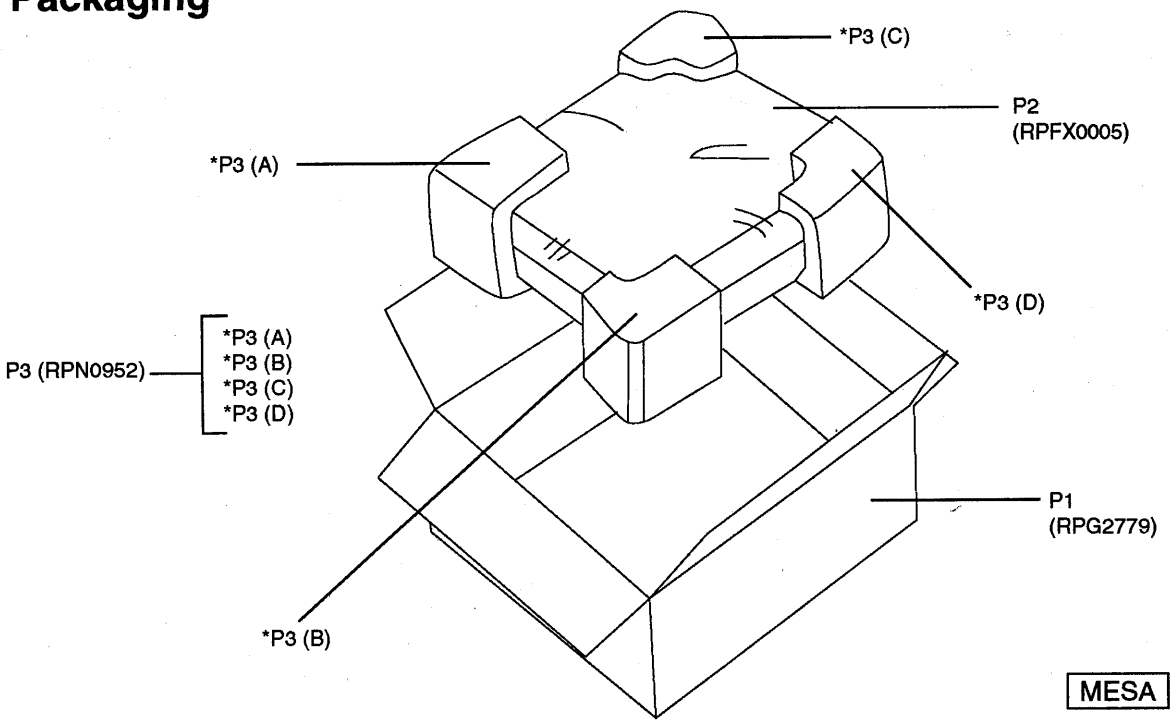
Ref No.	Part No.	Values & Remarks
C752	ECKR1H103ZF5	0.01 50V
C753	ECA1EM102B	1000P 25V
C754	ECBT1E103ZF5	0.01 25V
C755	ECEA1CU470B	47 16V
C757	ECEA1CU100B	10 16V
C758	ECEA1AU101B	100 10V
C771	ECEA1HKA2R2B	2.2 50V
C772	ECEA1CU100B	10 16V
C773	ECBT1E223ZF5	0.022 25V
C774	ECEA0JU221B	220 6.3V
C801	ECQV1H104JZ3	0.1 50V
C802	ECQV1H104JZ3	0.1 50V
C803	ECQV1H104JZ3	0.1 50V
C804	ECQV1H104JZ3	0.1 50V
C805	ECEA1CKA100B	10 16V
C806	ECEA1CKA100B	10 16V
C901	ECEA0JU102B	1000 6.3V
C902	ECBT1H104ZF5	0.1 50V
C903	ECBT1E103ZF5	0.01 25V
C904	ECEA0JU102B	1000 6.3V
C906	ECEA0JKA101B	100 6.3V
C908	ECBT1E103ZF5	0.01 25V
C909	ECEA1HKA220B	22 50V
C910	ECEA1HKA220B	22 50V
C911	ECEA1HKA220B	22 50V
C912	ECEA1HKA220B	22 50V
C913	ECEA1VKA100B	10 10V
C914	ECEA1VKA100B	10 10V

Ref No.	Part No.	Values & Remarks
C916	ECEA1HKA010B	1 50V
C919	ECBT1H104ZF5	0.1 50V
C920	ECEA1HKA010B	1 50V
C921	ECBT1H331KB5	330P 50V
C922	ECBT1H331KB5	330P 50V
C923	ECBT1H331KB5	330P 50V
C924	ECBT1H331KB5	330P 50V
C925	ECBT1H331KB5	330P 50V
C926	ECBT1H331KB5	330P 50V
C927	ECBT1H331KB5	330P 50V
C928	ECBT1H331KB5	330P 50V
C929	ECBT1H331KB5	330P 50V
C930	ECBT1H331KB5	330P 50V
C934	ECBT1E103ZF5	0.01 25V
C935	ECBT1E103ZF5	0.01 25V
C938	ECBT1E103ZF5	0.01 25V
C940	ECBT1H102KB5	1000P 50V
C941	ECBT1H102KB5	1000P 50V
C944	ECBT1H101KB5	100P 50V
C948	ECBT1E103ZF5	0.01 25V
C994	ECBT1H101KB5	100P 50V
C1001	ECEA1HKA010B	1 50V
C1002	ECEA1HKA010B	1 50V
C1003	ECEA1HKA3R3B	3.3 50V
C1004	ECEA1HKA3R3B	3.3 50V
C1005	ECEA1HKA010B	1 50V
C1007	ECFR1E223KR	0.022 25V
C1008	ECFR1E473KR	0.047 25V

Ref No.	Part No.	Values & Remarks
C1009	ECEA0JU221B	220 6.3V
C1010	ECEA1CKA100B	10 16V
C1011	ECEA1CKA100B	10 16V
C1012	ECEA1CKA100B	10 16V
C1013	ECEA1CKA100B	10 16V
C1014	ECEA0JU221B	220 6.3V
C1015	ECQV1H104JZ3	0.1 50V
C1016	ECQV1H104JZ3	0.1 50V
C1017	ECEA1HKAR47B	0.47 50V
C1018	ECEA1HKA4R7B	4.7 50V
C1019	ECEA1HKAR47B	0.47 50V
C1020	ECEA1HKA4R7B	4.7 50V
C1021	ECEA1HKAR15B	0.15 50V
C1022	ECEA1HKA3R3B	3.3 50V
C1023	ECQV1H154JZ3	0.15 50V
C1024	ECQV1H154JZ3	0.15 50V
C1025	ECEA1HKA3R3B	3.3 50V
C1026	ECEA1HKAR15B	0.15 50V
C1027	ECEA1HKA4R7B	4.7 50V
C1028	ECEA1HKAR47B	0.47 50V
C1029	ECEA1HKA4R7B	4.7 50V
C1030	ECEA1HKAR47B	0.47 50V
C1031	ECQV1H104JZ3	0.1 50V
C1032	ECQV1H104JZ3	0.1 50V
C1033	ECEA0JKA470B	47 6.3V
C1034	ECQV1H474JZ3	0.47 50V
C1035	ECBT1H681KB5	680P 50V
C1036	ECBT1H101KB5	100P 50V

Ref No.	Part No.	Values & Remarks
C1037	ECBT1H101KB5	100P 50V
C1038	ECBT1H101KB5	100P 50V
C1039	ECEA1CU101B	100 16V
C1040	ECEA1CKA100B	10 16V
C1041	ECBT1E103ZF5	0.01 25V
C1043	ECEA1CKA100B	10 16V
C1044	ECEA1CKA100B	10 16V
C1051	ECEA1HKA2R2B	2.2 50V
C1052	ECEA1HKA010B	1 50V
C1053	ECEA1HKA3R3B	3.3 50V
C1054	ECEA0JU221B	220 6.3V
C1055	ECEA1HKA010B	1 50V
C1056	ECFR1E563KR	0.056 25V
C1057	ECFR1E152KR	1500P 25V
C1058	ECFR1E563KR	0.056 25V
C1059	ECEA1CKA101B	100 16V
C1060	ECBT1E223ZF5	0.022 25V
C1062	ECBT1E223ZF5	0.022 25V
C1063	ECEA1CKA101B	100 16V
C1064	ECEA1HKA010B	1 50V
C1065	ECBT1H681KB5	680P 50V
C1067	ECBT1C152KR5	1500P 16V
C1068	ECBT1C152KR5	1500P 16V
C1081	ECEA1HKA010B	1 50V
C1082	ECBT1E223ZF5	0.022 25V

■ Packaging



MESA Printed in Singapore
P960303600 J/R/C/L