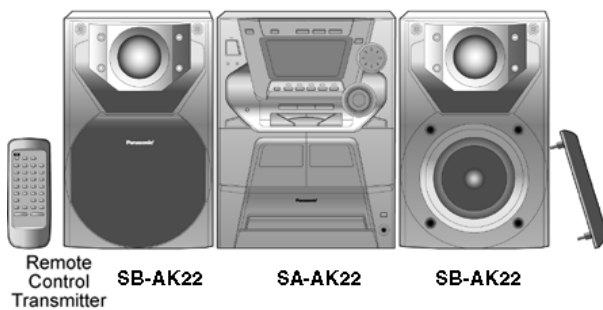


Service Manual

CD Stereo System



SA-AK22



Colour
(S)... Silver Type

Area
(P)... U.S.A.
(PC)... Canada

TAPE SECTION :
SG2 MECHANISM SERIES
CD SECTION :
RAE0152Z-3 TRAVERSE DECK SERIES

Specifications

■ AMPLIFIER SECTION

Power output	
10% Total harmonic distortion	
70 Hz-16 kHz, both channels driven	
(LOW)	60 W per channel (6 Ω)
Power output	
10% Total harmonic distortion	
1 kHz, both channels driven	
(HIGH)	70 W per channel (6 Ω)
Input sensitivity	
AUX	250 mV
Input Impedance	
AUX	13 kΩ

■ FM TUNER SECTION

Frequency range	87.9 - 107.9 MHz (200 kHz steps)
	87.5 - 108.0 MHz (100 kHz steps)
Sensitivity	2.5 μV (IHF)
S/N 26 dB	2.2 μV
Antenna terminal(s)	75 Ω (unbalanced)

■ AM TUNER SECTION

Frequency range	520 - 1710 kHz (10 kHz steps)
Sensitivity	
S/N 20 dB (at 1000 kHz)	560 μV/m

■ CASSETTE DECK SECTION

Track system	4 track, 2 channel
Heads	
Record/playback	Solid permalloy head
Erasere	Double gap ferrite head
Motor	DC servo motor
Recording system	AC bias 100 kHz
Erasing system	AC erase 100 kHz
Tape speed	4.8 cm/s
Frequency response (+3 dB, -6 dB at DECK OUT)	
HIGH (TYPE II)	35 Hz - 14 kHz
S/N	50 dB (A weighted)
Wow and flutter	0.18 % (WRMS)
Fast forward and rewind time	Approx. 120 seconds with C-60 cassette tape

■ CD SECTION

Sampling frequency	44.1 kHz
Decoding	16 bit linear
Beam source/wave length	Semiconductor laser/780 nm
Number of channels	Stereo
Frequency response	20 Hz - 20 kHz (+1, -2 dB)
Wow and flutter	Below measurable limit
Digital filter	8 fs

Panasonic®

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D/A converter	MASH (1 bit DAC)	SC-AK22(P)	Music Center: SA-AK22(P)
■ GENERAL			Speaker: SB-AK22(P)
Power supply	AC 120 V, 60Hz	SC-AK22(PC)	Music Center: SA-AK22(PC)
Power consumption	155 W		Speaker: SB-AK22(P)
Dimensions (W x H x D)	250 x 332 x 316 mm	Notes:	
	9 27/32" x 13 1/16" x 12 7/16"	1. Specifications are subject to change without notice. Mass and dimensions are approximate.	
Mass	(7.6 kg) 16.8 lb	2. Total harmonic distortion is measured by the digital spectrum analyzer.	
■ SYSTEM			

⚠ 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.

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1 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.

1.1. 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 $3\text{ M}\Omega$ and $5.2\text{ M}\Omega$ 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.

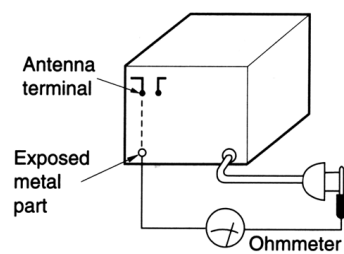


Fig. 1

Resistance = $3\text{ M}\Omega - 5.2\text{ M}\Omega$

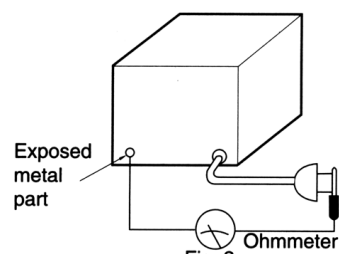


Fig. 2

Resistance = Approx ∞

2 Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C536, C545 and C546 through a 10 Ω , 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 120V, 60 Hz in NO SIGNAL mode should be ~400mA.

3 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.

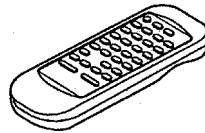
If this occurs, follow the procedure outlines below:

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.

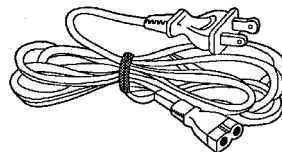
4 Accessories



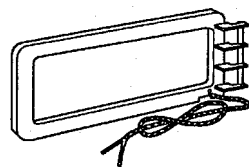
Remote Control
Transmitter



FM indoor antenna



AC mains lead



AM Loop antenna

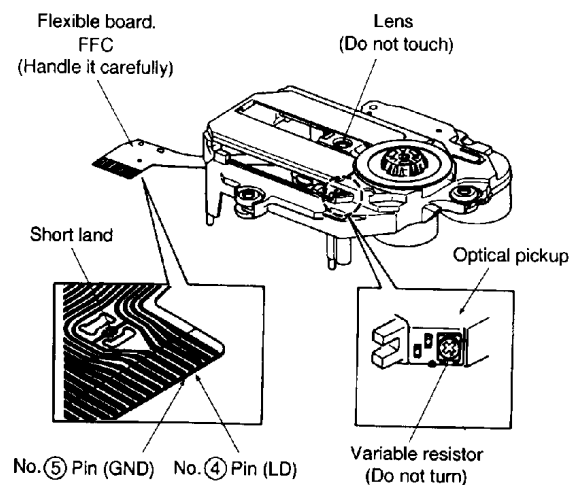
5 Handling Precautions For Traverse Deck

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

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

• Handling of traverse deck (optical pickup)

1. Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.
2. The short land between the No.4(LD) and No.5(GND) pins on the flexible board (FFC) is shorted with a solder build-up to prevent damage to the laser diode. To connect to the PC board, be sure to open by removing the solder build-up, and finish the work quickly.
3. Take care not to apply excessive stress to the flexible board (FFC).
4. Do not turn the variable resistor (laser power adjustment). It has already been adjusted.



• Grounding for electrostatic breakdown prevention

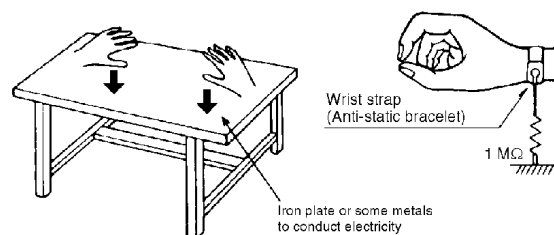
1. Human body grounding
Use the anti-static wrist strap to discharge the static electricity from your body.
2. Work table grounding
Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is placed, and ground the sheet.

Caution :

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

Caution when Replacing the Traverse Deck :

The traverse deck has a short point shorted with solder to protect the laser diode against electrostatics breakdown. Be sure to remove the solder from the short point before making connections.



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6 Precaution of Laser Diode

CAUTION:

This unit utilizes a class 1 laser.

Invisible laser radiation is emitted from the optical pickup lens.

When the unit is turned on:

1. Do not look directly into the pick up lens.
2. Do not use optical instruments to look at the pick up lens.
3. Do not adjust the preset variable resistor on the pickup lens.
4. Do not disassemble the optical pick up unit.
5. If the optical pick up is replaced, use the manufacturer's specified replacement pick up only.
6. Use of control or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

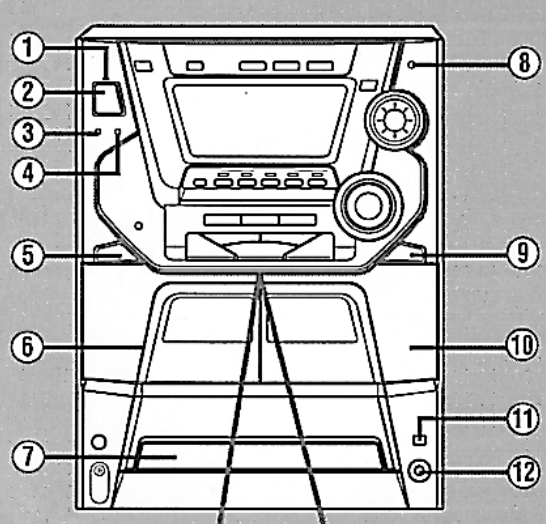
CAUTION!

THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

7 Operation Procedures

A

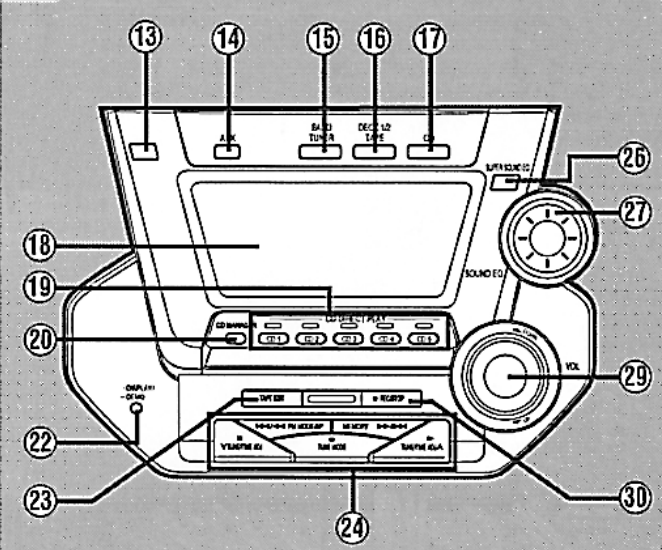


Front panel controls

A Main unit

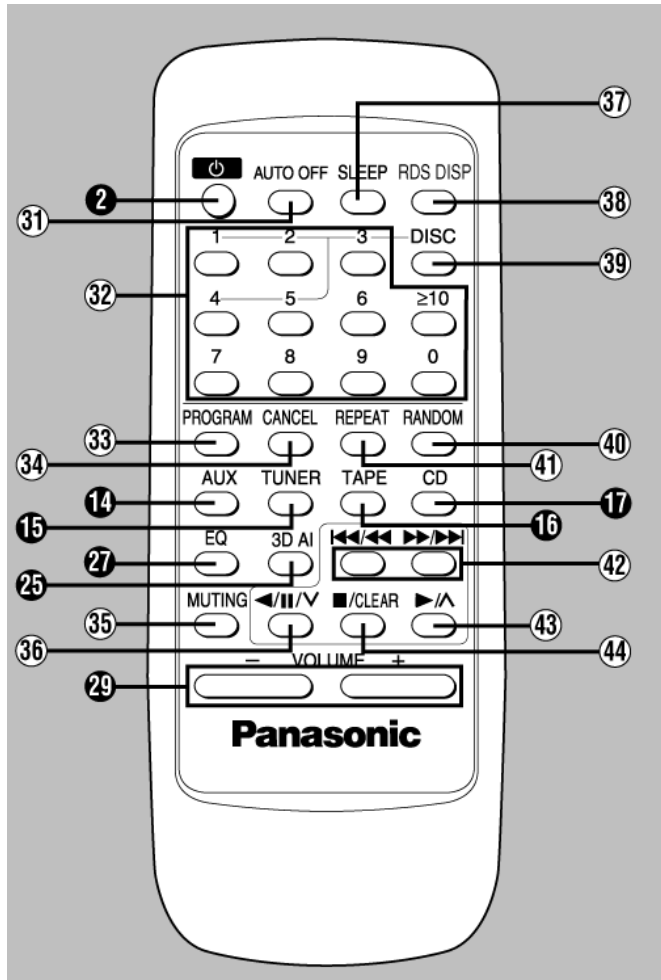
No.	Name
①	AC supply indicator (AC IN) This indicator lights when the unit is connected to the AC power supply.
②	Standby/on switch (⏻/⏻, POWER) Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
③	Play timer/record timer button (⌚/⌚)
④	Clock/timer button (CLOCK/TIMER)
⑤	Deck 1 open button (⏏ DECK 1 OPEN)
⑥	Deck 1 cassette holder
⑦	Disc tray
⑧	Super woofer on/off button (S.WOOFER)
⑨	Deck 2 open button (⏏ DECK 2 OPEN)
⑩	Deck 2 cassette holder
⑪	CD open/close button (⏏, OPEN/CLOSE)
⑫	Headphone jack (PHONES)

B



B Center console

⑬	Remote control signal sensor
⑭	AUX button (AUX)
⑮	Tuner/band select button (TUNER, BAND)
⑯	Tape/deck select button (TAPE, DECK 1/2)
⑰	CD button (CD)
⑱	Display
⑲	Disc direct play buttons and indicators (CD 1 ~ CD 5)
⑳	CD manager button (CD MANAGER)
㉒	Display select/demonstration button (-DISPLAY/-DEMO)
㉓	Tape edit button (TAPE EDIT)
㉔	Basic operating buttons Functions change according to the source.
㉖	Super sound EQ button (SUPER SOUND EQ)
㉗	Jog control (SOUND EQ)
㉙	Volume control (VOL)
㉚	Recording start/stop button (● REC/STOP)



Front panel controls

Remote control

Buttons such as ② functions in exactly the same way as the buttons on the main unit.

No.	Name
②	Standby/on button (⏻)
③①	Auto off button (AUTO OFF)
③②	Numeric buttons (≥ 10 , 1-9, 0)
③③	Program button (PROGRAM)
③④	Cancel button (CANCEL)
①④	AUX button (AUX)
①⑤	Tuner/band select button (TUNER)
②⑦	EQ select button (EQ)
③⑤	Muting button (MUTING)
③⑥	Pause/preset channel select button (⏸/V)
②⑨	Volume buttons (- VOLUME +)
③⑦	Sleep button (SLEEP)
③⑧	Disc button (DISC)
③⑨	Random button (RANDOM)
④①	Repeat button (REPEAT)
①⑦	CD button (CD)
①⑥	Tape/deck select button (TAPE)
④①	Skip/search buttons (⏮/⏪, ⏩/⏭)
④②	Play/preset channel select button (▶/^)
④③	Stop/program clear button (■/CLEAR)

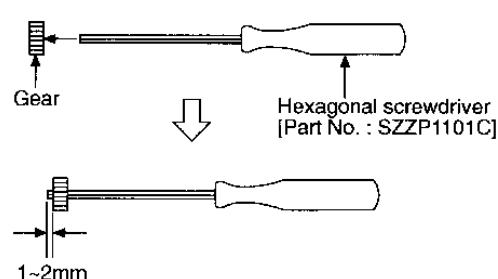
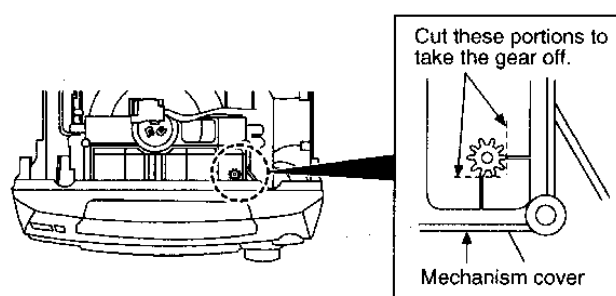
8 Operation Checks and Main Component Replacement Procedures

Gear for servicing (jig) information

1. This unit has a gear which is used for checking items (Open/close of disc tray, up/down operation of traverse unit by manually) when servicing.
2. For preparation of gear (for servicing), Perform the procedures as follows.
3. In case of re-servicing the same set, the "gear for servicing" may have been taken off because it has been used. The "gear for servicing" must be stored.

1. Remove the gear provided with mechanism cover as shown below.

2. Insert the hexagonal screwdriver (2mm) into the gear, and then project the tip of screwdriver for 1~2mm in length.



“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

- Disassembly and assembly main unit
 1. Checking of the Main, Panel, Deck and Power P.C.B.
- Main Component Replacement Procedures
 1. Replacement of the Traverse Deck.
 2. Replacement of the Power Amplifier IC.
- Disassembly and assembly of the Traverse Unit
- Disassembly and assembly of the Disc Tray

Warning:

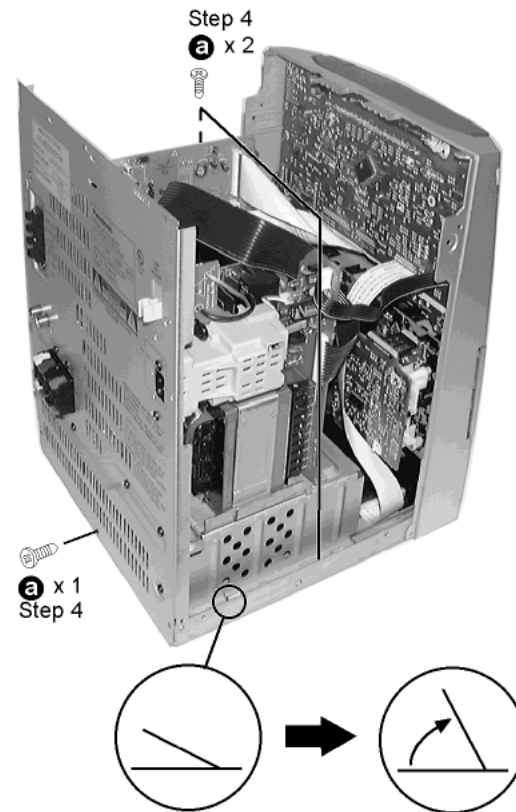
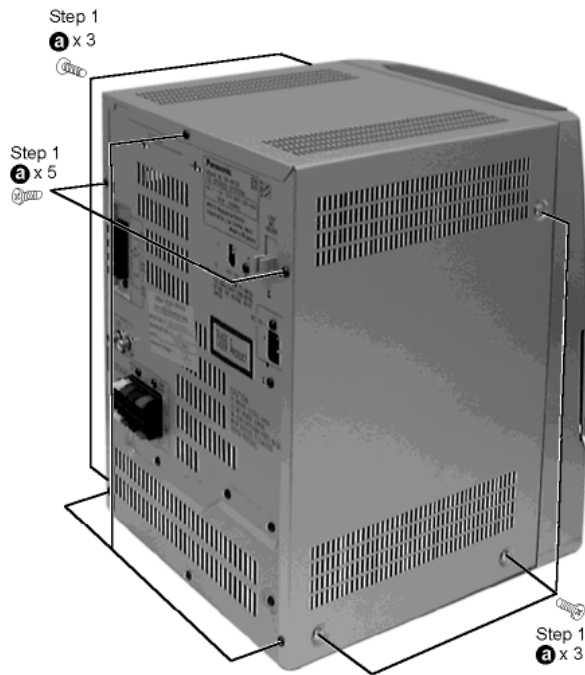
This product uses a laser diode. Refer to caution statement Precaution of Laser Diode.

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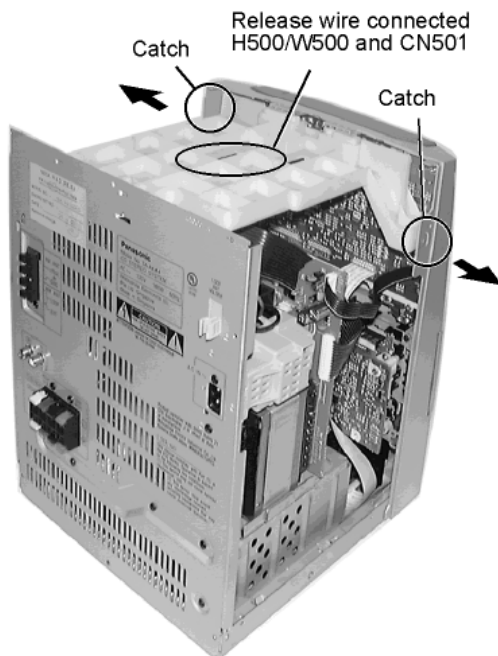
8.1. Disassembly and assembly main unit

Step 1 Remove 3 screws each side and 5 screws at rear panel.

Step 2 Remove the Top Cabinet

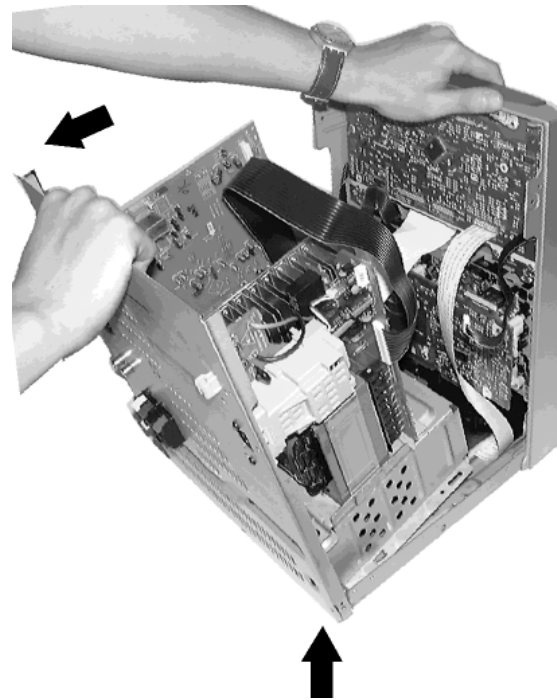


Step 3 Remove T-bracket.



Step 4 Remove 2 screws each side of the inner chassis and a screw at the rear panel. Turn locating pin 90°.

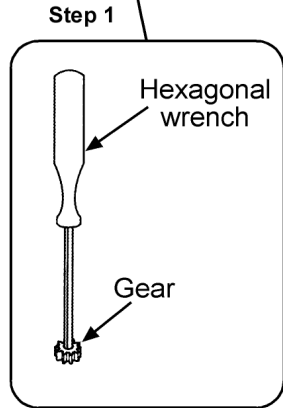
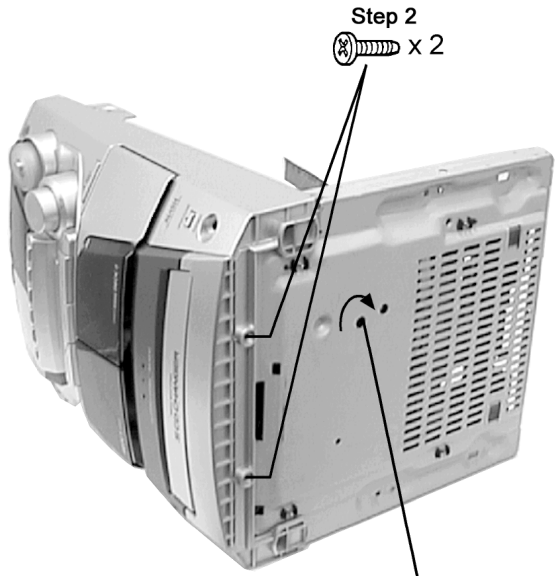
(Locating pin need not have to be bent back).



Step 5 Release the wires CN 300, 301, 302, 304 and 309.

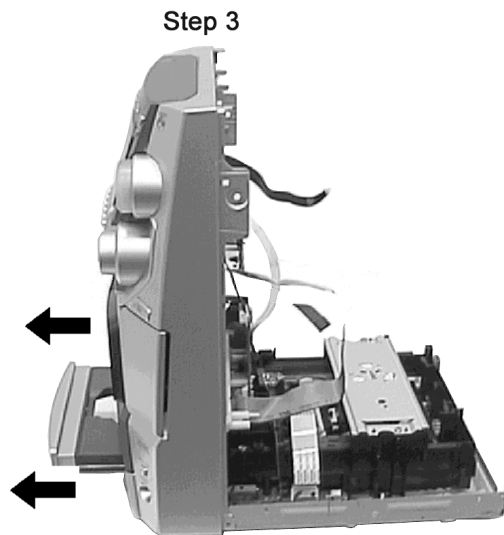
Remove rear panel by pulling backward and lift rear panel assy off.

Remove Front Panel

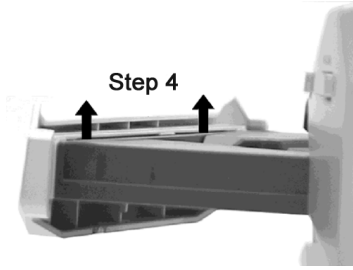


Step 1 : Use a hexagonal wrench and turn clockwise to release the tray.

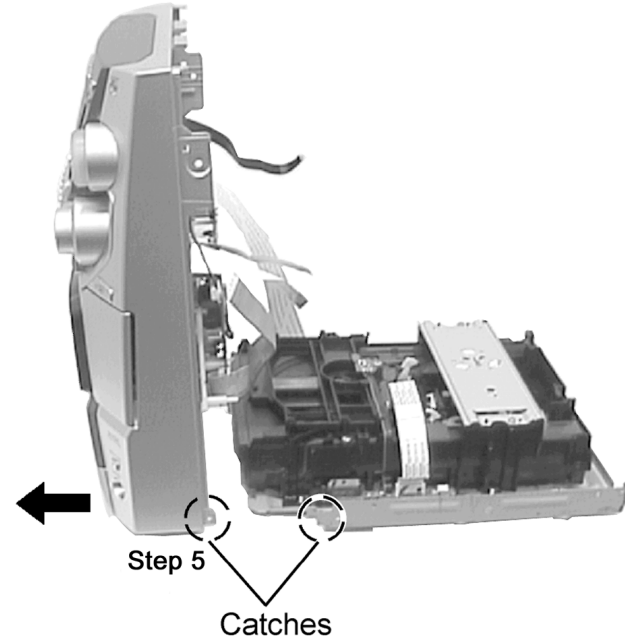
Step 2 : Remove the 2 screws.



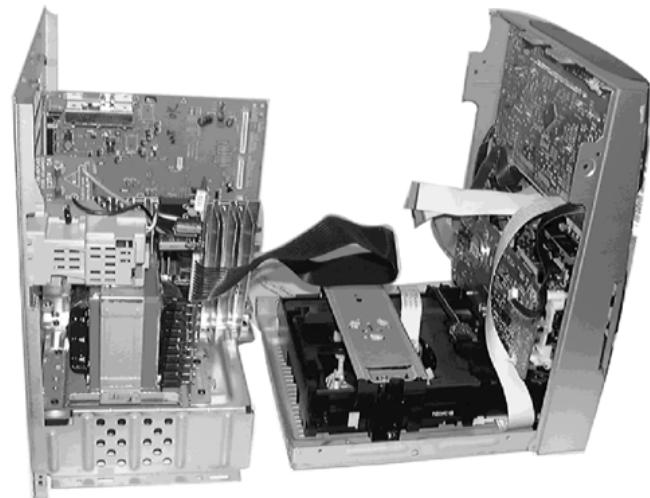
Step 3 : Push the CD tray in the direction shown above.



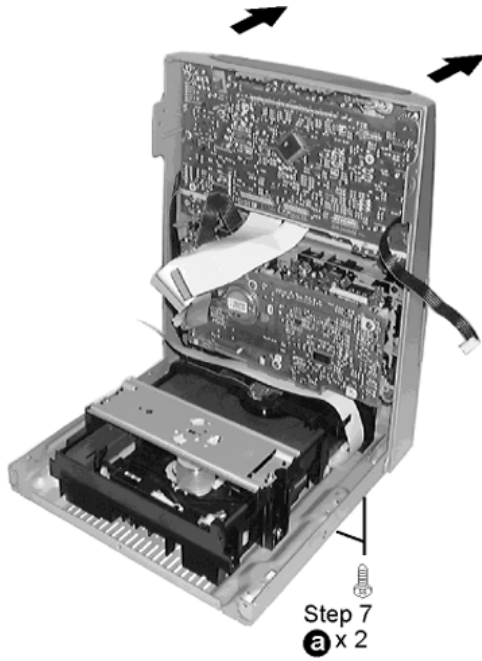
Step 4 : Remove the CD lid in the direction of the arrow.



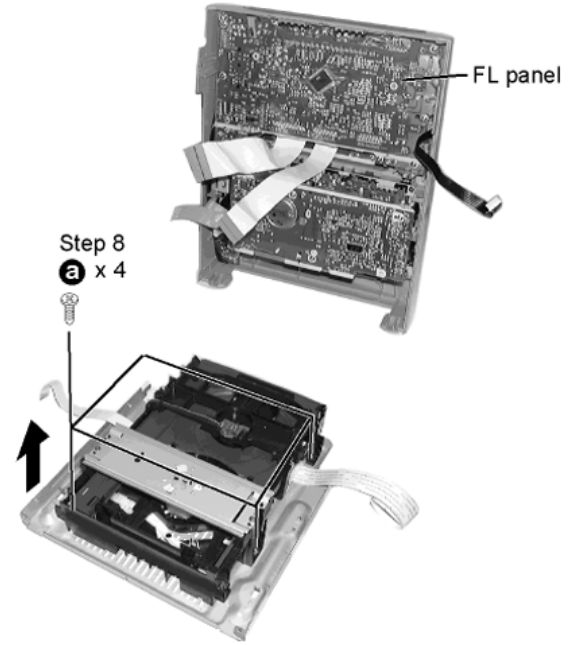
Step 5 : Release the two catches shown above to remove the front cabinet from the CD Traverse Unit.



Removal of Inner bracket.

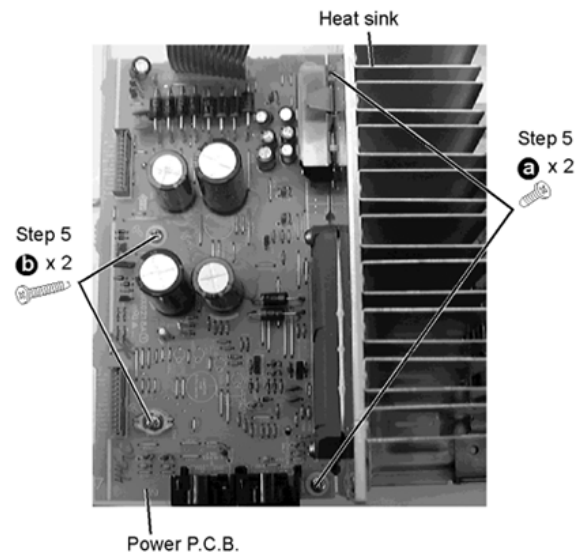
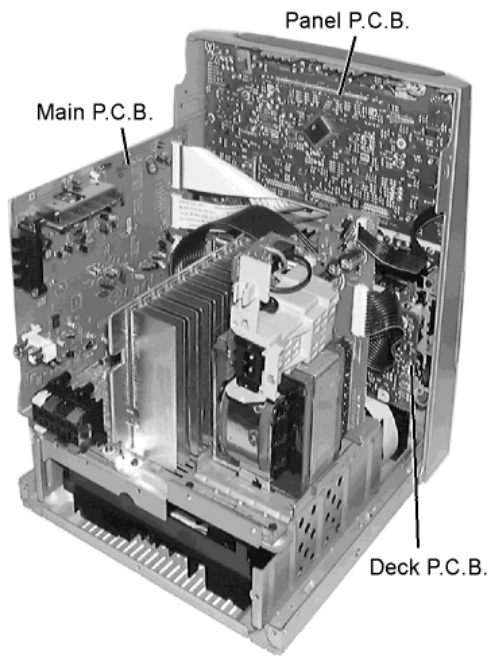


Step 7 Remove 2 screws from bottom and 2 screw beside inner bracket to push forward to release the front panel.



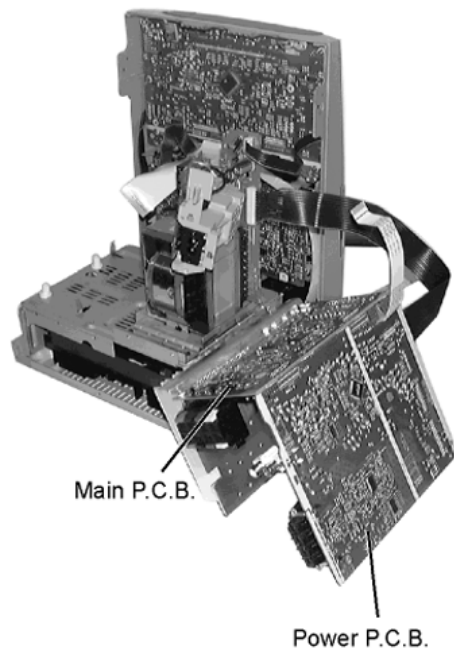
Step 8 To release inner bracket, remove 4 screws.

8.1.1. Checking for Panel, Main and Deck P.C.B.

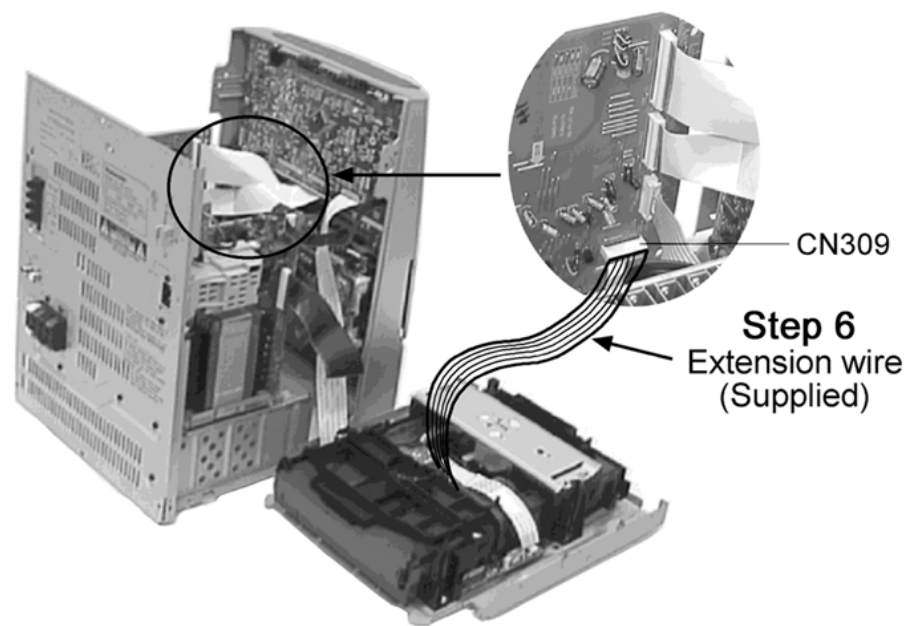


Step 1 Remove 2 screws each side.

8.1.2. Checking for Power P.C.B.



8.1.3. For Live Troubleshooting Procedure



Step 6 : Reconnect all connectors.

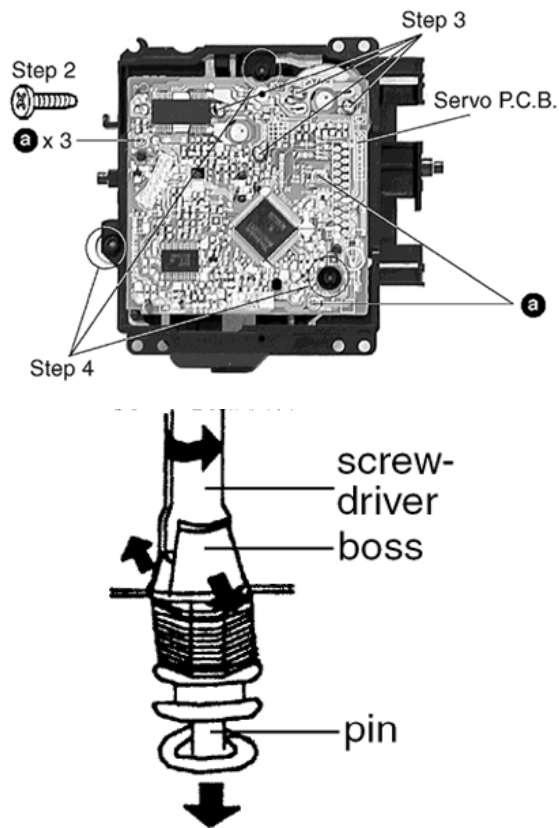
Step 7 : Use extension 14pin FFC wire for CN309.

Step 8 : Supply power for troubleshooting.

8.2. Main Component Replacement Procedures

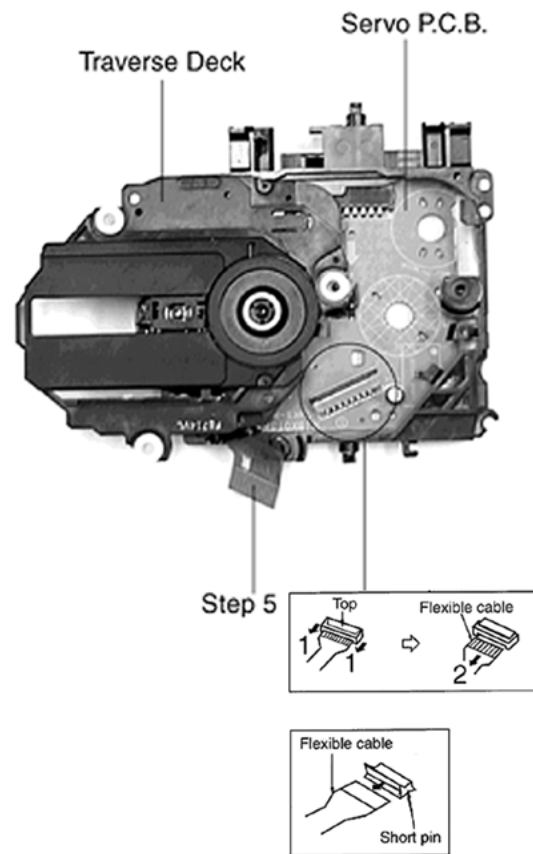
1. Replacement of the Traverse Deck

Step 1 Follow the procedures in 'Disassembly of the Traverse Unit' (Step 1 - Step 4)



Step 3 Desolder the 4 legs of the 2 motors and pull out the Servo P.C.B.

Step 4 Widen the 3 bosses with a flat screwdriver and pull out the 3 pins. Then remove the Traverse Deck.



Step 5 Remove the flexible cable CN 701.

- Removal of the flexible cable. Push the top of the connector in the direction of the arrow 1, and then pull out the flexible cable in the direction of the arrow 2.

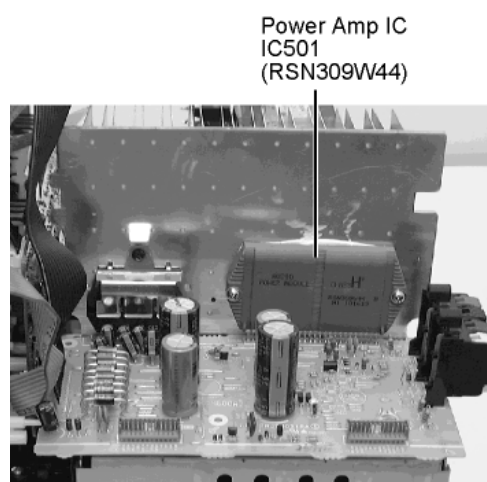
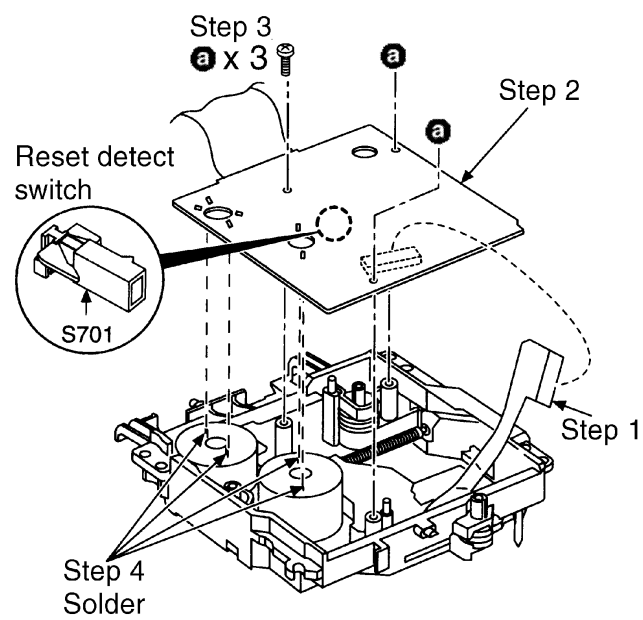
Note:

Insert a short pin into the flexible cable for traverse unit.

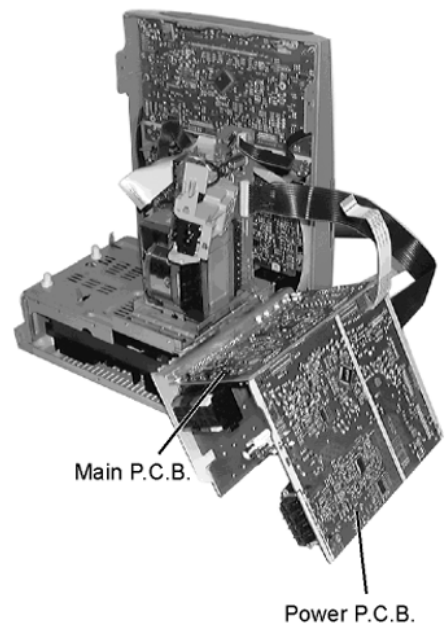
- **Installation of the CD servo P.C.B. after replacement**

Step 1 Connect the FFC board.

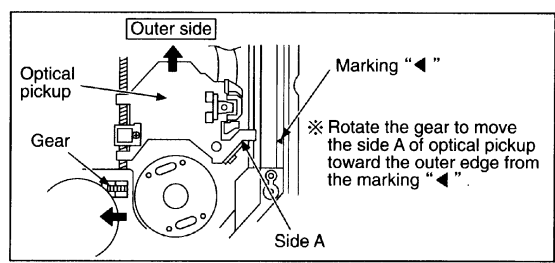
Step 2 Install the CD servo P.C.B. in the traverse deck assembly.



Step6 Unsolder the terminals of Power Amp IC and replace the respective component.

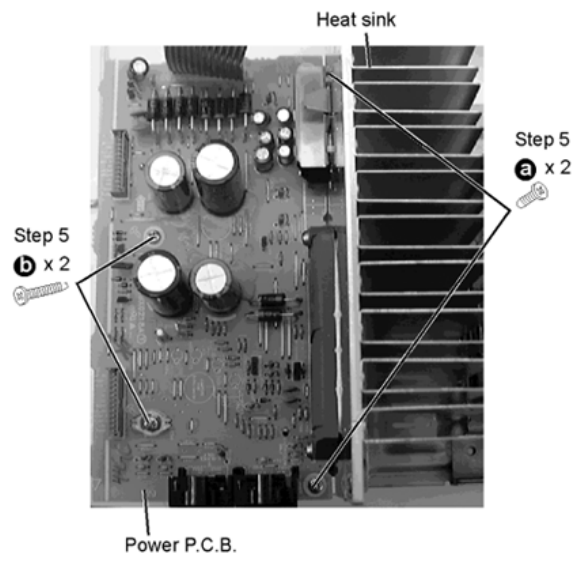


Note:
Before installing the CD servo P.C.B., move the optical pickup towards the outer edge from the marking (black triangle). [Otherwise, the reset detect switch (S701) mounted on the CD servo P.C.B. may be damaged.]



2. Replacement of the Power Amplifier IC

Step 1 Follow the procedures in 'Checking Procedure for each major P.C.B.' (Step 1 - Step 6).



Step 4 Remove the wires at CN302, CN303 and CN304 and pull out the Main P.C.B.

Step 5 Remove 4 screws fixed to the Power Amplifier IC.

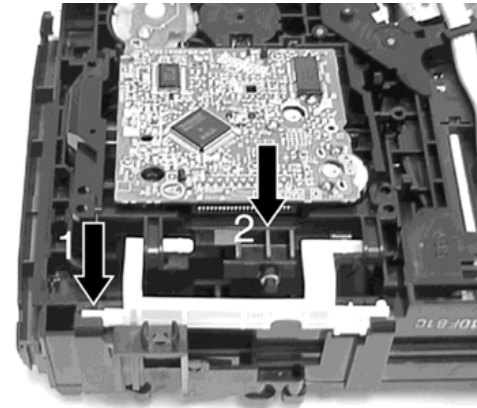
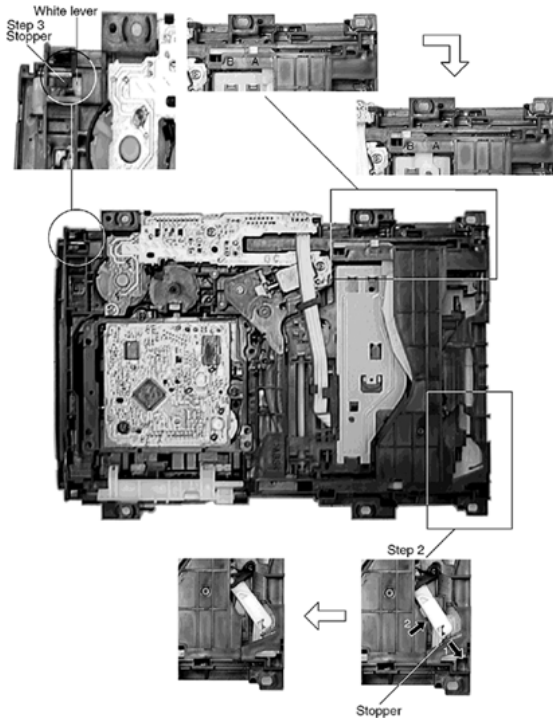
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8.3. Disassembly and assembly of the Traverse Unit

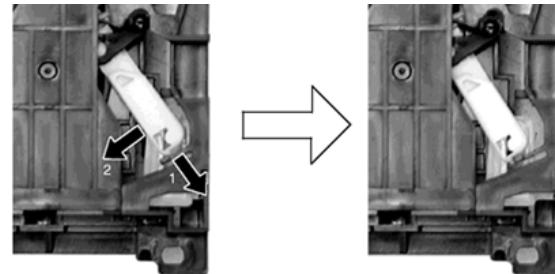
Step 1 Push the lever from position A to B.

Step 2 Pull the stopper (black) in the direction of arrow 1 and push the lever in the direction of arrow 2.

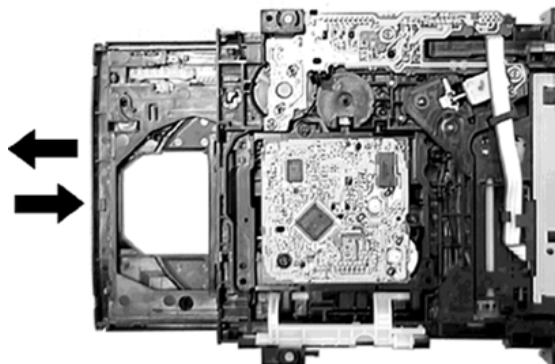
Step 3 Push the stopper (black) down until the white lever eject out.



Step 3 Pull the stopper in the direction of arrow 1 and release the lever in the direction of arrow 2 as shown.

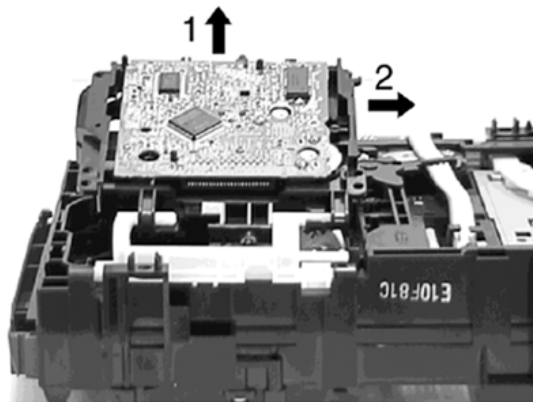


Step 4 Pull out the tray half way and push it back fully.



Step 4 Lift up the traverse unit and slide out the unit as shown.

• Replacement of Traverse Unit



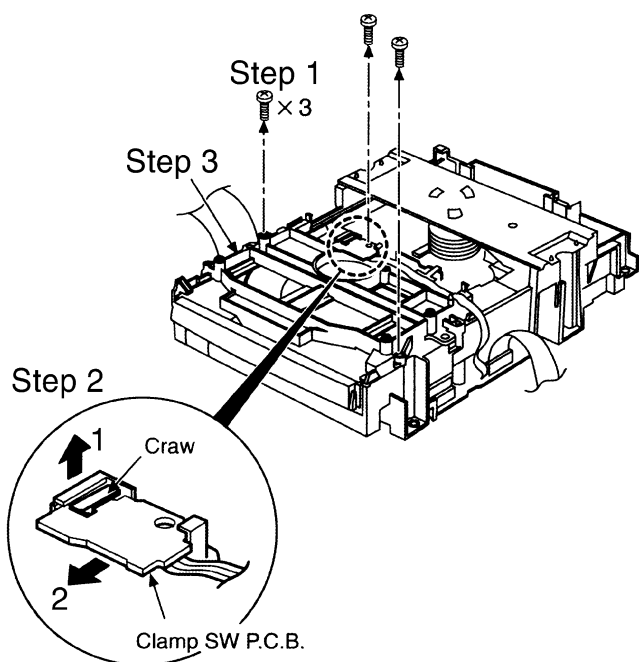
Step 1 Place the traverse unit as shown.

Step 2 Press in the lever shaft in the direction of arrow 1 as shown and push the traverse unit into the position in the direction of arrow 2.



Step 5 Push the lever to the initial position indicated 'I---I'.

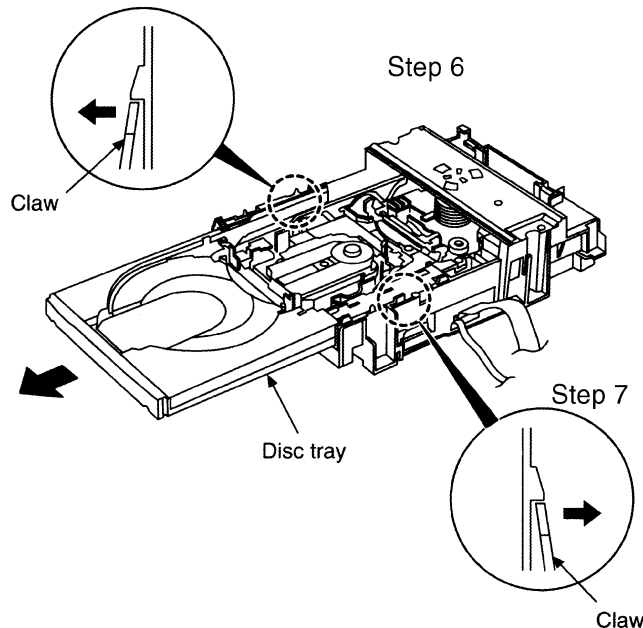
8.4. Disassembly and assembly of the Disc Tray



Step 2 With lifting the claw in the direction of arrow 1, draw the clamp SW P.C.B. in the direction of arrow 2.

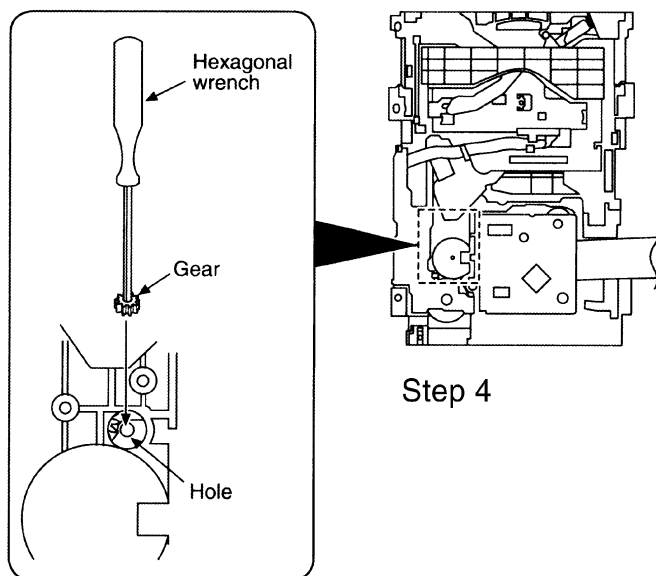
Step 3 Remove the mechanism cover.

Step 5 Rotate the hexagonal wrench in the direction of arrow (clockwise), and then open the disc tray fully.

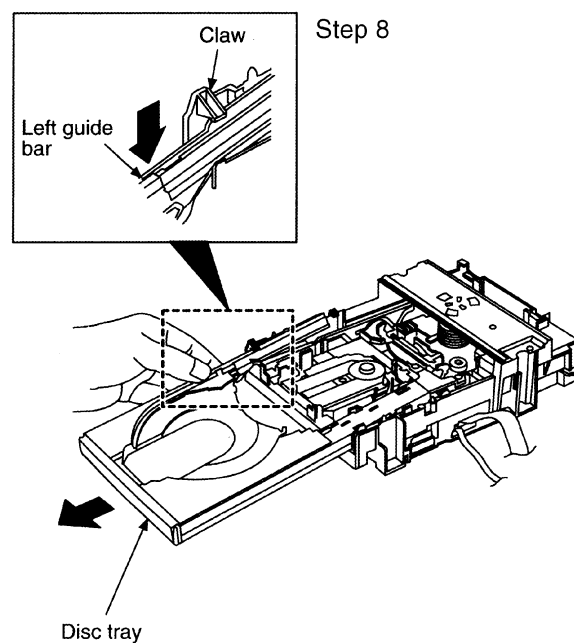


Step 6 Upset the CD changer unit again.

Step 7 Release both the claws, and then draw the disc tray.

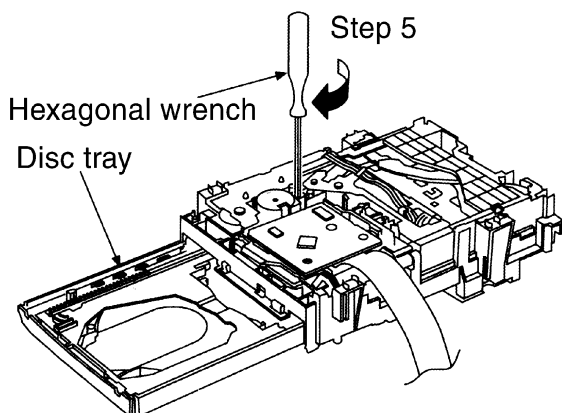


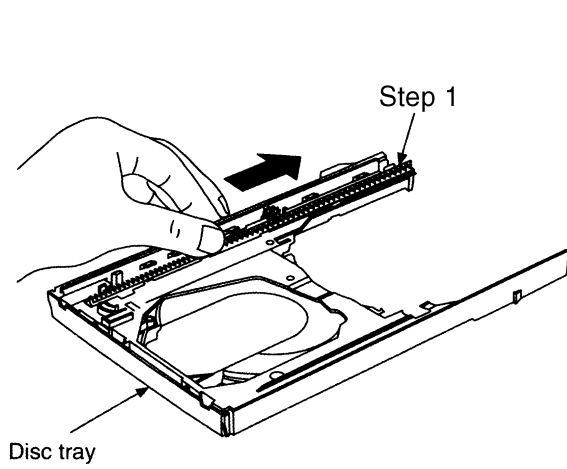
Step 4 Insert the gear with hexagonal wrench into the hole.



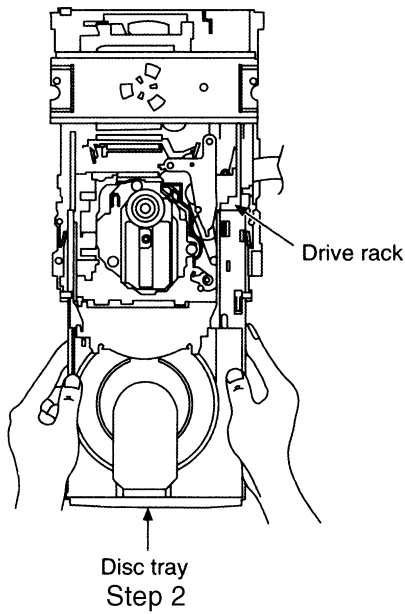
Step 8 With forcing the left guide bar manually because the left guide bar interferes with claw, draw the disc tray.

• Installation of the disc tray after replacement

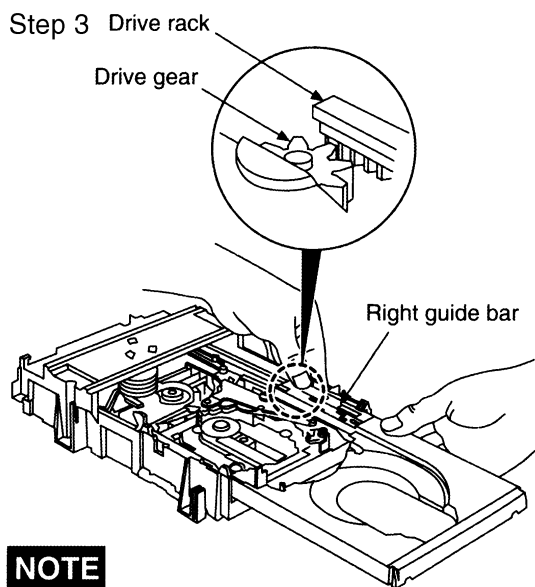




Step 1 Slide the drive rack fully in the direction of arrow.



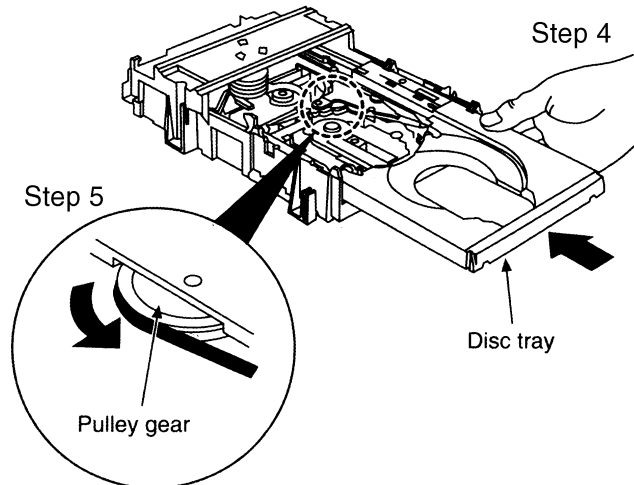
Step 2 Holding the drive rack not to move, install the disc tray.



NOTE

Force the right guide bar of tray base manually not to move upwards.

Step 3 Align the drive rack with the driver gear.



Step 4 Holding the disc tray manually, rotate the pulley gear in the direction of arrow.

Step 5 Rotate the gear 5 or 6 times manually, and then push the disc tray.

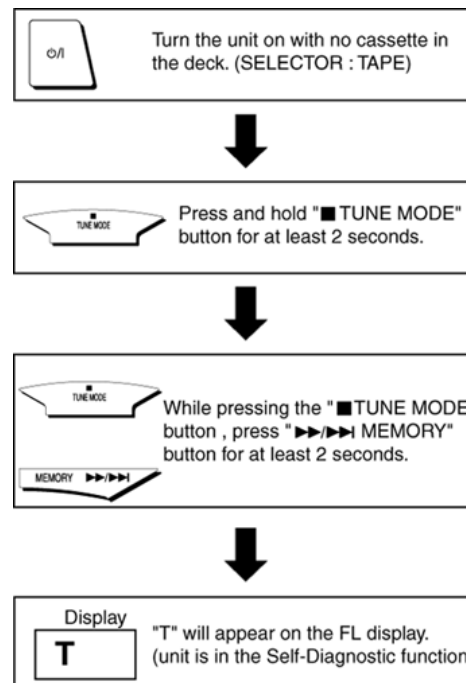
9 Self-Diagnostic Function

9.1. Self-diagnostic display

This unit is equipped with a self-diagnostic display function which, if a problem occurs, will display an error code corresponding to the problem.

Use this function when performing maintenance on the unit.

9.2. How to enter the Self-Diagnostic Function



9.3. Cassette Mechanism Test (For error code H01, H02, H03, F01, F02)

1. Press "TAPE, DECK 1/2" to select Deck 2.
2. Load a cassette tape with the erasure prevention tab, remove from left side only and close the cassette holder.
3. Press "FAST FORWARD MEMORY" (Tape will be stop after 2 seconds)
4. Load a cassette tape with the erasure prevention tab, remove from right side only and close the cassette holder.
5. Press "REVERSE FM MODE/BP" (Tape will be stop after 2 seconds)
6. Load a pre-recorded tape with both side record tabs intact and close the cassette holder.
7. Press "PLAY/TUNE/TIME ADJ UP" (After TPS function, tape will stop automatically)
8. Press "REC/STOP" (Tape will not move)
9. Press "STOP/TUNE MODE" to indicate Error code.
 - If several problem exist, error code will change each time when "TUNE MODE" is pressed.
(e.g. H01 → H03 → F01etc.)
10. Press "TAPE, DECK 1/2" to select Deck 1.
11. Repeat step 2 to 9 to test Deck 1. (Tape Deck 1 will not check H02 because of no recording function)

9.4. CD Mechanism Test (F15, F26, F16, F17, F27, F28, F29, H15)

1. Press "CD".
2. Press "OPEN/CLOSE (1)" and place a CD.
3. Press "OPEN/CLOSE (1)" to close the tray.
4. Press "OPEN/CLOSE (5)" and wait until the tray is open.
5. Press "OPEN/CLOSE (1)" and remove the CD.
6. Press "OPEN/CLOSE (1)" to close the tray.
7. Press "■/TUNE MODE" to indicate Error Code.

- If several problem exist, error code will change each time when "■/TUNE MODE" is pressed. (e.g. F15 → F26 → F16etc).

9.5. To clear all Error code

1. Press "STOP/TUNE MODE" button for 5 seconds.
2. FL indicator shows "CLEAR" for 1 second and change to "T".

9.6. How to get out from Self-Diagnostic function

1. Press "Power" button OFF.

9.7. Power Amplifier Failure (F61)

1. When power amplifier fail, F61 will indicate automatically.

10 Description of Error Code

10.1. Error detection for Cassette Mechanism block

No.	Error	Error Display	Problem condition
1	MODE SW detection error	H01	Faulty operation of cassette mechanism. Faulty contact or short-circuit of mechanism mode switch (S951, S971).
2	REC INH SW detection error	H02	Recording not possible. Faulty contact or short-circuit of REC INH switch (S974, S975).
3	HALF SW detection error	H03	Playback cannot perform. Faulty contact or short-circuit of HALF switch (S952, S972).
4	Reel Pulse detection error	F01	The tape advances slightly and then stops. Faulty reel pulse, faulty hole detect IC (IC951, IC971).
5	TPS abnormal	F02	Cassette deck will not perform TPS function. Faulty playback EQ/recording amplifier IC (IC101).

10.2. Error detection for CD/Changer block

No.	Error	Error Display	Problem condition
1	REST SW detection error	F15	CD does not function. This error occurs when the Optical Pick Up REST SW (S701) is not detected within the specified time (about 8 seconds)
2	CD tray opens automatically	F16	CLAMP switch (S4) NG (Check & Replace)
3	Does not startup when [PLAY] button is pressed	F17	BOTTOM switch (S5) NG (Check & Replace)
4	Transmission error between CD servo LSI and micon	F26	CD does not function. This error occurs when the POWER is ON for the CD block and an error is detected after the transmission has started.
5	Startup fails even when you insert CD or the selected disc tray does not open	F27	Tray 1 detect switch or Tray 2 detect switch NG (Check & Replace)
6	Cannot insert CD	F28	Tray 1 detect switch NG (Check & Replace)
7	Cannot eject CD	F29	Check if disc is stuck. Tray 2 detect switch NG (Confirm & Replace)
8	The CD tray closes	H15	CD disc tray detect switch NG (S3) (Check & Replace)

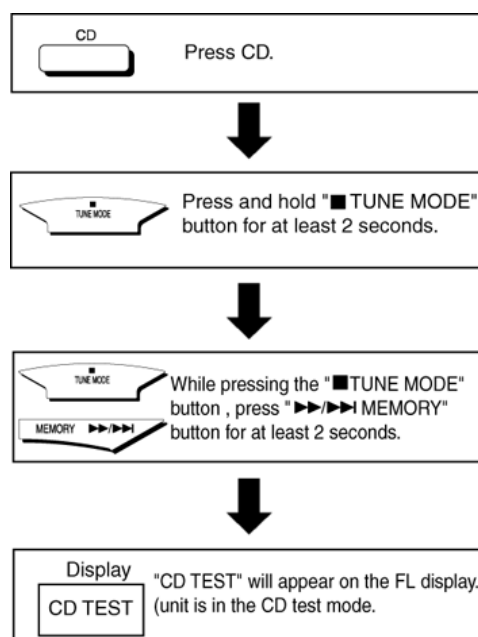
10.3. Power Supply related error detection

No.	Error	Error Display	Problem condition
1	POWER AMP output abnormal	F61	When POWER is switched on, power become off automatically. During normal operation, if DC DET become L, PCNT shall become L and the error display on the left shall be displayed. (IC501)

11 CD Test Mode Function

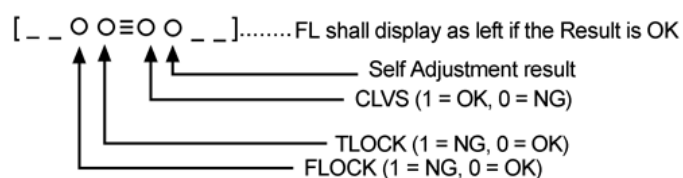
This CD test mode is provided to check CD unit without connecting to changer loading mechanism. This mode shall operate CD PLAY with CD unit being connected only and CD Automatic Alignment result is shown on FL display.

11.1. How to set CD test mode



11.2. CD Automatically Adjustment result indication

Under CD test mode, pressing the numeric key '0' on the remote controller will display the auto adjustment result. FLOCK, TLOCK and CLVS status shall be shown as below:



During the above display, executing CD PLAY will display auto adjustment result for CD PLAY mode.

12 Measurements and Adjustments

12.1. Cassette Deck Section

- Measurement Condition

- Tape edit: NORMAL
- Record timer: OFF
- Make sure head, capstan and press roller are clean.
- Judgeable room temperature 20 ± 5 °C (68 ± 9 °F)

- Measuring instrument

- EVM (Electronic Voltmeter)
- Digital quency counter

- Test Tape

- Tape speed gain adjustment (3 kHz, -10 dB); QZZCWAT

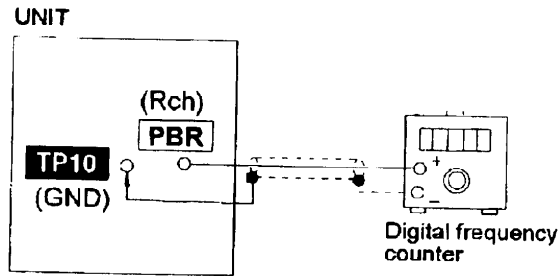
12.1.1. Tape Speed Adjustment (Deck 1/2)

1. Set the tape edit button to "NORMAL" position.
2. Insert the test tape (QZZCWAT) to DECK 2 and playback (FWD side) the middle portion of it.
3. Adjust Motor VR (DECK 2) for the output value shown below.

Adjustment target: 2940 ~ 3060 Hz (NORMAL speed)

SA-AK22

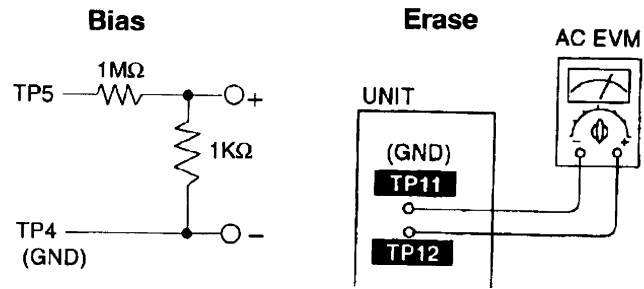
4. After alignment, assure that the output frequency of the DECK 1 FWD are within ± 60 Hz of the value of the output frequency of DECK 2 FWD.



12.1.2. Bias and Erase Voltage Check

1. Set the unit "AUX" position.
2. Insert the Normal blank tape (QZZCRA) into DECK 2 and the unit to "REC" mode (use "● REC/STOP" key).
3. Measure and make sure that the output is within the standard value.

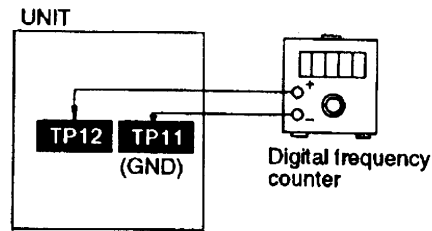
Bias voltage for Deck 2 14 ± 4 mV (Normal Standard value)
 Erase voltage for Deck 2 more than 80mV (Normal)



12.1.3. Bias Frequency Adjustment (Deck 1/2)

1. Set the unit to "AUX" position.
2. Insert the Normal blank tape (QZZCRA) into DECK 2 and set the unit to "REC" mode (● use "REC/STOP" key).
3. Adjust L1002 so that the output frequency is within the standard value.

Standard Value: 97 ± 8 kHz



12.2. Tuner Section

12.2.1. AM-IF Alignment

• AM-IF ALIGNMENT

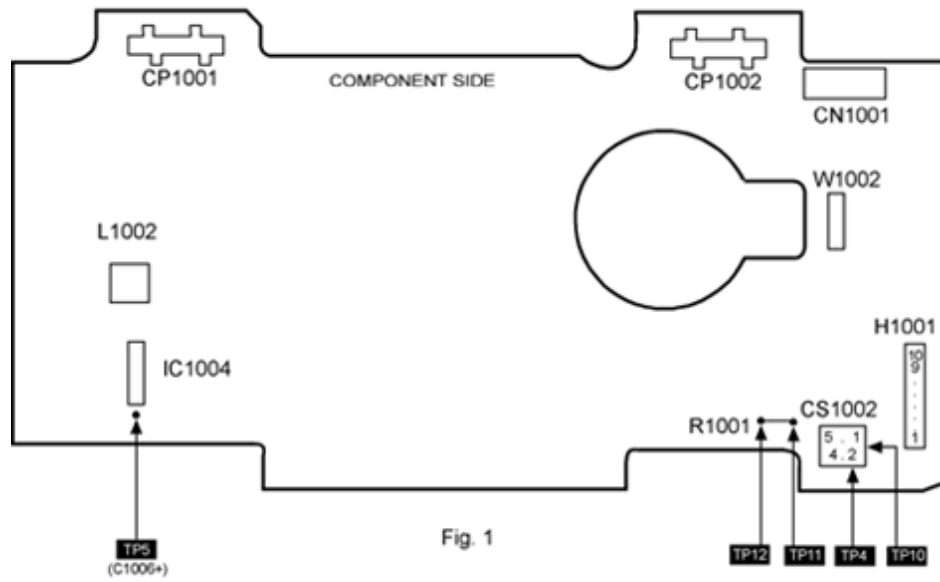
SIGNAL GENERATOR OR SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER OSCILLOSCOPE)	ADJUSTMENT(Shown in Fig.3)	REMARKS
CONNECTIONS	FREQUENCY				
Fashion a loop of several turns of wire and radiate signal into loop of receiver.	450 kHz 30% Mod. at 400Hz.	Point of non-interference (on/about 600 kHz)	Headphone Jack (32Ω) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	Z102 (AM IFT)	Adjust for maximum output.

• FM/AM-RF ALIGNMENT

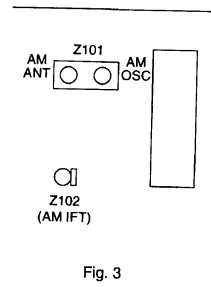
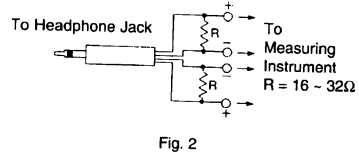
SIGNAL GENERATOR OR SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER OSCILLOSCOPE)	ADJUSTMENT(Shown in Fig.1)	REMARKS
CONNECTIONS	FREQUENCY				
Fashion a loop of several turns of wire and radiate signal into loop of receiver.	520 kHz	Tuning capacitor fully closed.	Headphone Jack (32Ω) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	Z101 (AM OSC Coil)	Adjust for maximum output.
Fashion a loop of several turns of wire and radiate signal into loop of receiver.	600 kHz	Tuning capacitor fully open.	Headphone Jack (32Ω) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	Z101 (AM ANT Coil)	Adjust for maximum output.

12.3. Alignment Points

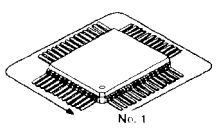
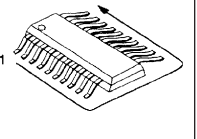
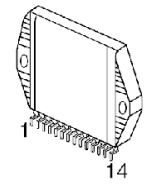
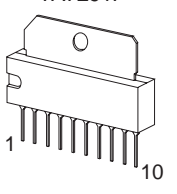
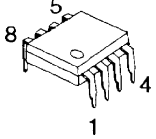
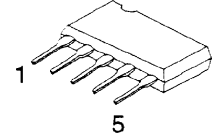
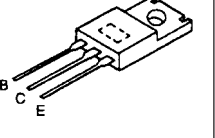
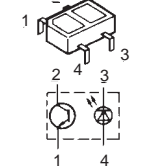
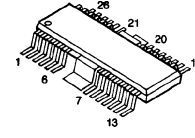

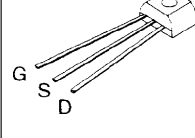
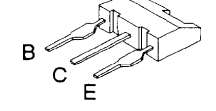
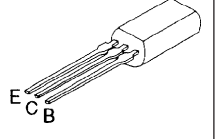
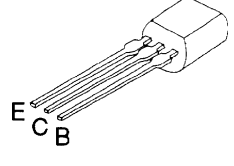
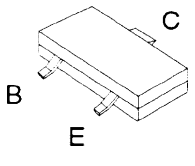
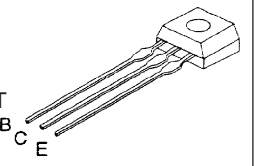
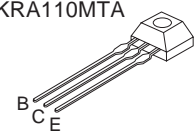
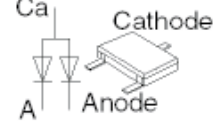

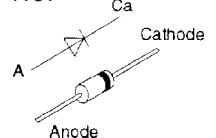
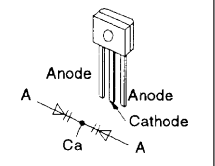
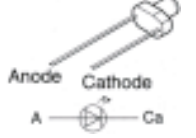
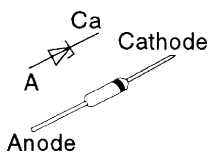
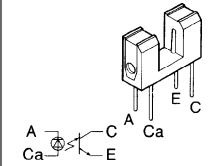
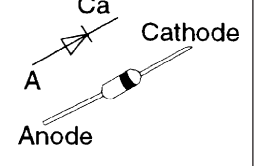
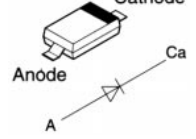
Cassette Deck Section



Tuner Section



13 Illustration of IC's, Transistors and Diodes

<p>M38B79MFA053 (100P) BH3874AKS2 (64P) MN662790RSC (80P)</p>  <p>No. 1</p>	<p>BU2090AF-E2 (16P) LA1833NMNTLM (24P) LC72131MDTRM (20P) AN7348STA-E1 (24P) BA4558FE2 (8P) AN8885SBE1 (28P)</p>  <p>No. 1</p>	<p>RSN3502C (14P)</p> 	<p>TA7291P</p> 	<p>M5218AP 93LC46B</p> 	
<p>BA7755A</p> 	<p>KTC2026 KTA1046</p> 	<p>0N2180RLC1</p> 	<p>AN8739SBE2</p> 	<p>2SC2058SPTA</p> 	<p>2SK544F-AC</p> 
<p>2SD1859QRTV2</p> 	<p>KRC114STA</p> 	<p>KTA12710YTA KTD1146YTA 2SB621ARSTA KTC3205YTA KRC101MTA KTC32030YTA</p> 	<p>2SA1037AKSTX 2SC2412KT96R KRA102STA KTC3875GRTA KRC111STA KTD1304TA KRC102STA KRA102STA</p> 		
<p>2SA933SSTA 2SC2787FL1TA 2SD2144STA KTC3199GRTA RVTDTTC143EST 2SC2786MTA</p> 	<p>KRA102MTA KRC103MTA KRC102MTA KRA110MTA</p> 	<p>DAP202KT146</p> 	<p>MA8300MTX 1SS355TE17 UDZSTE175R1B UDZSTE177R5B UDZTE173R6B UDZSTE179R1B</p> 		
<p>RL1N4003S-P 1N5402BM21 1T3T</p> 	<p>SVC211SPA-AL</p> 	<p>SLI325URCT31 SLR325MCT31W</p> 	<p>MA4020LTA MTZJ6R8BTA MTZJ4R7BTA MTZJ10BTA MTZJ15CTA MTZ556BTA</p> 	<p>GP1S94</p> 	
<p>RVD1SS133TA 1SS291TA MA165TA MA700ATA MA723TA</p> 	<p>1SS355TE17</p> 				

14 Terminal Function of IC's

14.1. IC701 (AN8885SBE1) Servo Amplifier

Pin No.	Mark	I/O	Function
1	PDE	I	Tracking signal input 1
2	PDF	I	Tracking signal input 2
3	VCC	I	Power supply
4	PDA	I	Focus signal input terminal 1
5	PDB	I	Focus signal input terminal 2
6	LPD	I	APC amp input
7	LD	O	APC amp output
8	RF	O	RFsumming output
9	RFIN	I	Detector's input
10	CSBRT	I	Capacitor for OFTR connection
11	CEA	I	Capacitor for HPF amp connection
12	BDO	O	BDO output ("H" : drop out)
13	LDON	I	APC control
14	GND	—	Ground

Pin No.	Mark	I/O	Function
15	/RFDET	O	NRFDET output ("L" : detection)
16	PDOWN	O	Power-down input
17	OFTR	O	OFTR output
18	NC	O	N.C.
19	ENV	O	3T-ENV output
20	NC	I	N.C.
21	NC	I	N.C.
22	TEN	I	TE amp input
23	TEOUT	O	TE amp output
24	FEOUT	O	FE amp output
25	FEN	I	FE amp input
26	VREF	O	Reference voltage output
27	TBAL	I	Tracking balance control
28	FBAL	I	Focus balance control

14.2. IC702 (MN662790RSC) Servo processor/ Digital signal processor/ Digital filter/ D/A converter

Pin No.	Mark	I/O	Function
1	BCLK	O	N.C.
2	LRCK	O	N.C.
3	SRDATA	O	N.C.
4	DVDD1	I	Power supply input (for digital circuit)
5	DVSS1	I	GND (for digital circuit)
6	TX	O	Digital audio interface signal output (Latches data at first transition)
7	MCLK	I	Microprocessor command clock signal input
8	MDATA	I	Microprocessor command data signal input
9	MLD	I	Microprocessor command load signal input
10	SENSE	O	Sense signal output (OFT, FESL, MAGEND, NAJEND, PO SAD, SFG) (Not used, open)
11	/FLOCK	O	Focus servo feeding signal output ("L" : Feed)
12	/TLOCK	O	Tracking servo feeding signal output ("L" : Feed)
13	BLKCK	O	Sub-code block clock signal output (BLKCKf = 75Hz during normal playback)
14	SQCK	I	External clock signal input for sub-code Q resistor
15	SUBQ	O	Sub-code Q code output
16	DMUTE	I	Muting input ("H" : mute)
17	STAT	O	Status signal output (CRC, CUE, CLVS, TTSTVP, F CLV, SQCK)
18	/RST	I	Reset signal input
19	SMCK	O	1/2-divided clock signal of crystal oscillating at MSEL = "H" (fSMCK = 8.4672 MHz) 1/4-divided clock signal of crystal oscillating at MSEL = "L" (fSMCK = 4.2336 MHz)
20	CSEL	I	Frequency Selection Terminal H = 33.8688 MHz ; L = 16.9344 MHz
21	TRV	O	N.C.
22	TVD	O	Traverse drive output
23	PC	O	Spindle motor ON output ("L" : ON)

Pin No.	Mark	I/O	Function
24	ECM	O	Spindle motor drive signal output(forced mode output)
25	ECS	O	Spindle motor drive signal output (servo error signal output)
26	KICK	O	N.C.
27	TRD	O	Tracking drive output
28	FOD	O	Focus drive output
29	VREF	I	D/A (drive) output (TVD, ECS, TRD, FOD, FBAL, TBAL) Reference voltage input
30	FBAL	O	Focus balance adjustment output
31	TBAL	O	Tracking balance adjustment output
32	FE	I	Focus error signal input (analog input)
33	TE	I	Tracking error signal input (analog input)
34	RFENV	I	RF envelope signal input
35	VDET	I	Vibration detection signal input ("H" :detection)
36	OFT	I	Off-track signal input ("H" : off track)
37	TRCRS	I	Track cross signal input
38	/RFDET	I	RF detection signal input ("L" : detection)
39	BDO	I	Dropout signal input ("H" : Dropout)
40	LDON	O	Laser on signal output ("H" : ON)
41	PLL2	I/O	N.C.
42	DSL2	O	Tracking Offset alignment output/DSL Balance Output (DA Output)
43	WVEL	O	N.C.
44	ARF	I	RF signal input
45	IREF	I	Reference current input
46	DRF	I	DSL bias terminal (Not used, open)
47	DSL2	I/O	DSL loop filter terminal
48	PLL2	I/O	PLL loop filter terminal
49	VCOF	I/O	VCO loop filter terminal
50	AVDD2	I	Power supply input (for analog circuit)
51	AVSS2	I	GND (for analog circuit)

SA-AK22

Pin No.	Mark	I/O	Function
52	EFM	-	EFM signal output
53	PCK	-	PLL extraction clock output (fPCK = 4.321 MHz during normal playback)
54	VCOF2	I/O	VCO Loop filter for 33.8688 MHz conversation terminal for 16.9344 MHz crystal mode, must use other circuit
55	SUBC	O	Sub-code serial data output
56	SBCK	I	Clock input for sub-code serial data
57	VSS	I	GND
58	X1 IN	I	Crystal oscillating circuit input (f = 16.9344MHz)
59	X2 OUT	O	Crystal oscillating circuit input (f = 16.9344 MHz)
60	VDD	I	Power supply input (for oscillating circuit)
61	BYTCK	-	Byte clock output
62	/CLDCK	-	Sub-code frame clock signal output (fCLDCK = 7.35 kHz during normal playback)
63	FCLK	-	Crystal frame clock signal output (fCLK = 7.35 kHz, double = 14.7 kHz)
64	IPFLAG	-	Interpolation flag output ("H" : Interpolation)
65	FLAG	-	Flag output

Pin No.	Mark	I/O	Function
66	CLVS	-	Spindle servo phase synchronizing signal output ("H" : CLV, "L" : rough servo)
67	CRC	-	Sub-code CRC checked output ("H" :OK, "L" :NG)
68	DEMPH	-	De-emphasis ON signal output ("H" :ON)
69	RESY	-	Frame re-synchronizing signal output
70	IOSEL	I	Mode Switching Terminal
71	/TEST	I	Test input
72	AVDD1	I	Power supply input (for analog circuit)
73	OUTL	O	Left channel audio signal output
74	AVSS1	I	GND
75	OUTR	O	Right channel audio signal output
76	RSEL	I	RF signal polarity assignment input (at "H" level, RSEL="H", at "L" level, RSEL="L")
77	IOVDD	I	5V supply input
78	PSEL	I	Test terminal (connected to Gnd)
79	MSEL	I	SMCK oscillating frequency designation input ("L":4.2336 MHz, "H":8.4672 MHz)
80	SSEL	I	SUBQ output mode select ("H":Q-code buffer mode)

14.3. IC703 (AN8739SBE2) Focus coil/ Tracking coil/ Traverse motor/ Spindle motor driver

Pin No.	Mark	I/O	Function
1	/RST	-	RESET output terminal
2	NC	-	N.C.
3	IN2	I	Motor Drive (2) input
4	PC2	I	Turntable motor drive signal ("L" :ON)
5	NC	-	N.C.
6	IN1	I	Motor driver (1) input
7	NC	I	N.C.
8	PVCC1	I	Power supply (1) for driver
9	PGND1	-	Ground connection (1) for driver
10	NC	-	N.C.
11	D1-	O	Motor driver (1) reverse-action output
12	D1+	O	Motor driver (1) forward-action output
13	D2-	O	Motor driver (2) reverse-action output
14	D2+	O	Motor driver (2) forward-action output

Pin No.	Mark	I/O	Function
15	D3-	O	Motor driver (3) reverse-action output
16	D3+	O	Motor driver (3) forward-action output
17	D4-	O	Motor driver (4) reverse-action output
18	D4+	O	Motor driver (4) forward-action output
19	NC	-	N.C.
20	PGND2	-	Ground connection (2) for driver
21	PVCC2	I	Power supply (2) for driver
22	NC	-	N.C.
23	VCC	I	Power supply terminal
24	VREF	I	Reference voltage input
25	IN4	I	Motor driver (4) input
26	IN3	I	Motor driver (3) input
27	RSTIN	I	Reset terminal
28	NC	-	N.C.

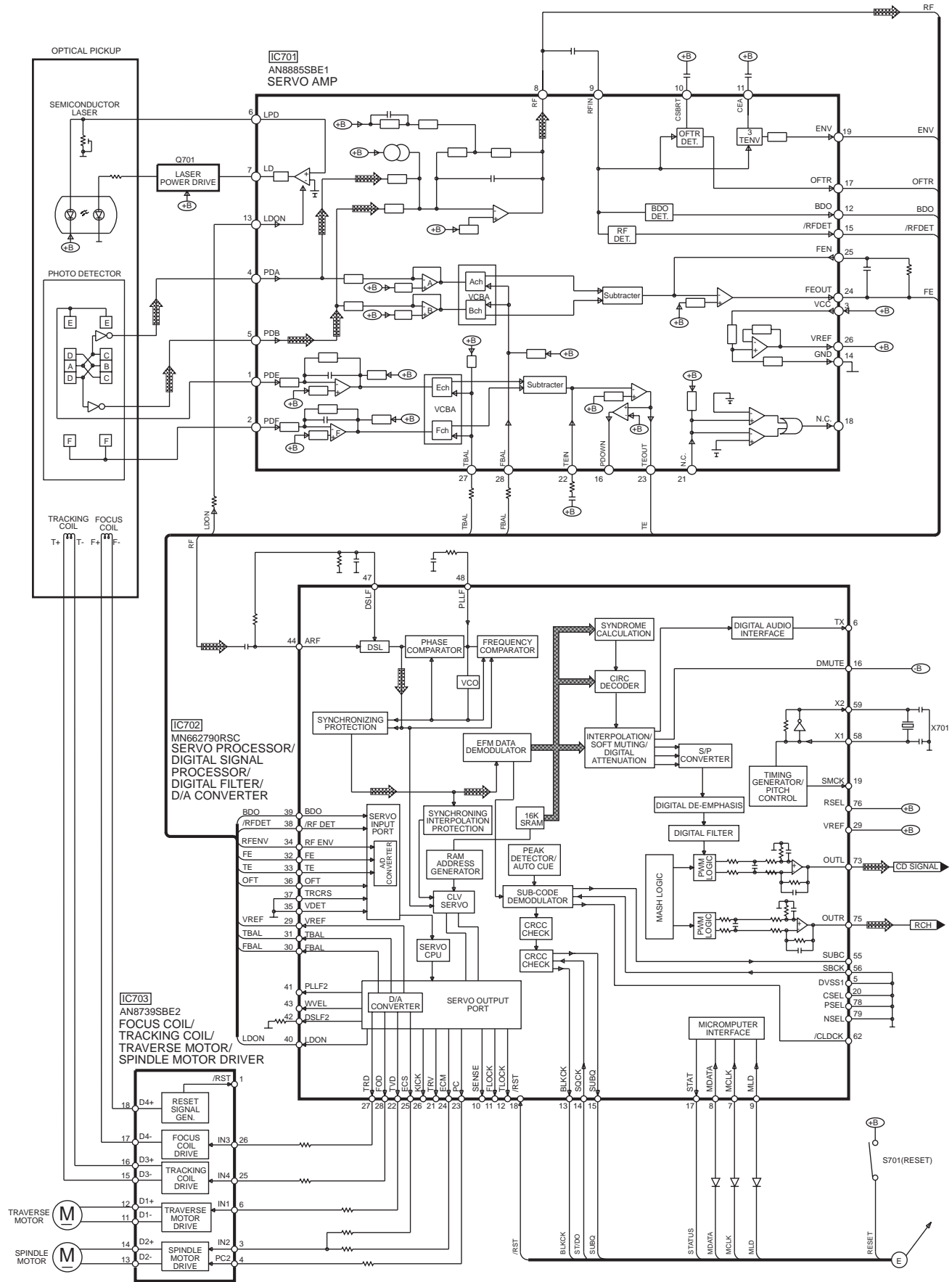
14.4. IC600 (M38B79MFA053) System Microprocessor

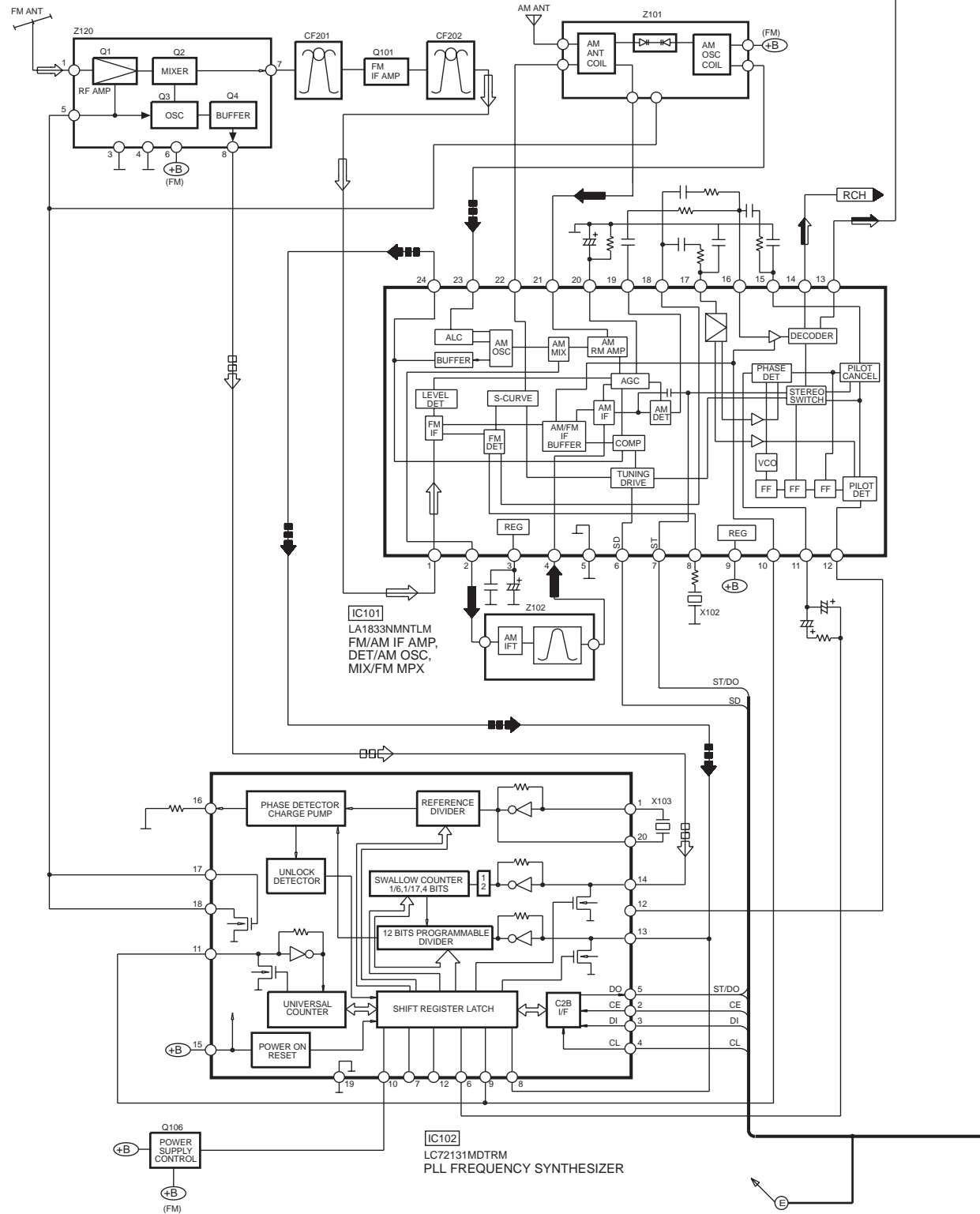
Pin No.	Mark	I/O	Function
1	DECK2	I	Tape mecha condition input (Half2/Reci_F/Mode/Reci_R)
2	KEY3	I	Key 3 input
3	KEY2	I	Key 2 input
4	KEY1	I	Key 1 input
5	V_JOG_AD	I	Volume jog A-D detection input
6	J_JOG_AD	I	EQ Joy jog A-D detection input
7	CHG_AD1	I	(Open Clamp) Chngr sw A-D detection input 1
8	CHG_AD2	I	(Position/ bottom) Chngr sw A-D detection input 2

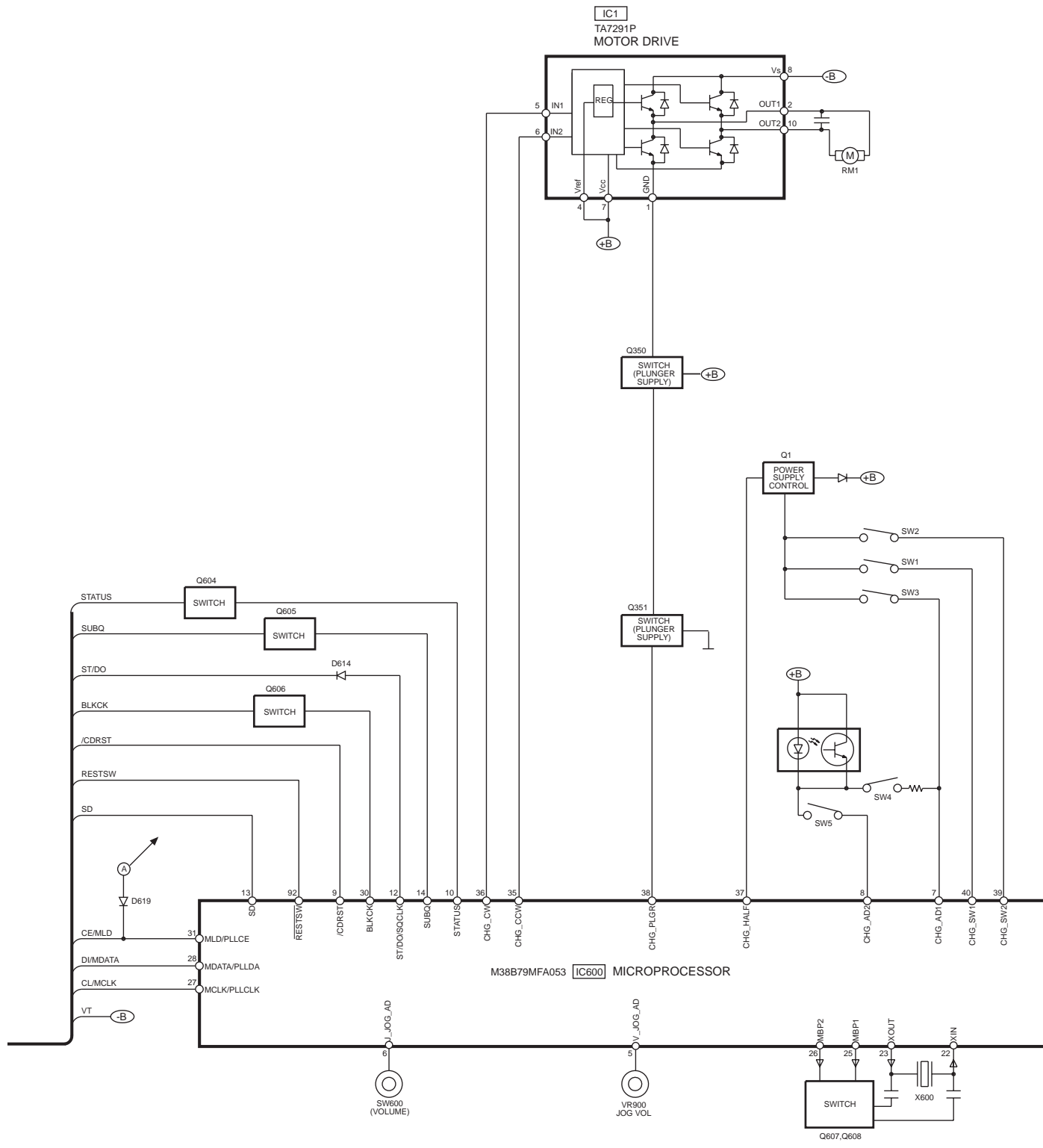
Pin No.	Mark	I/O	Function
9	CDRST	O	CD reset output
10	STATUS	I	CD signal processor status input (INV)
11	SPE	I	Speana input
12	ST/DO/SQC K	I/O	Tuner if data/stereo input and CD subcode clock output
13	SD	I/O	Tuner signal detect input
14	SUBQ	I	CD subcode data input (INV)
15	RDS_CL	I	RDS clock input
16	RDS_DA	I	RDS data input
17	CNVSS	-	Flash mode terminal (connect to ground)
18	/RESET	-	RESET input

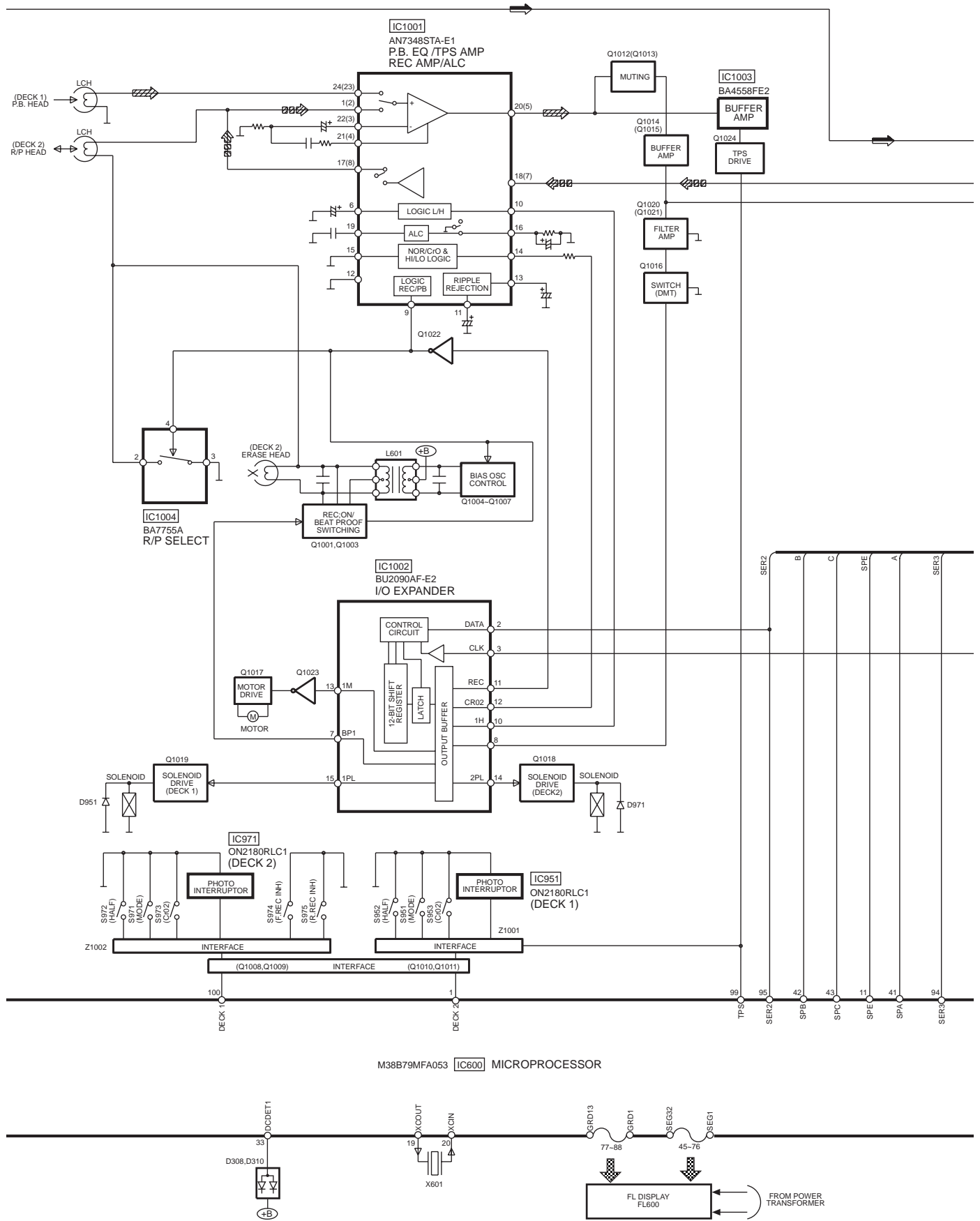
Pin No.	Mark	I/O	Function
19	XCOUT	-	32.768 kHz sub clock
20	XCIN	-	32.768 kHz sub clock
21	VSS	-	Ground (0V)
22	XIN	-	4.19 MHz main clock
23	XOUT	-	4.19 MHz main clock
24	VCC	-	Power supply (+5V)
25	MBP1	O	MPU beat proof output 1
26	MBP2	O	MPU beat proof output 2
27	MCLK/ PLLCK	O	CD command clock output/ tuner PLL clock output
28	MDATA/ PLLDA	O	CD command data output/ tuner PLL data output
29	RMT	I	Remote control input
30	BLKCK	I	CD block clock input (INV)
31	MLD/ PLLCE	O	CD command load output/ tuner PLL chip enable
32	SYNC	I	AC failure detect input
33	DCDET 1	I	DC detect input 1
34	DCDET 2	I	DC detect input 2
35	CHG_CCW	O	Changer motor CCW output
36	CHG_CW	O	Changer motor CW output
37	CHG_HALF	O	Changer half drive output
38	CHG_PLGR	O	Changer plunger output
39	CHG_SW2	I/O	CD changer SW2 input
40	CHG_SW1	I/O	CD changer SW1 input
41	SP_A	O	Speana control output A
42	SP_B	O	Speana control output B
43	SP_C	O	Speana control output C
44	SWFK_LED	-	Super woofer LED
45-63	SEG1- SEG19	O	Segment drive output (Anode drive output)
64-72	SEG20-28 SEG9-1	O	Segment drive output (Anode drive output) For regional setting/ function selection use
73-75	SEG29-31	O	Segment drive output (Anode drive output)
76	SEG32	O	Segment drive output
77-88	GRD12-1	O	Digit drive output (Grid drive output)
89	VEE	-	Power supply (-30V)
90	REG_IN EE_CS	I/O	Region and function setting input and eeprom chip select output
91	ECONO	O	Main transormer control output for economy mode
92	RESTSW	I	CD limit SW input for the most inner point (Active Low)
93	SER4	O	EEPROM_CLK EXP2_CLK/MK_CLK
94	SER3	O	ASP latch
95	SER2	O	ASP_CLK/EXP1_CLK/ MK_DAT
96	SER1	I/O	EEPROM_DAT / ASP_DAT / EXP1_DAT / EXP2 DAT
97	AVSS	-	Analog ground (0V)
98	VREF	-	Reference for A-D
99	TPS	I	Tape mecha TPS Input/ chrome 1 / chrome 2
100	DECK1	I	Tape mecha condition input (Half1/Mode/Photo1/Photo 2)

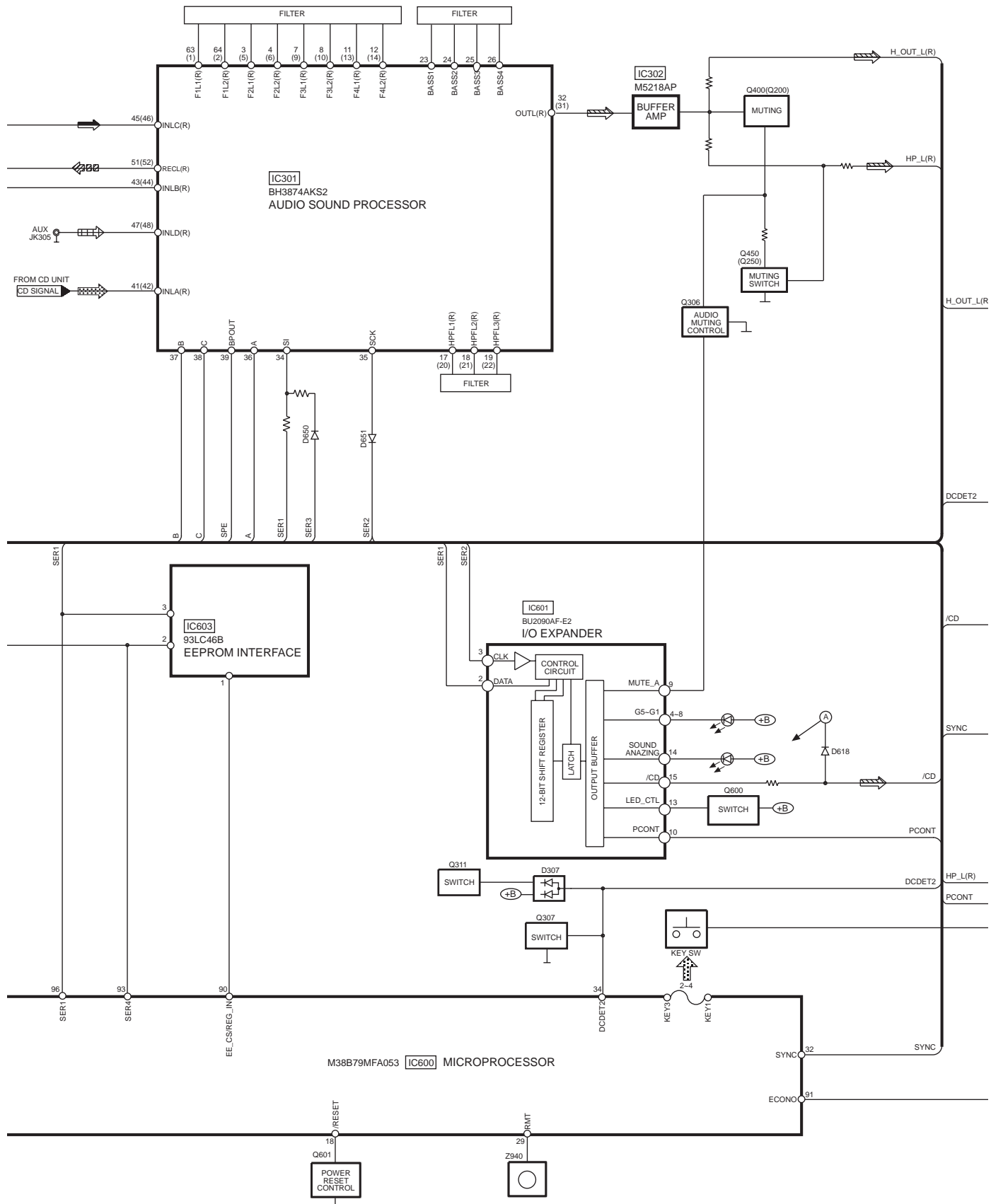
15 Block Diagram



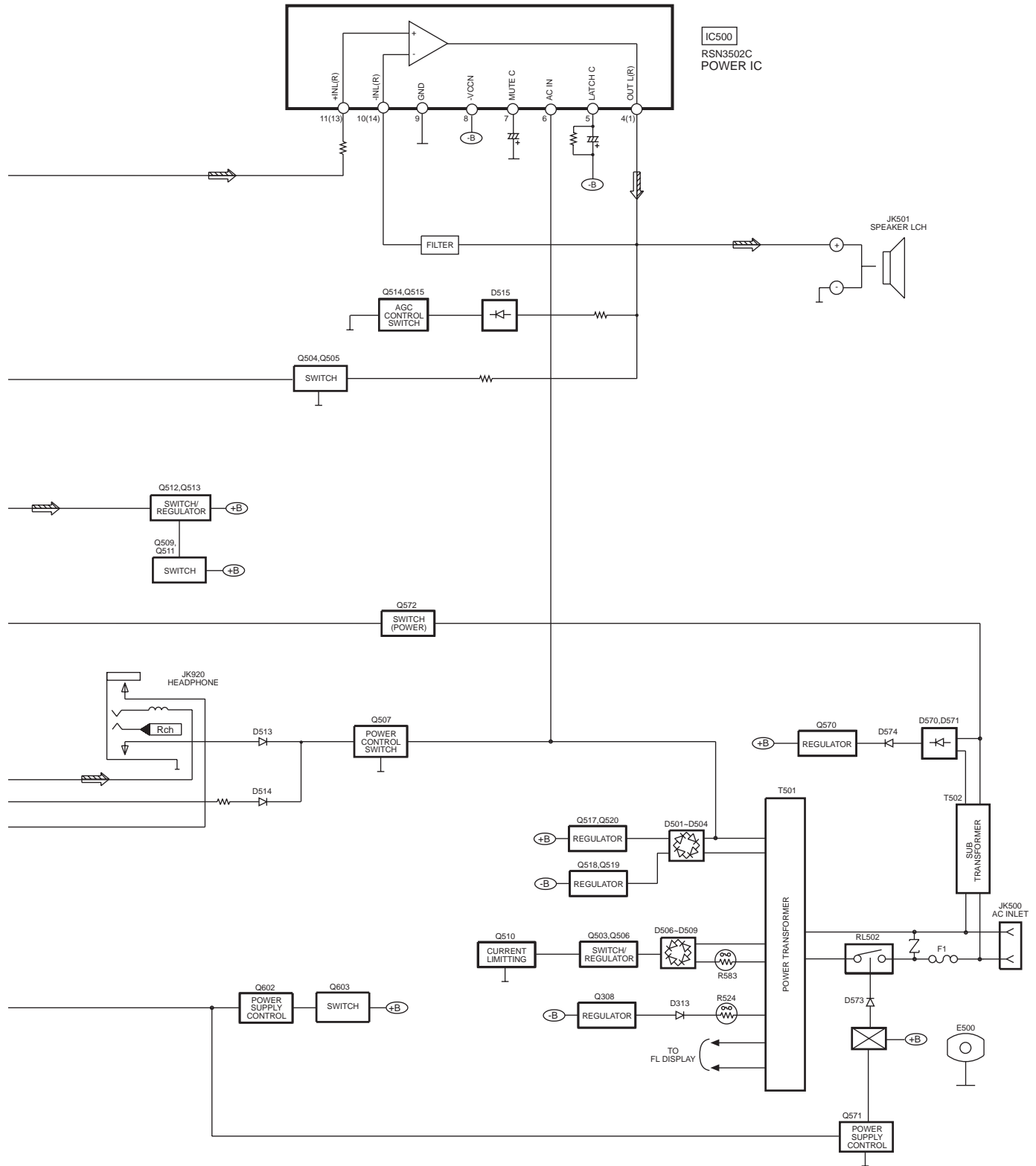








SIGNAL LINES



16 Schematic Diagram

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

Note:

S701	: Reset switch
S900	: CD Manager switch
S901	: Switch CD 1
S902	: Switch CD 2
S903	: Switch CD 3
S904	: Switch CD 4
S905	: Switch CD 5
S906	: Rec/Stop select switch
S907	: Reverse Mode select switch
S908	: Tape Edit select switch
S909	: Switch tune down
S910	: Switch FM mode/BP
S911	: Switch memory
S912	: Switch tune mode
S913	: Switch tune up
S920	: Switch CD eject
S940	: Switch AUX
S941	: Switch tuner
S942	: Switch tape
S943	: Switch CD
S945	: Switch super sound EQ
S950	: Switch deck 2 open
S951	: Mode switch
S952	: Leaf switch
S953	: Leaf switch
S956	: Switch power
S958	: Switch Play/Rec timer
S959	: Switch clock/timer
S961	: Switch Display character
S962	: Switch Deck 1 open
S971	: Switch leaf
S972	: Switch leaf
S973	: Switch leaf
S974	: Switch leaf
S975	: Switch leaf
S976	: Switch leaf
SW1	: Switch push
SW2	: Switch push
SW3	: Switch leaf
SW4	: Switch CD
SW5	: Switch lock
SW600	: Switch Joy Jog

- 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 : Playback << >> : Rec < > : FM
 (()) : CD () : AM [] : AUX

• Importance safety notice :

Components identified by \triangle 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.

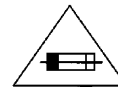
Caution !

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.
- Put a conductive mat on the work table.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

CAUTION : FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE **F1, 3.15A, 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 hazard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

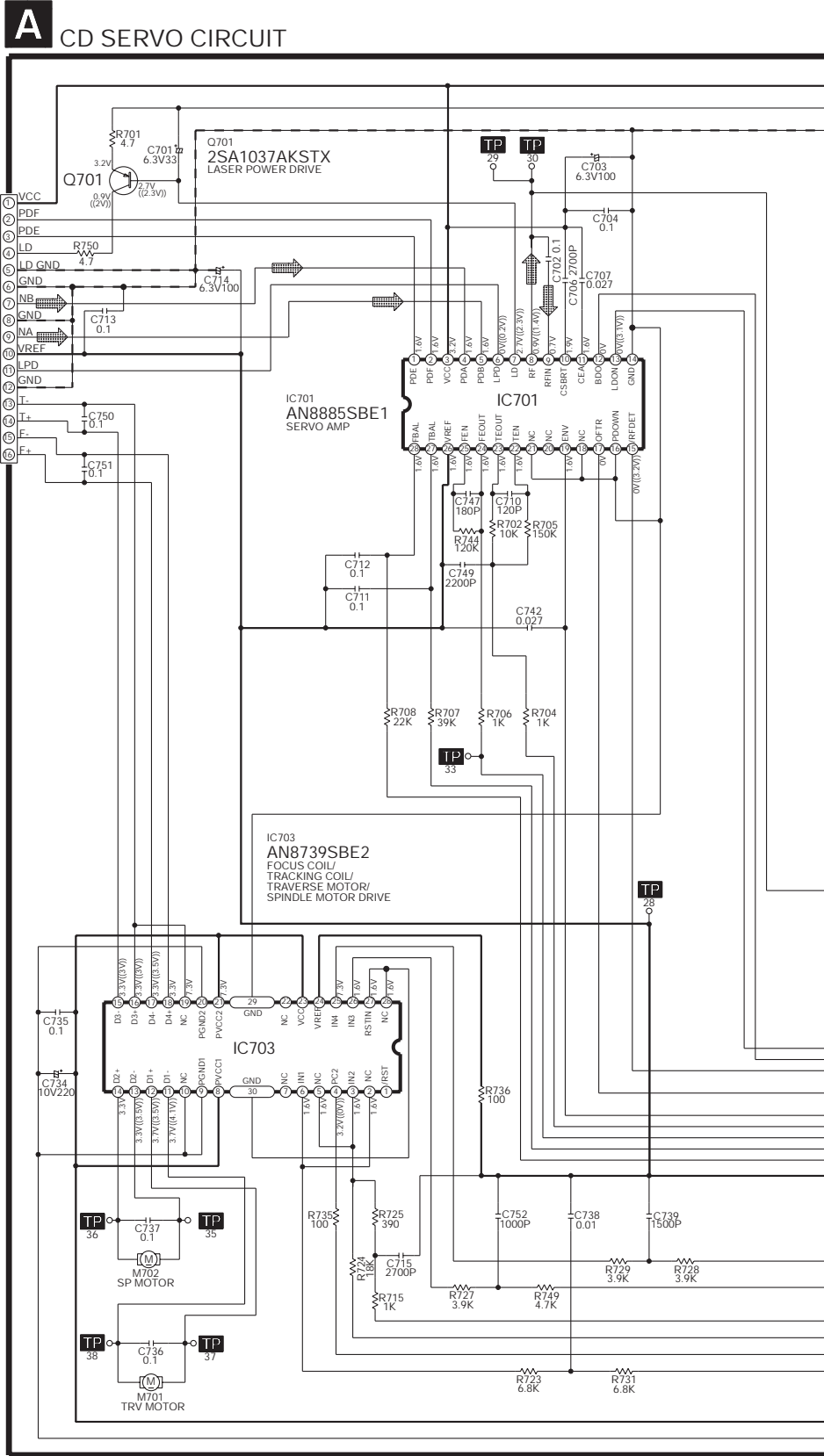


Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n'utiliser que des fusibles de même type. Ce dernier est indiqué là où le présent symbole est apposé.

CAUTION: REPLACE FUSIBLE RESISTOR WITH THE SAME TYPE RSFMB40KT-L FUSIBLE RESISTOR "ATTENTION: REMPLACER LA RESISTANCE FUSIBLE PAR UNE RESISTANCE FUSIBLE DE MEME TYPE RSFHB40KT-L.

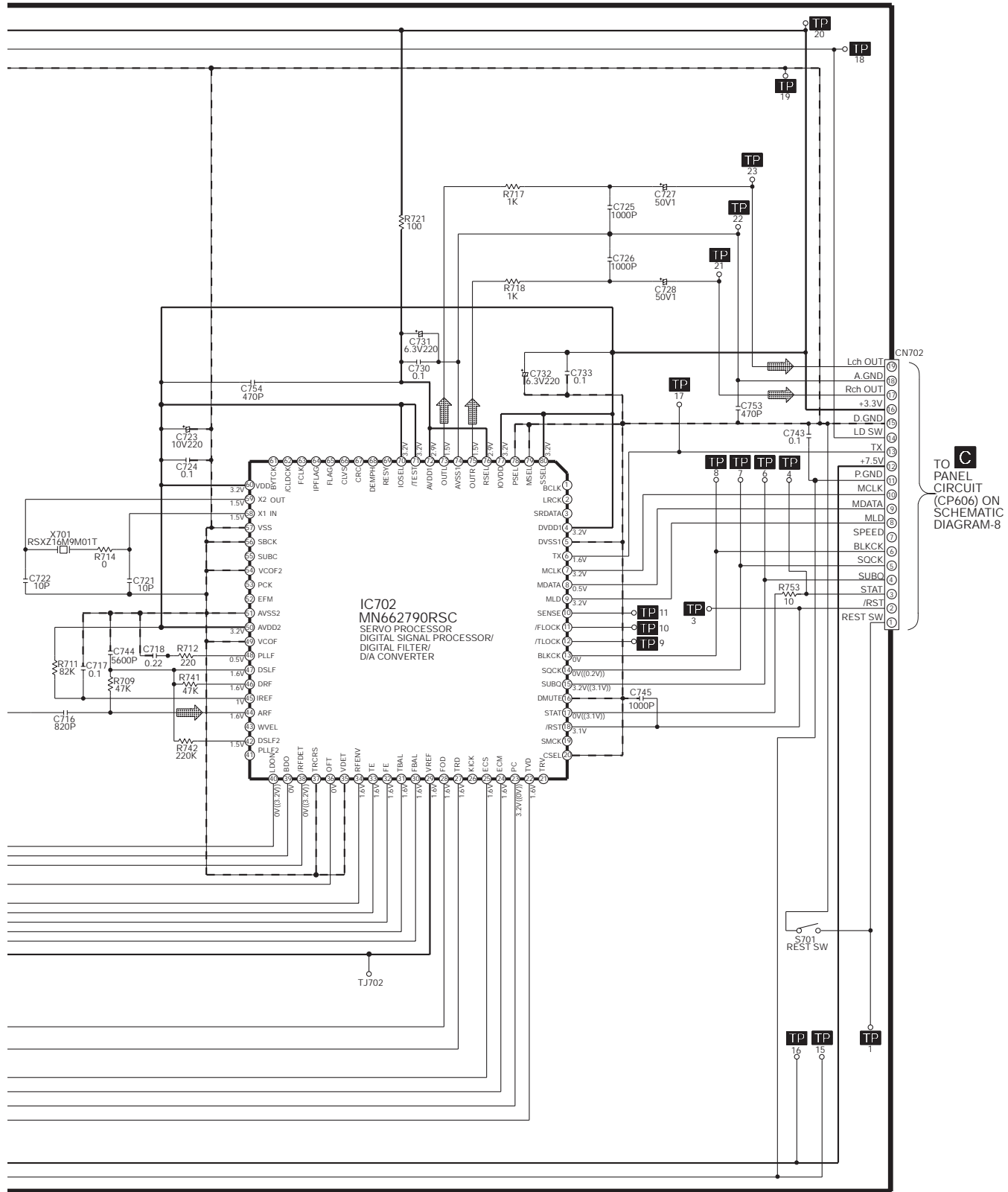
SCHEMATIC DIAGRAM -1

— : +B SIGNAL LINE - - : +B SIGNAL LINE  : CD SIGNAL LINE

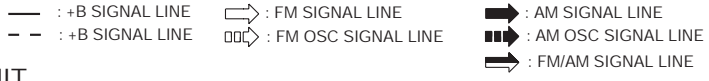


SCHEMATIC DIAGRAM - 2

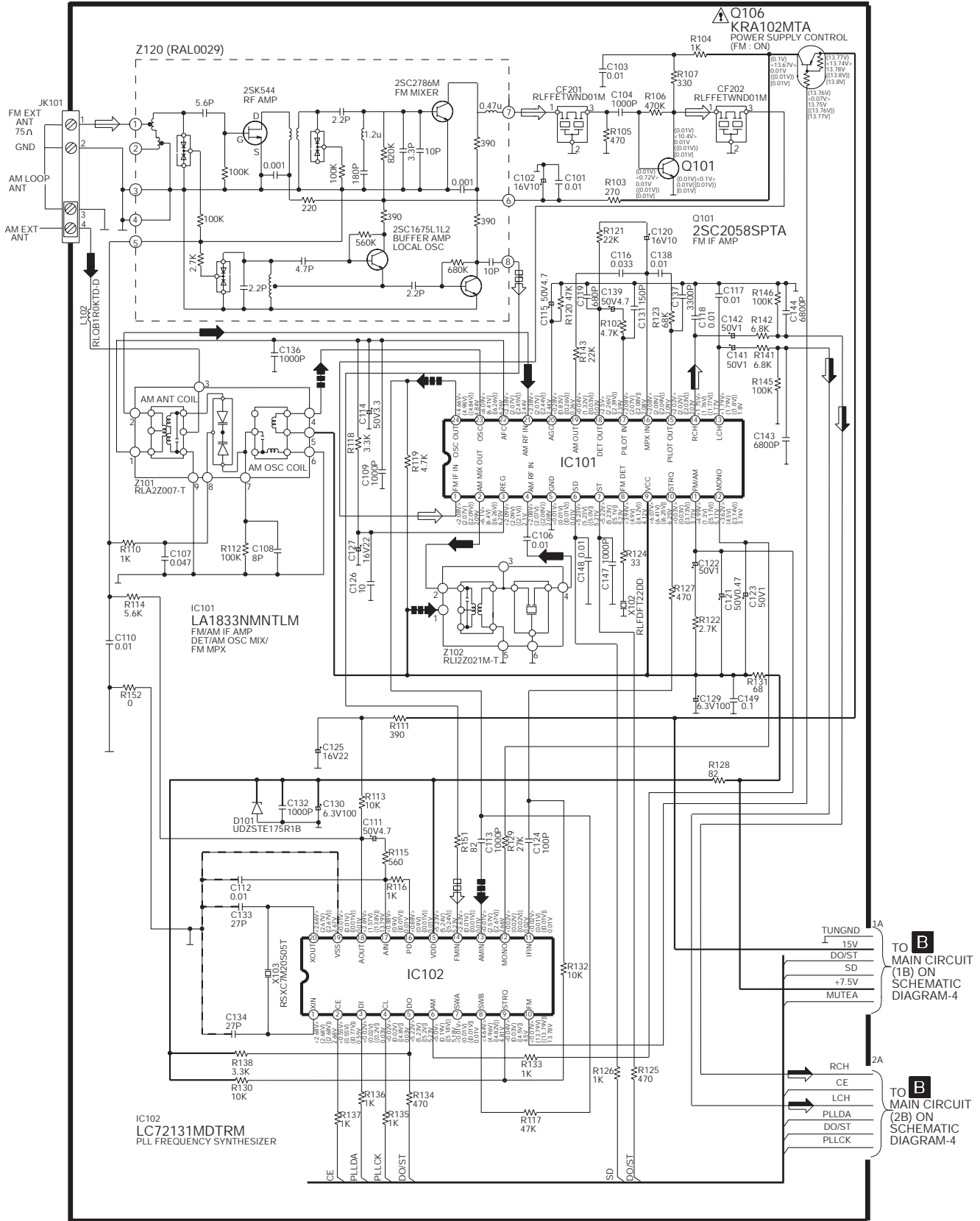
— : +B SIGNAL LINE - - - : +B SIGNAL LINE  : CD SIGNAL LINE



SCHEMATIC DIAGRAM - 3

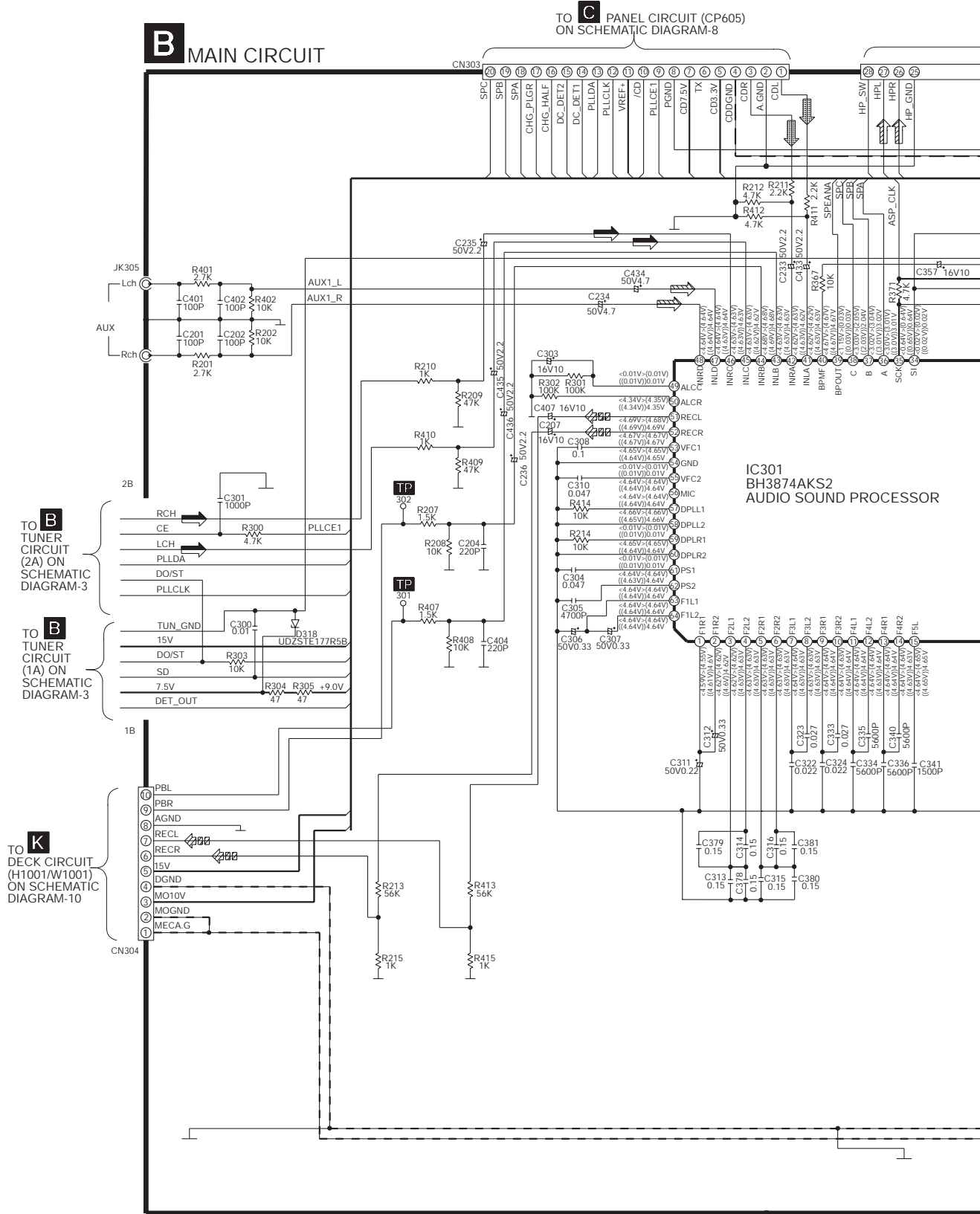


B MAIN/TUNER CIRCUIT



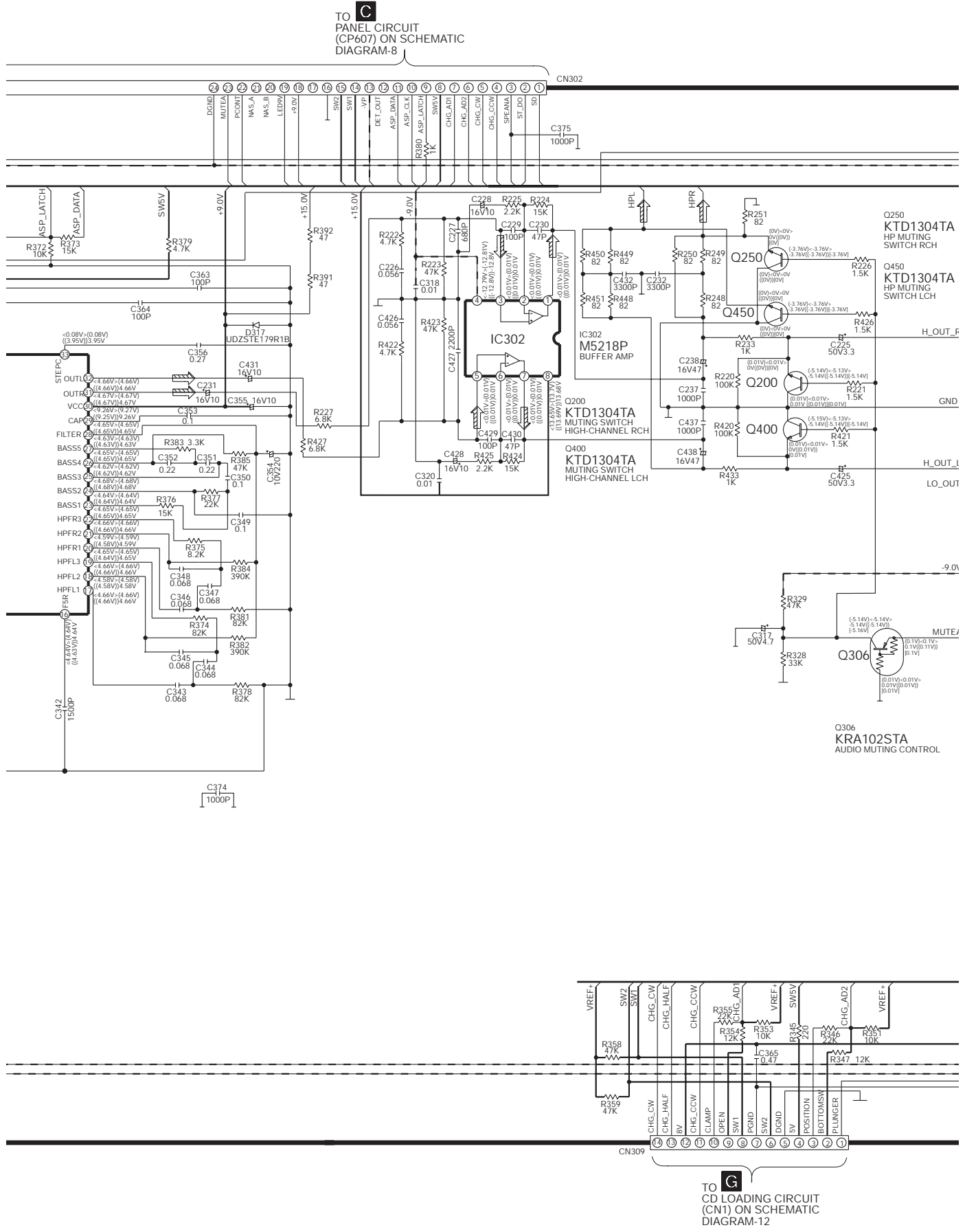
SCHEMATIC DIAGRAM - 4

- : +B SIGNAL LINE
- - - : -B SIGNAL LINE
- : MAIN SIGNAL LINE
- : CD SIGNAL LINE
- : FM/AM SIGNAL LINE
- : RECORD SIGNAL LINE



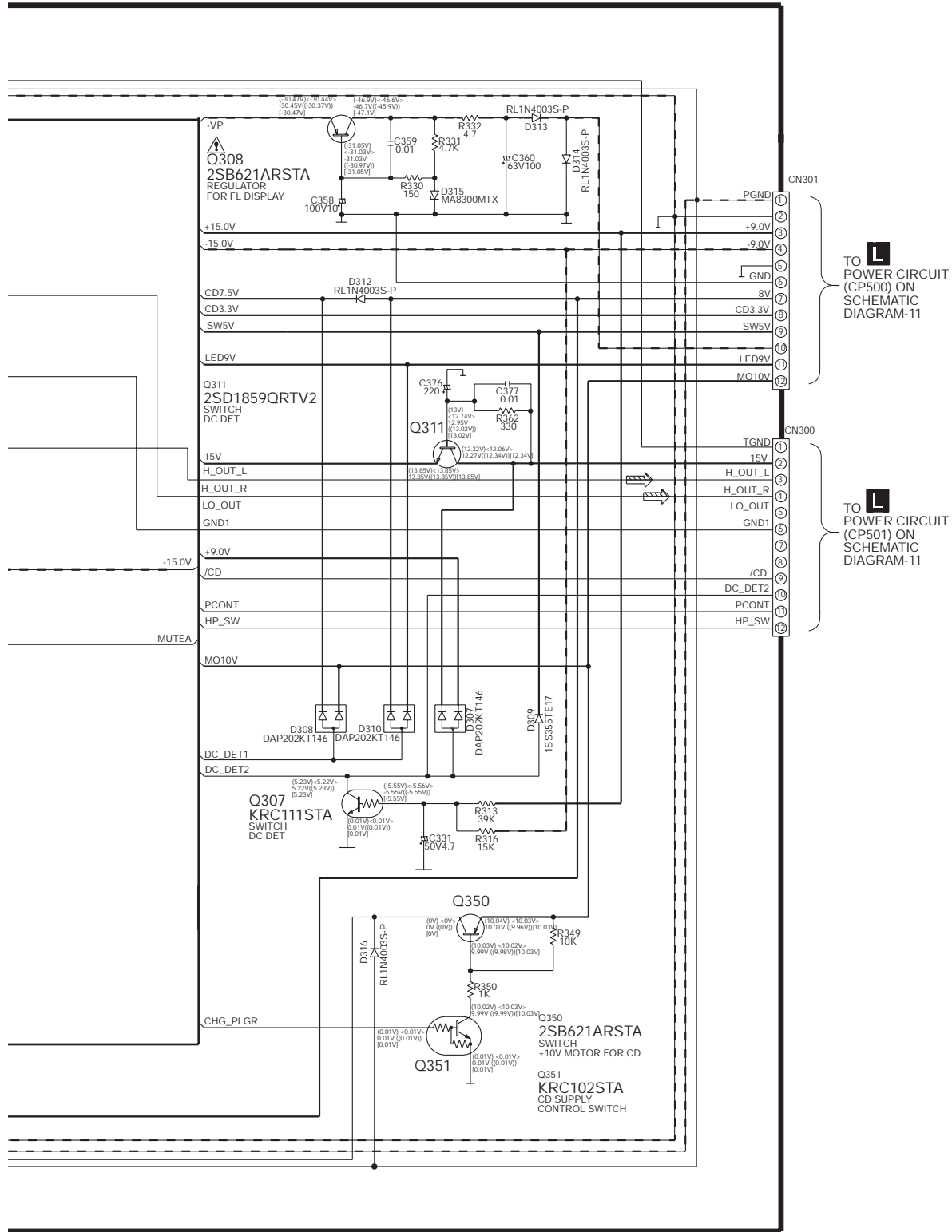
SCHEMATIC DIAGRAM - 5

— : +B SIGNAL LINE - - : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE



SCHEMATIC DIAGRAM - 6

— : +B SIGNAL LINE - - - : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

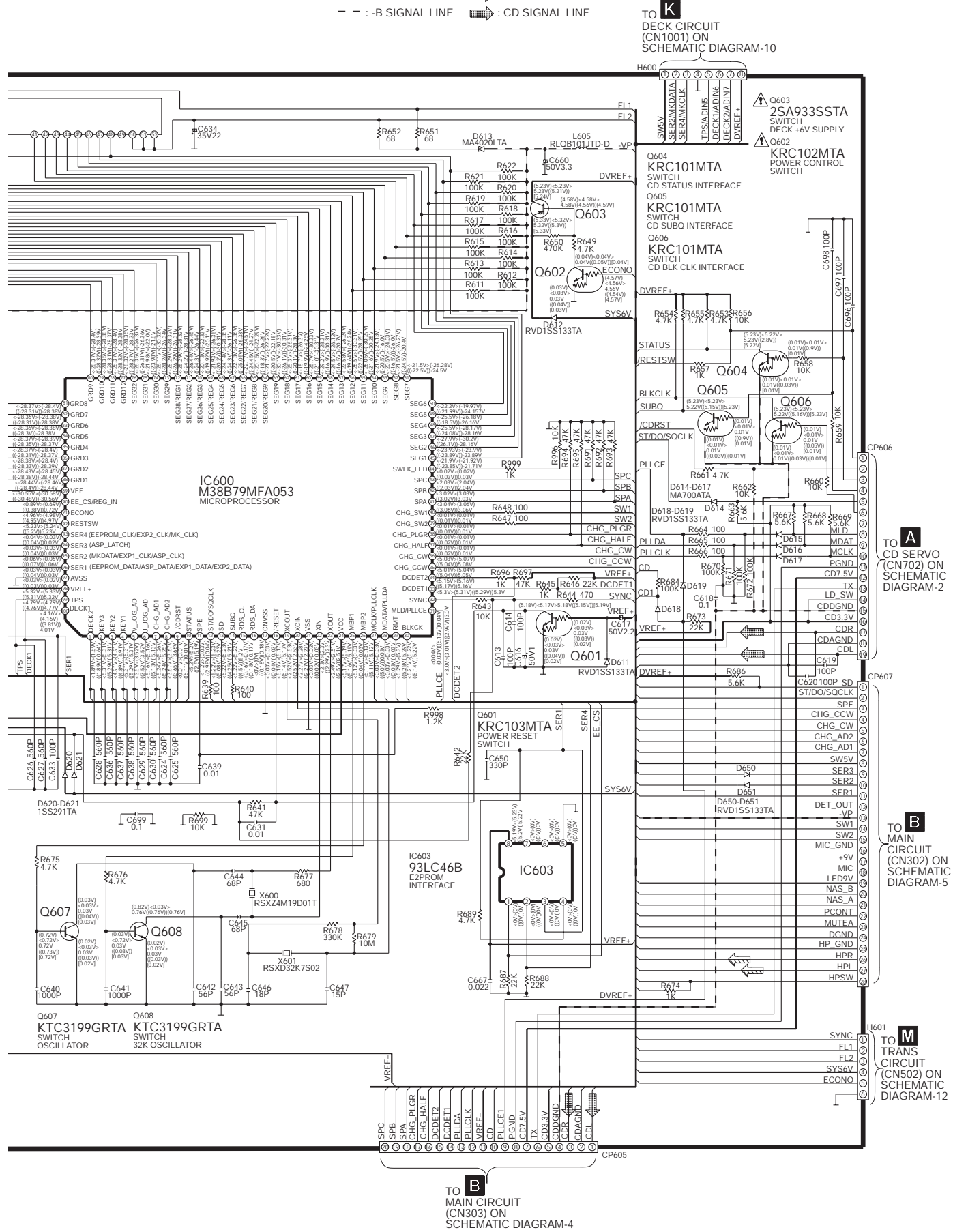


TO POWER CIRCUIT (CP500) ON SCHEMATIC DIAGRAM-11

TO POWER CIRCUIT (CP501) ON SCHEMATIC DIAGRAM-11

SCHEMATIC DIAGRAM - 8

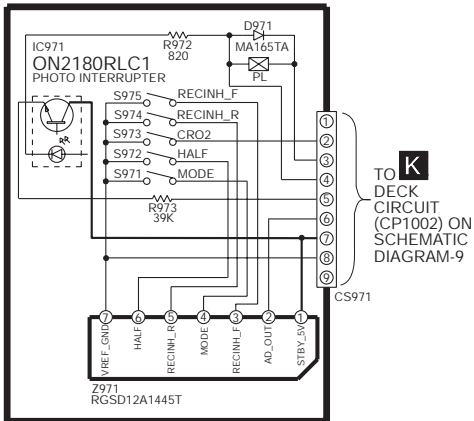
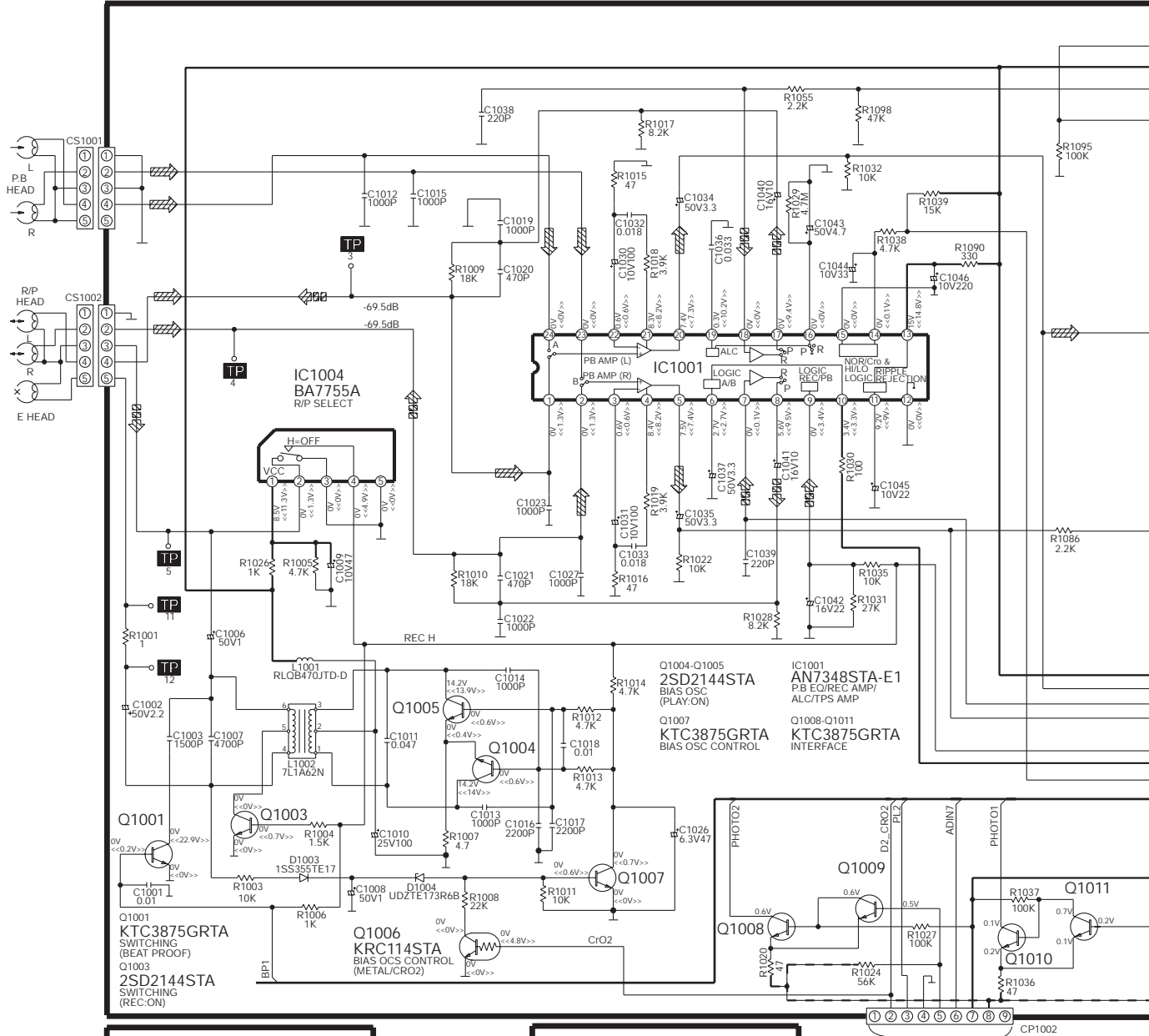
— : +B SIGNAL LINE ⇨ : MAIN SIGNAL LINE
 - - - : -B SIGNAL LINE ⇨ : CD SIGNAL LINE



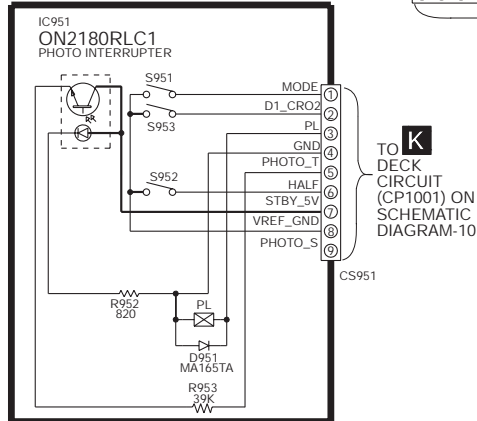
SCHEMATIC DIAGRAM - 9

— : +B SIGNAL LINE ▨ : PLAYBACK SIGNAL LINE
 - - : -B SIGNAL LINE ▩ : RECORD SIGNAL LINE

K DECK CIRCUIT



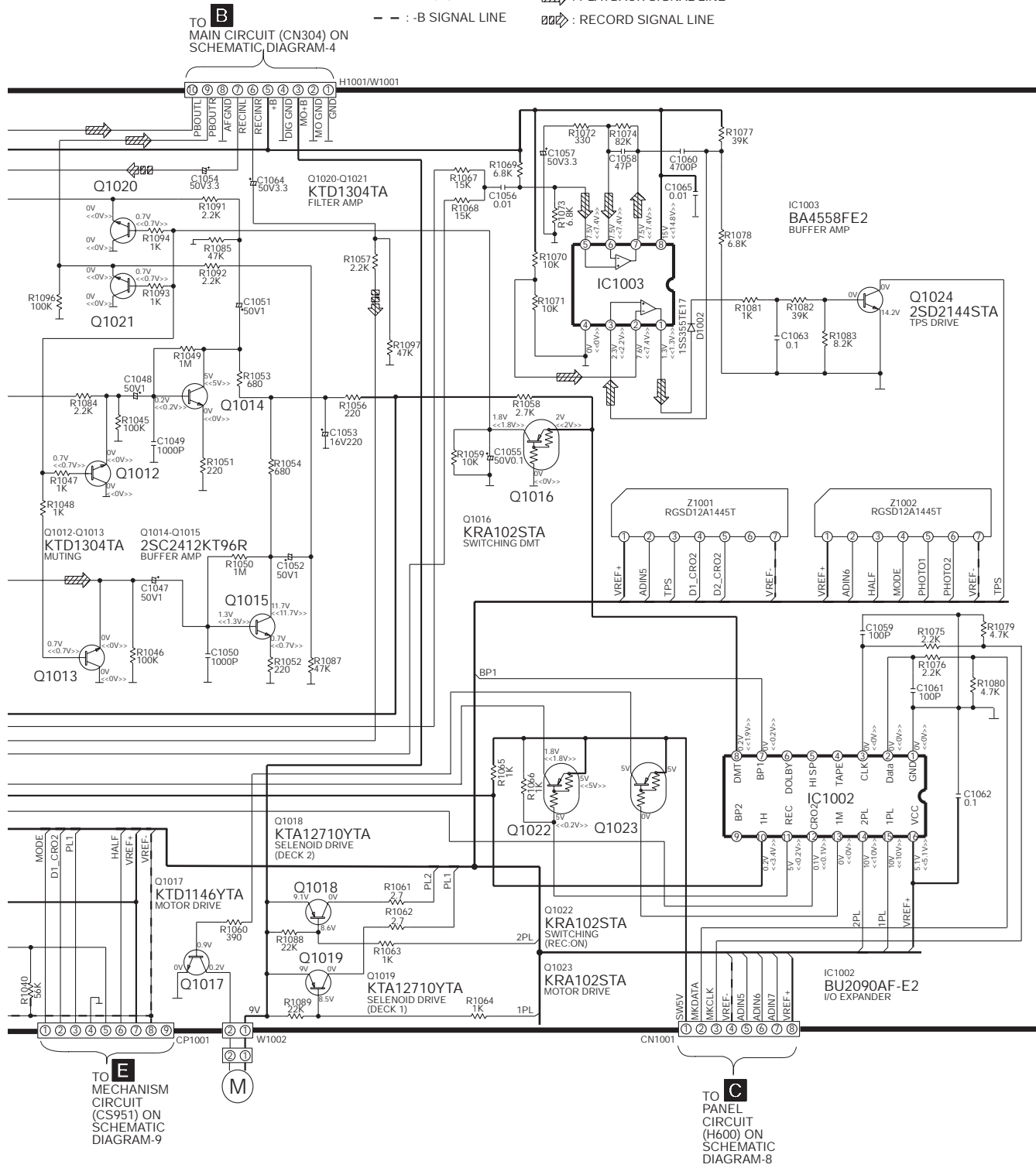
F MECHANISM CIRCUIT (DECK 2)



E MECHANISM CIRCUIT (DECK 1)

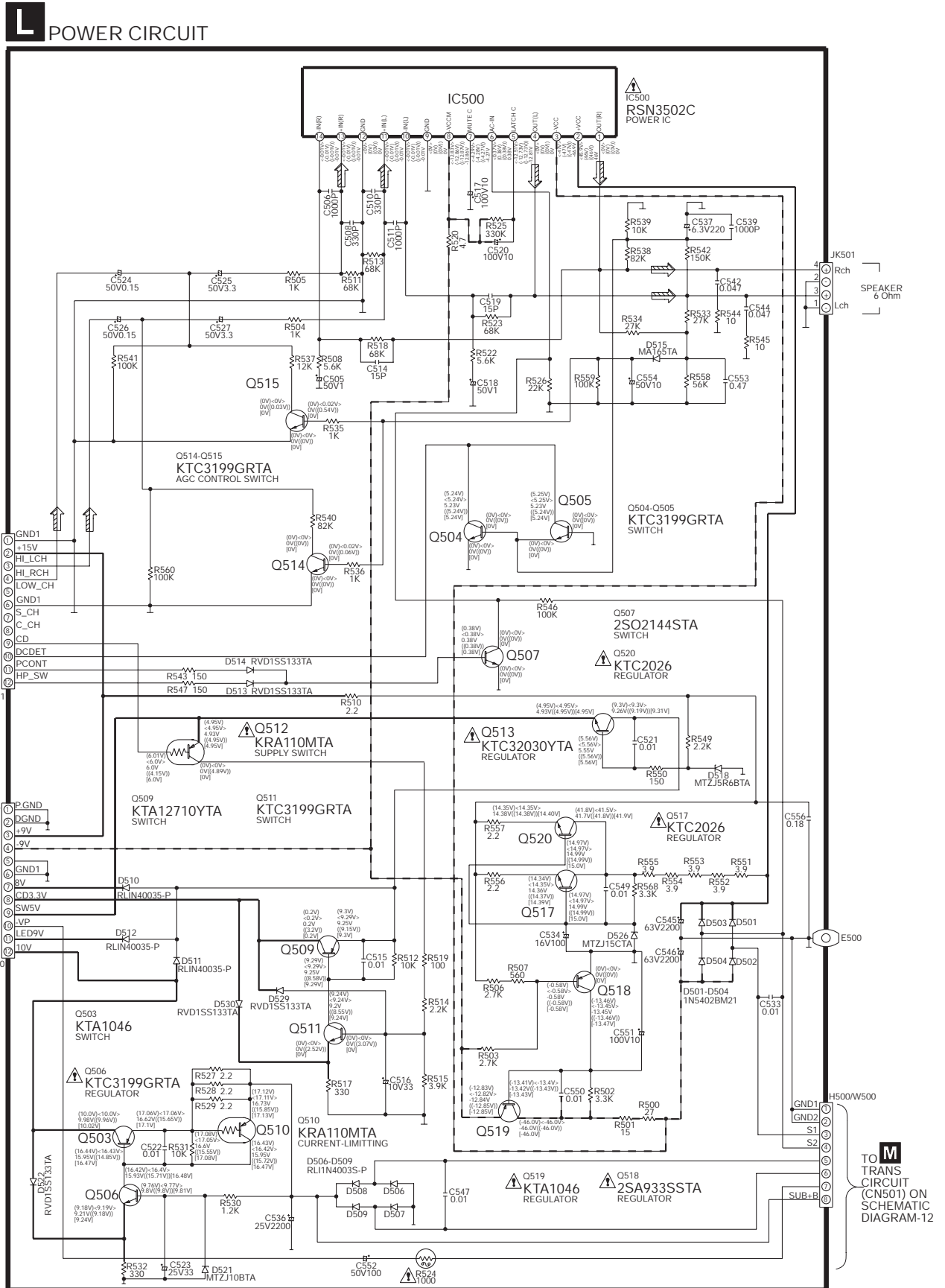
SCHEMATIC DIAGRAM - 10

— : +B SIGNAL LINE ▨ : PLAYBACK SIGNAL LINE
- - - : -B SIGNAL LINE ▩ : RECORD SIGNAL LINE

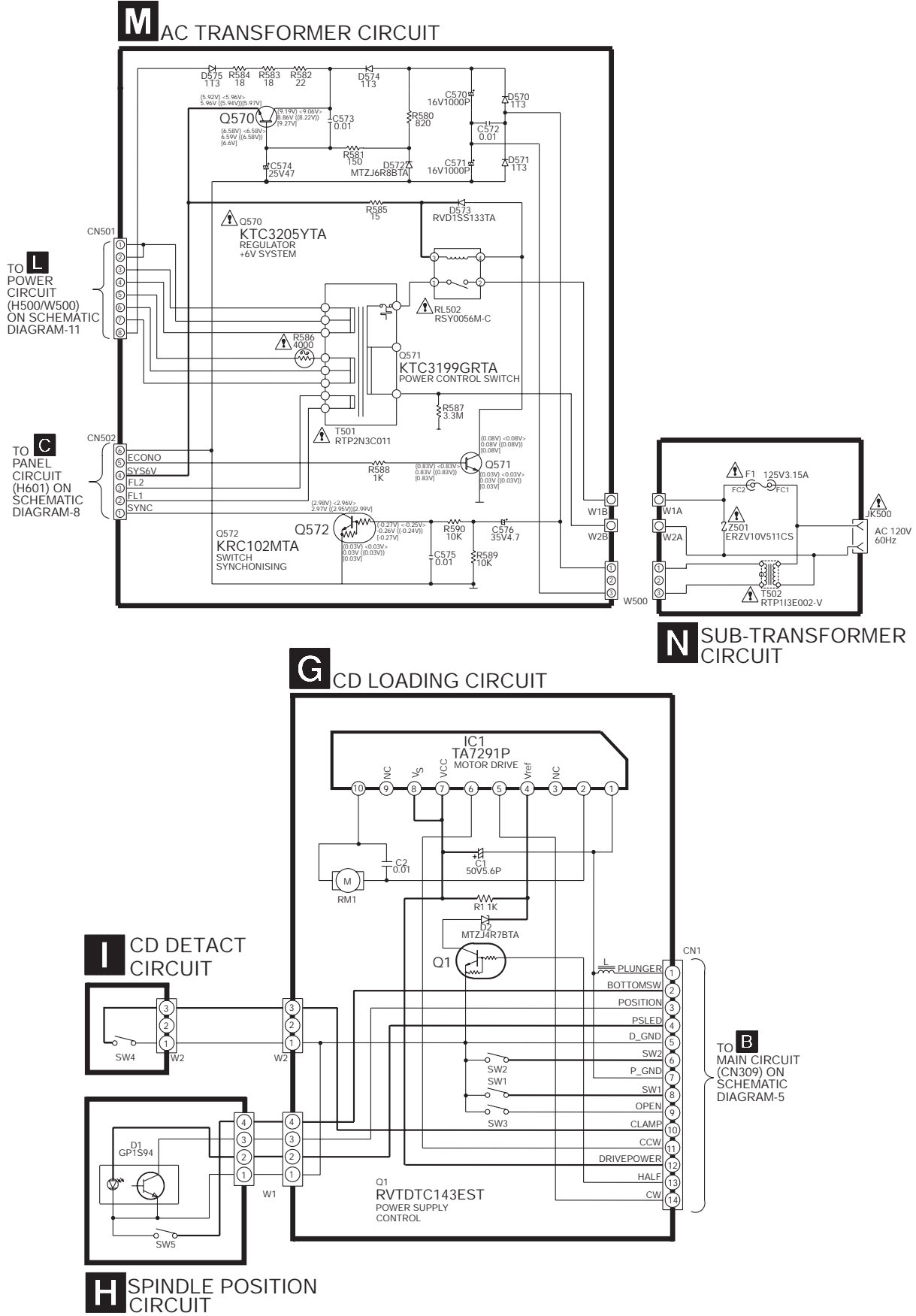


SCHEMATIC DIAGRAM - 11

— : +B SIGNAL LINE - - - : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

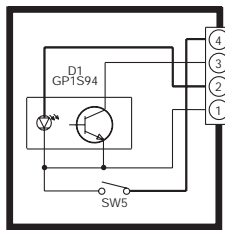
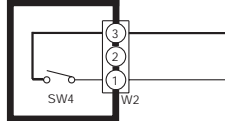


SCHEMATIC DIAGRAM -12
 — : +B SIGNAL LINE

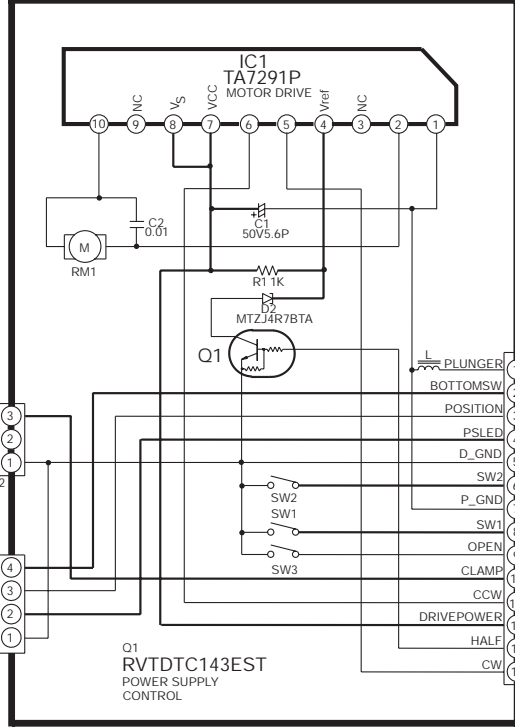


G CD LOADING CIRCUIT

I CD DETACT CIRCUIT



H SPINDLE POSITION CIRCUIT

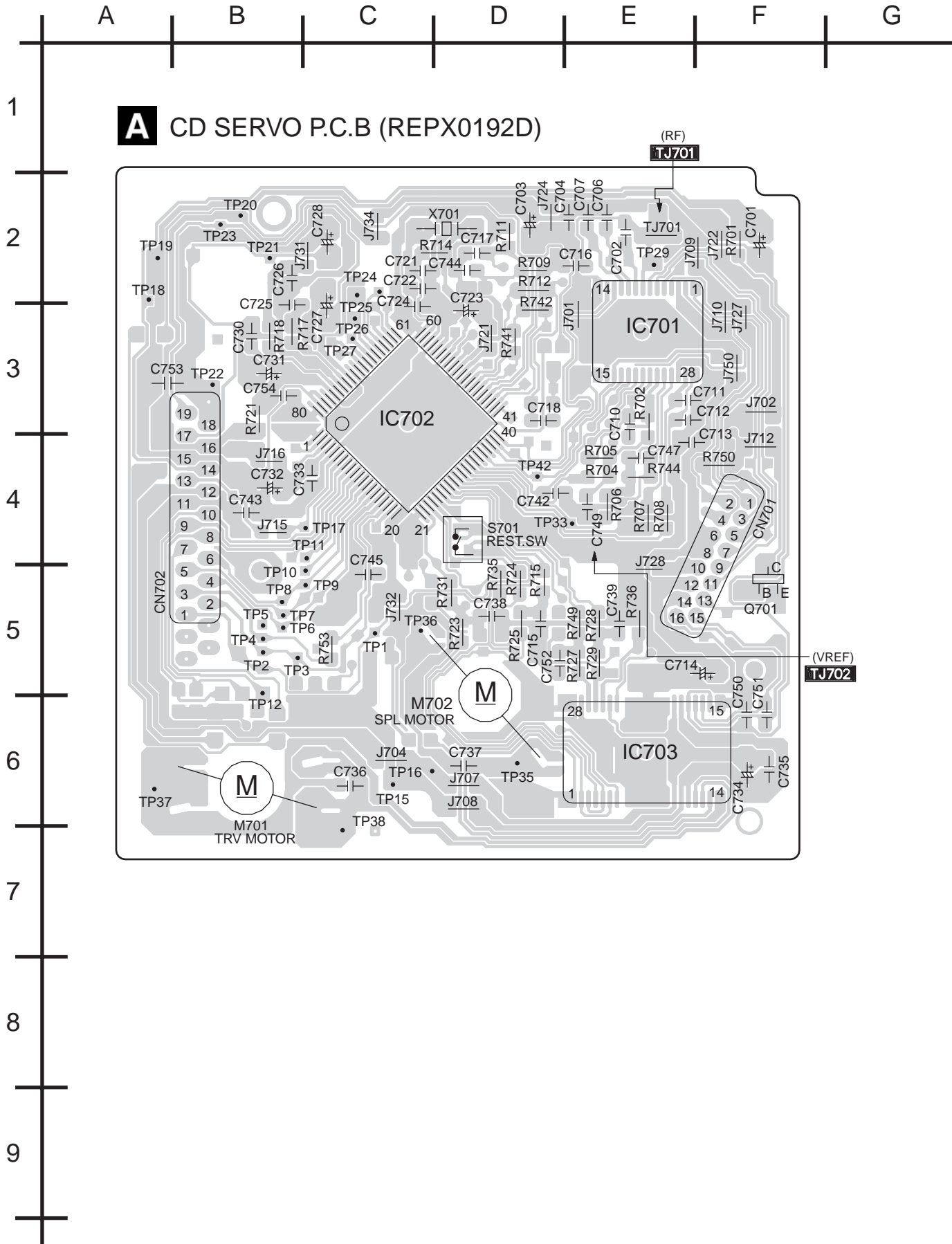


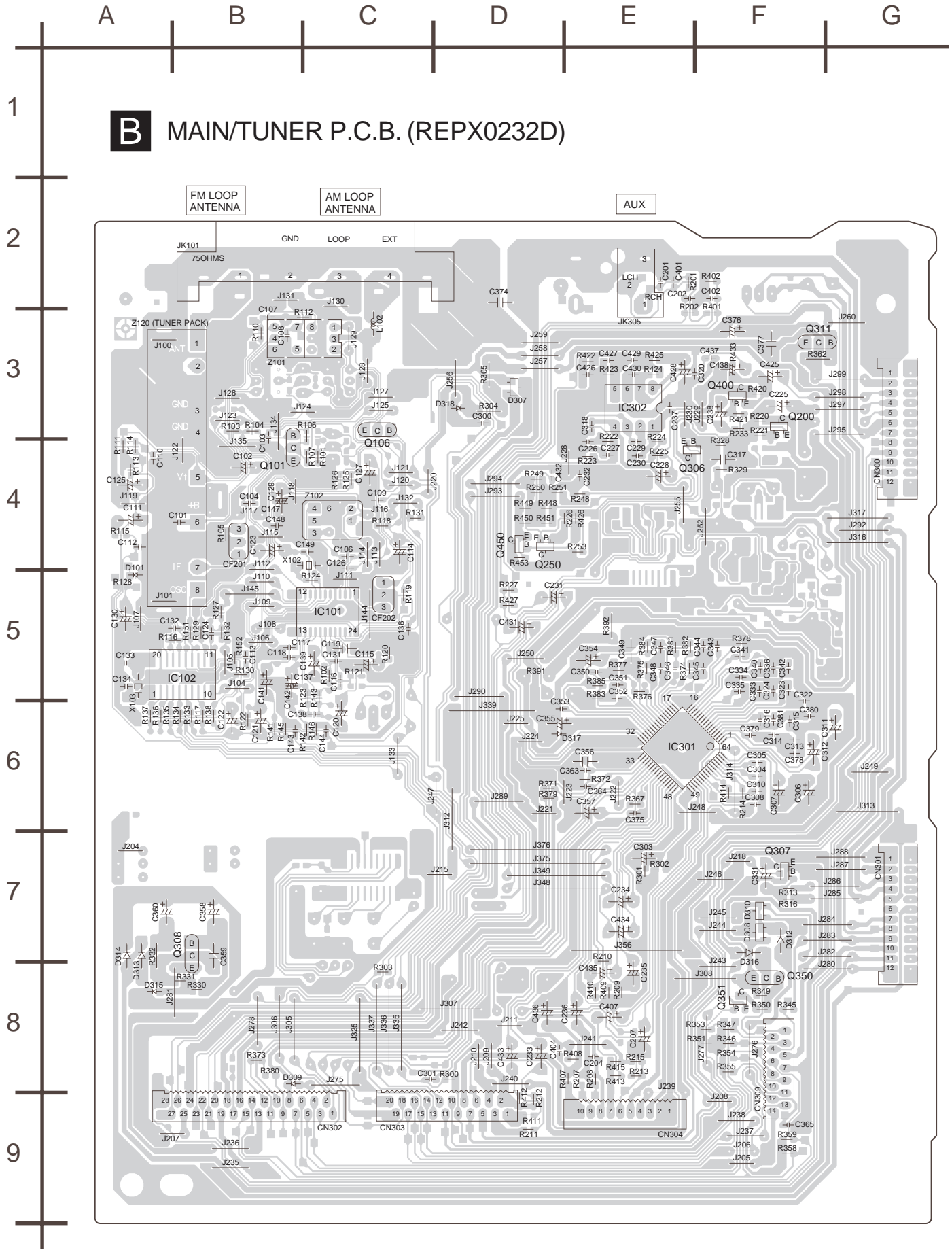
N SUB-TRANSFORMER CIRCUIT

TO **B** MAIN CIRCUIT (CN309) ON SCHEMATIC DIAGRAM-5

17 Printed Circuit Board

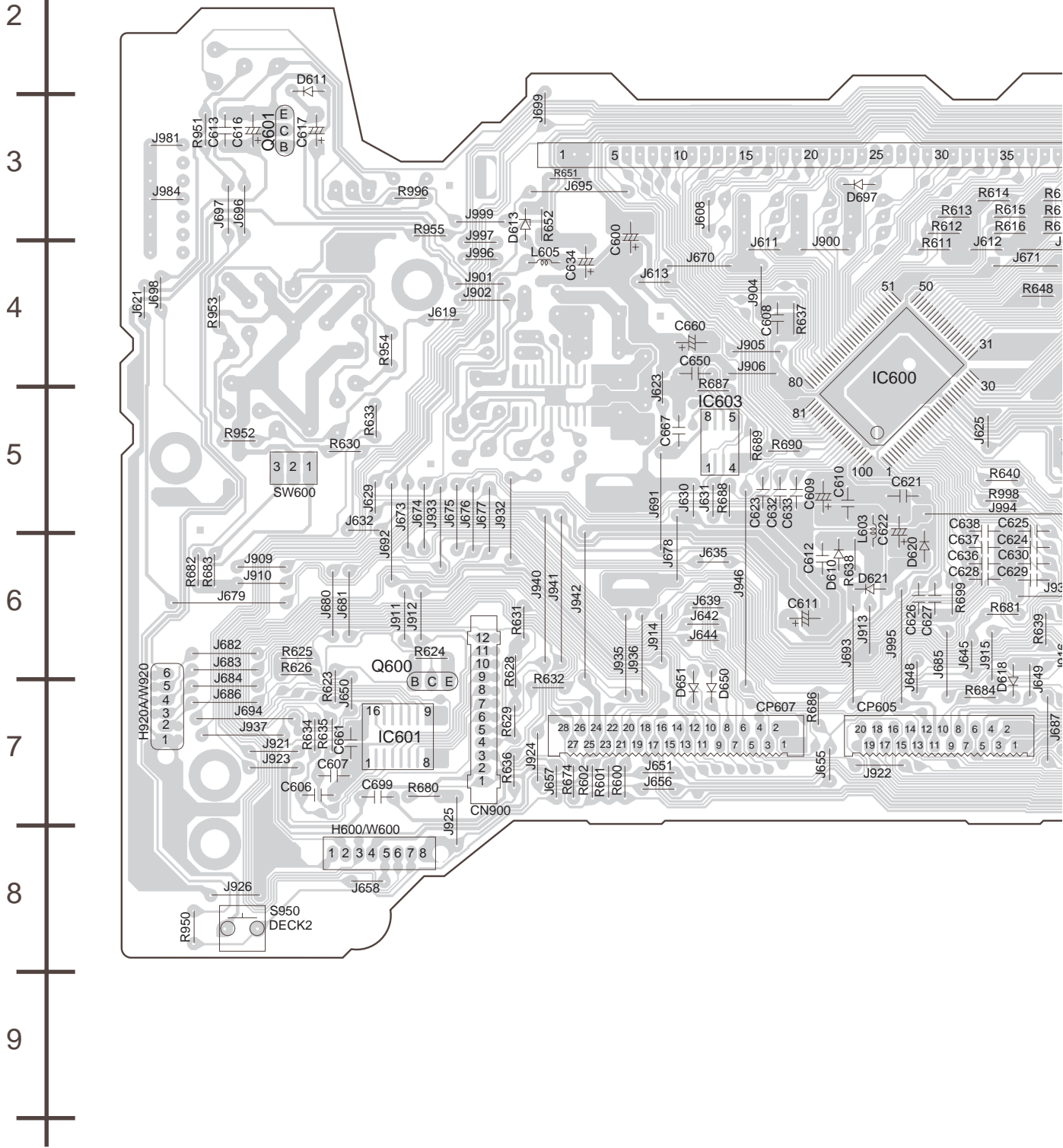
Note: Circuit board diagrams may be modified at any time with the development of new technology.





A B C D E F G

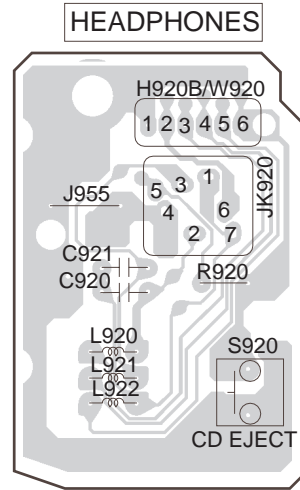
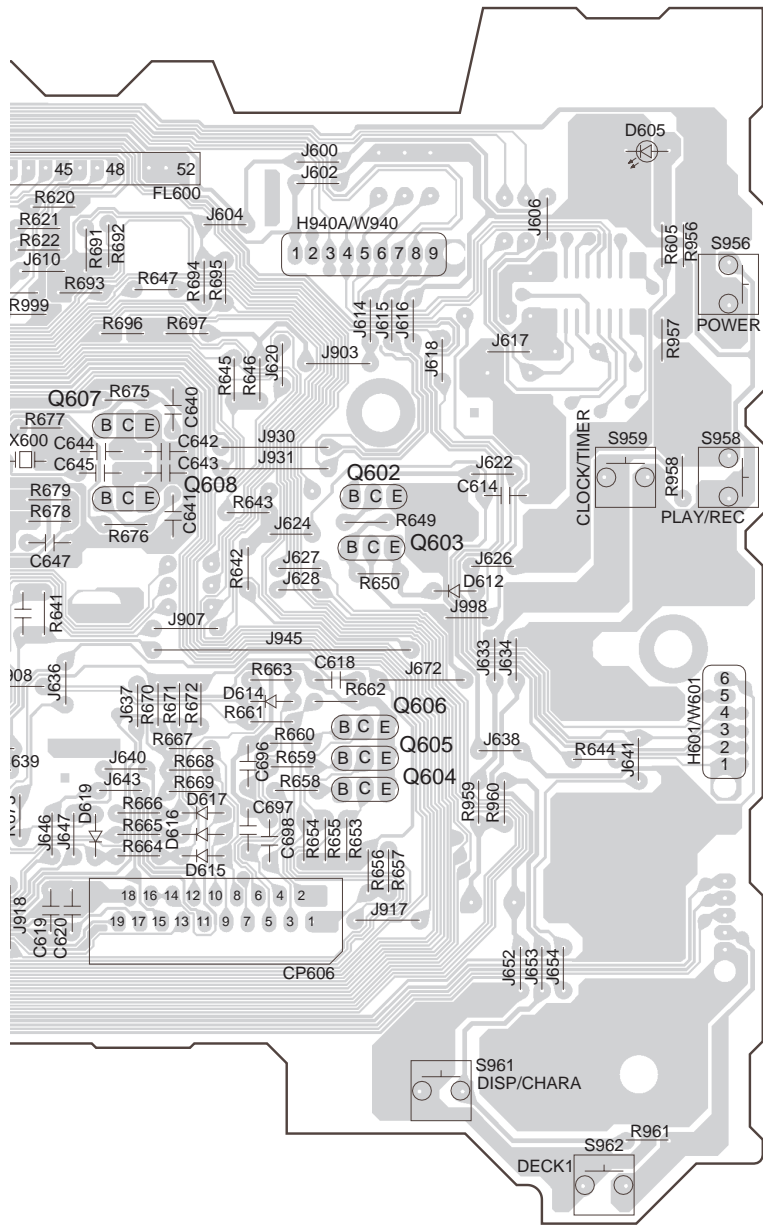
1 **C** PANEL P.C.B. (REPX0231E)

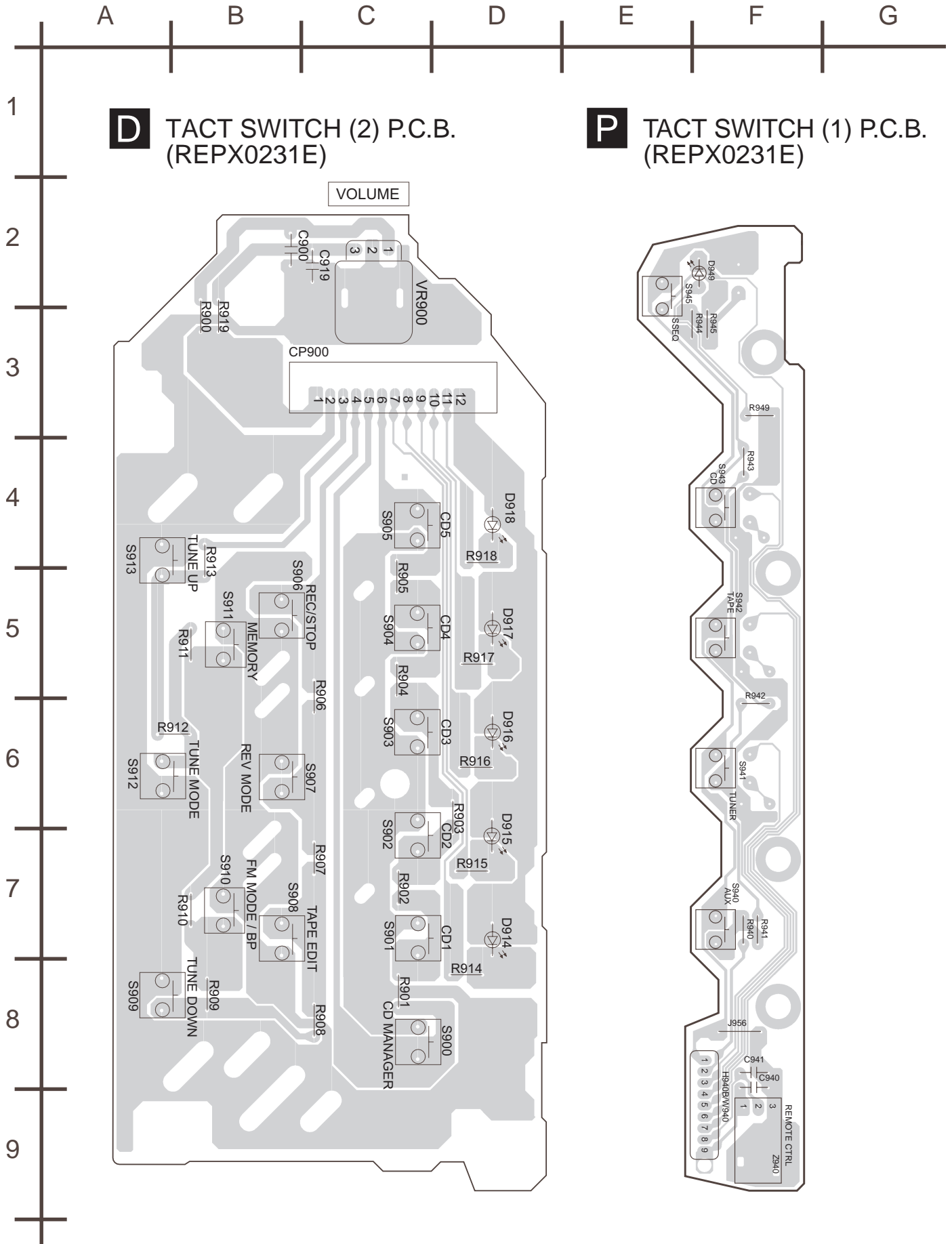


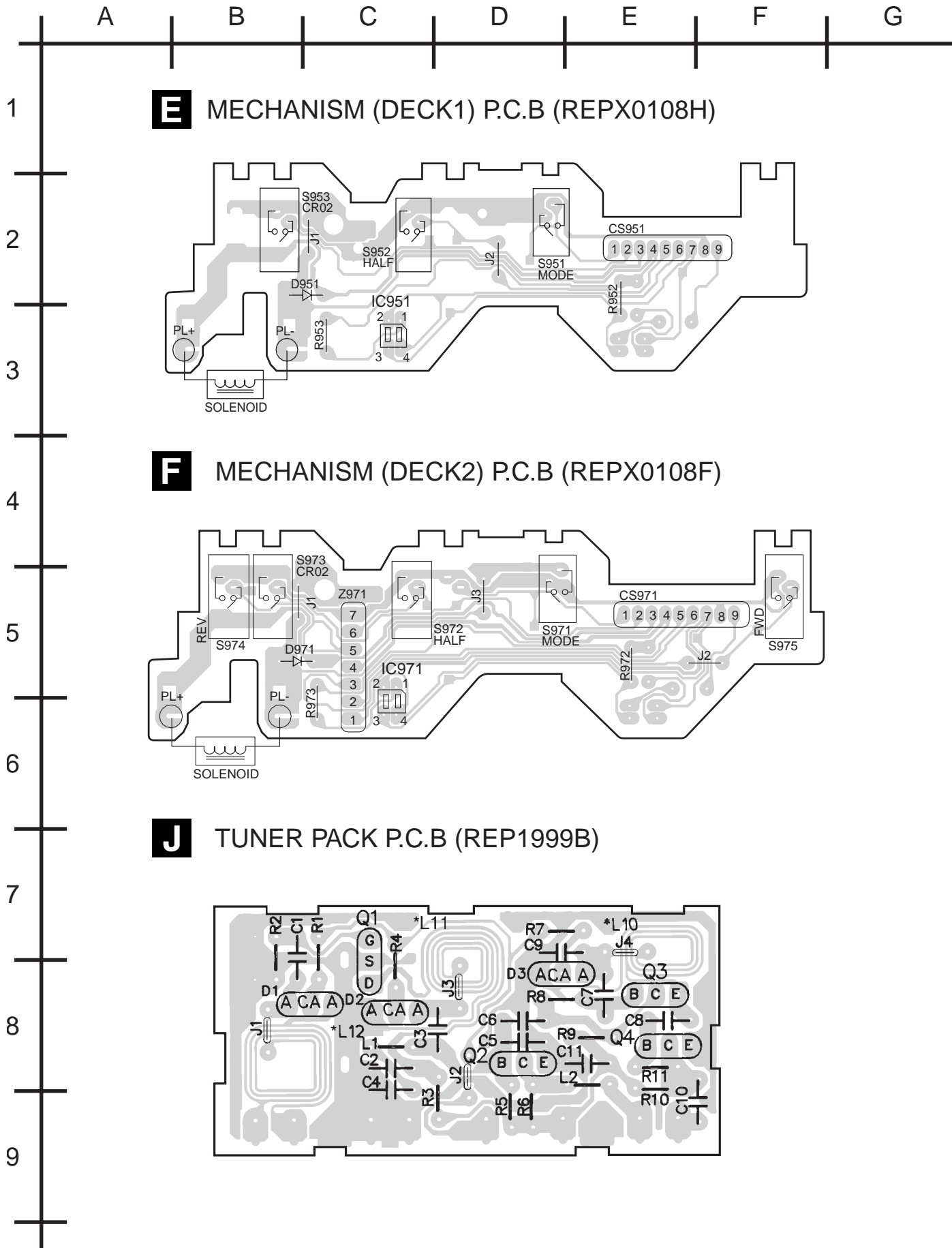
SA-AK22

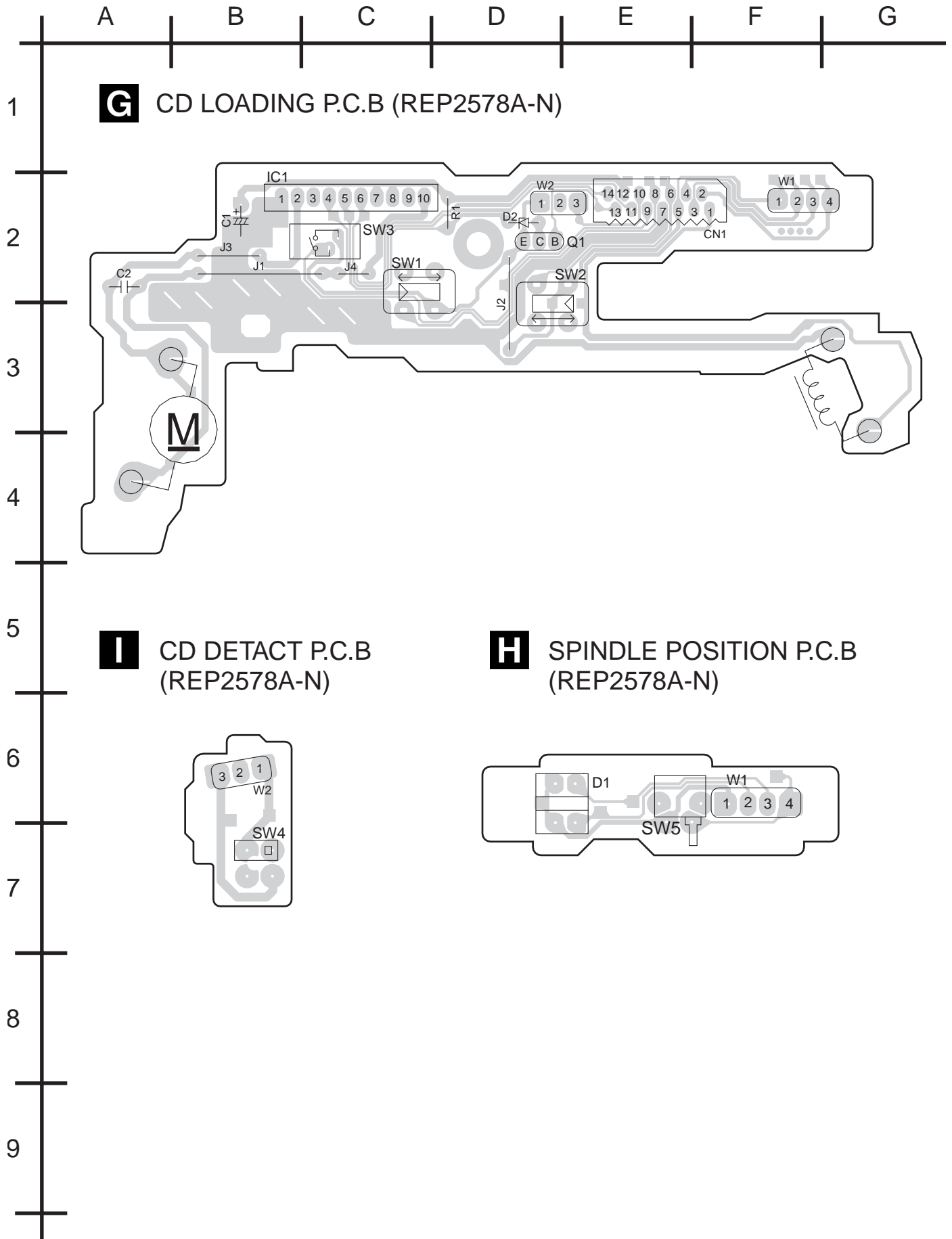


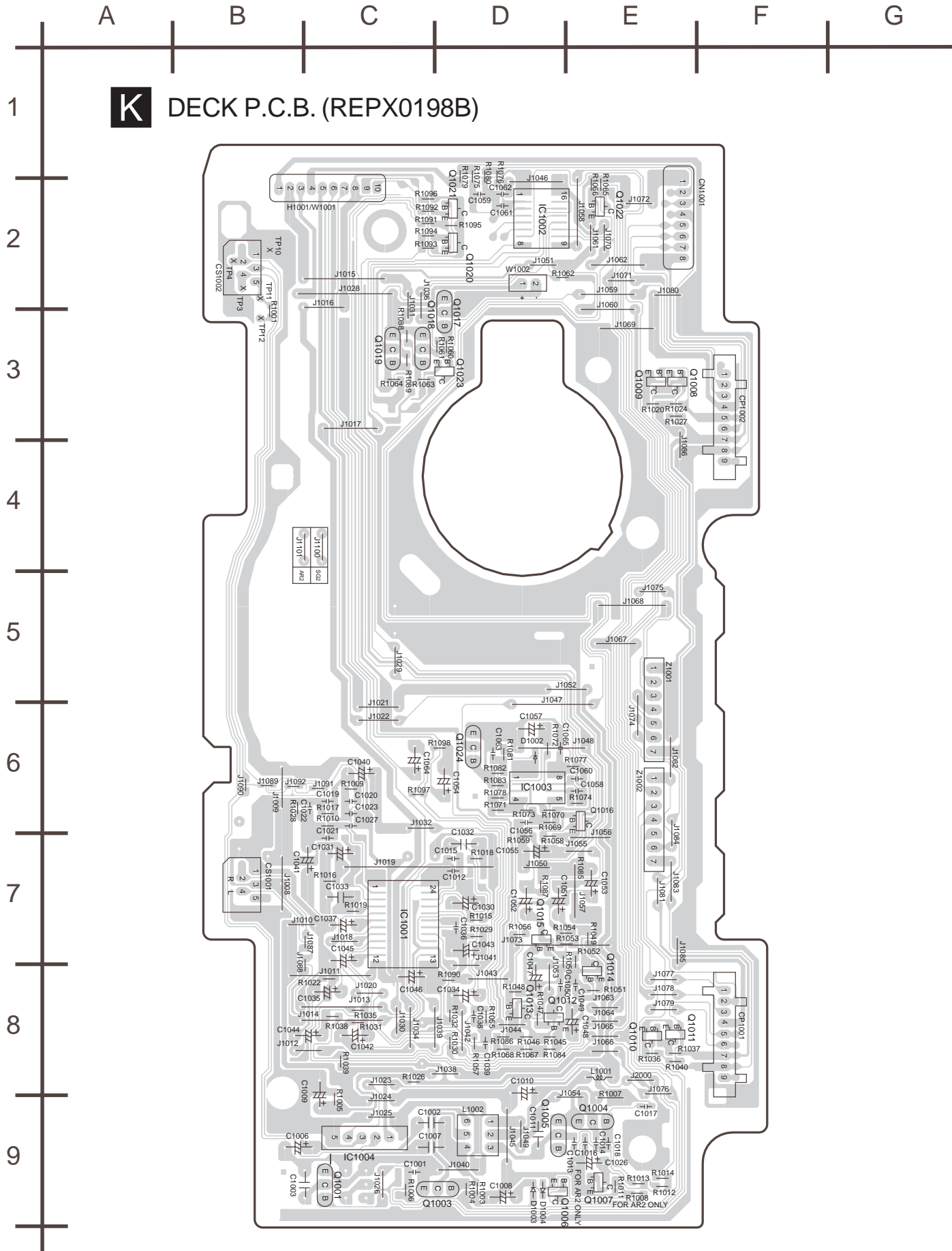
O HEADPHONE P.C.B.
(REPX0231E)





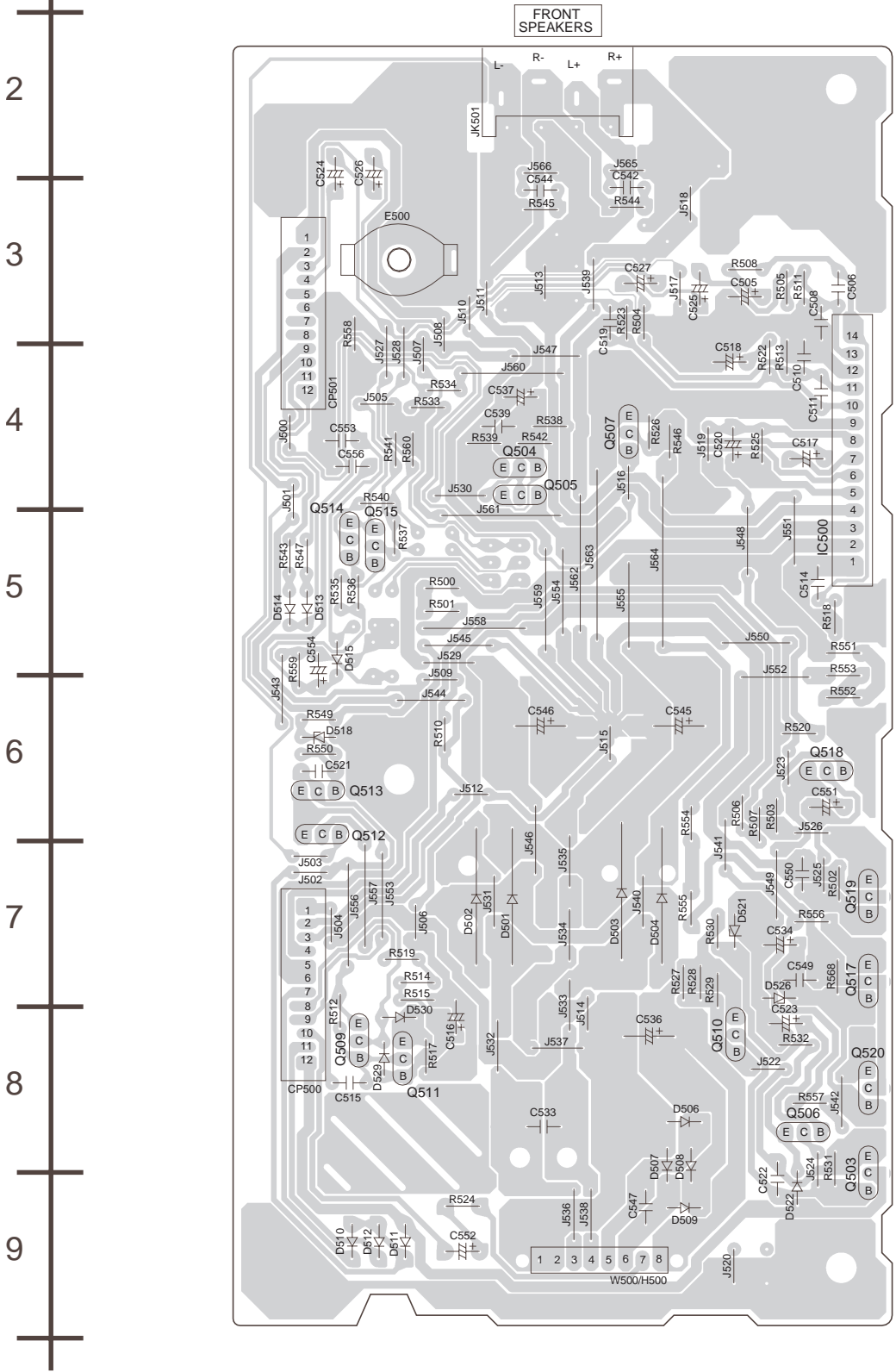






A B C D E F G

1 **L** POWER P.C.B. (REPX0253A...P)
(REPX0253B...PC)



A B C D E F G

1

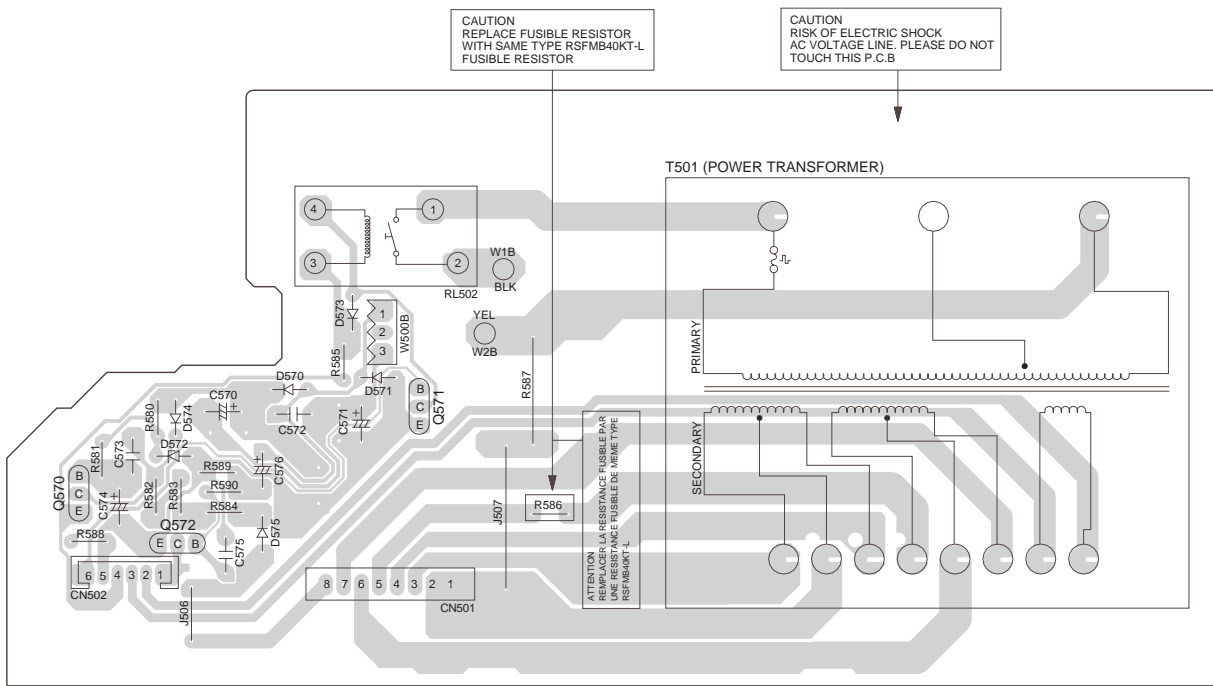
M AC TRANSFORMER P.C.B. (REPX0256A)

2

3

4

5



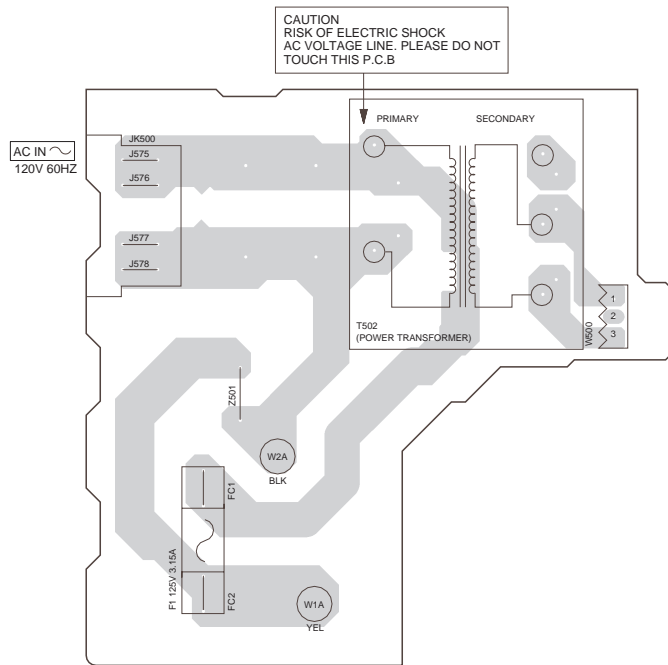
6

N SUB-TRANSFORMER P.C.B. (REPX0256A)

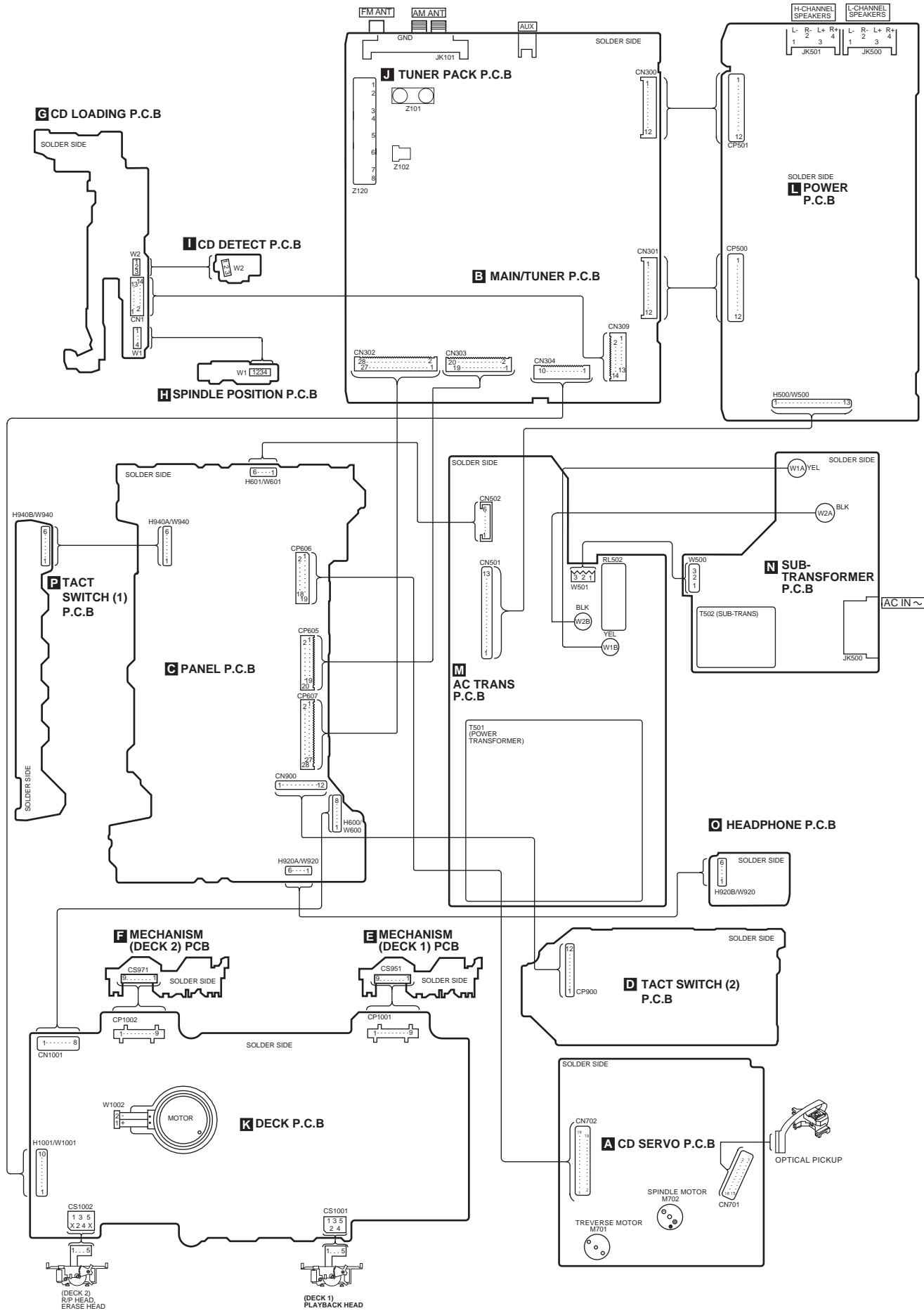
7

8

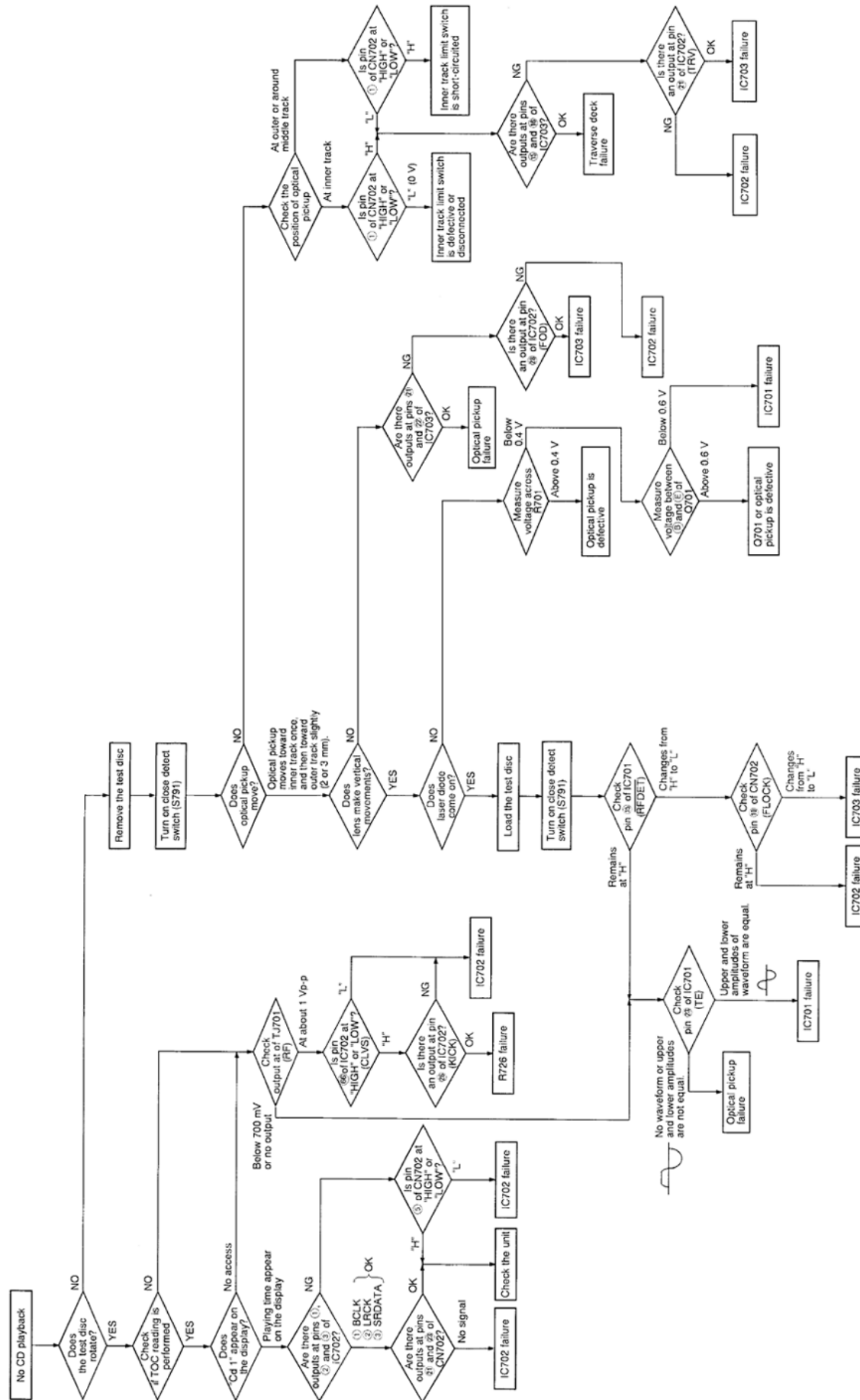
9



18 Wiring Connection Diagram



19 Troubleshooting Guide



20 Parts Location and Replacement Parts List

Notes:

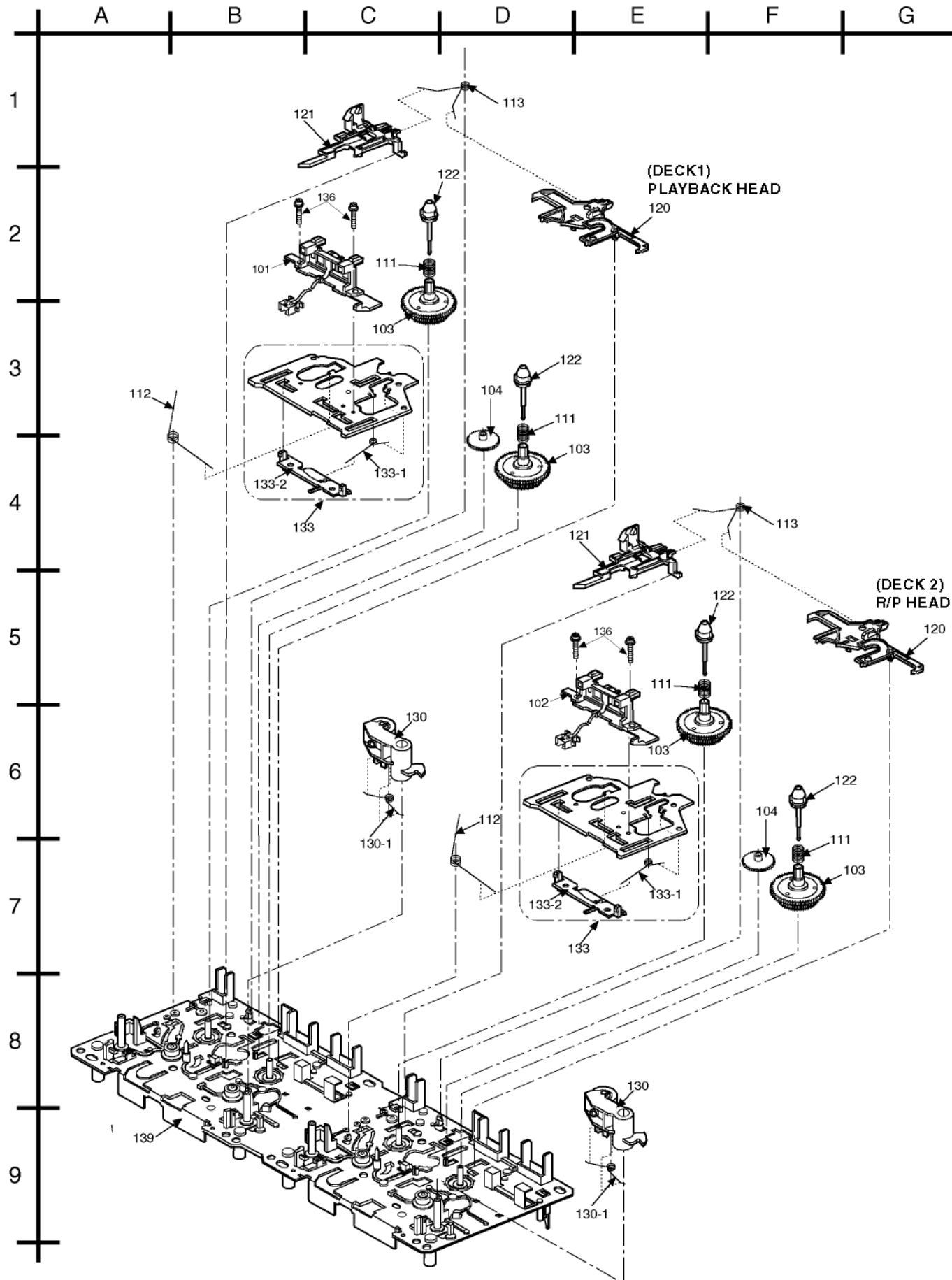
- Important safety notice:
Components identified by \triangle mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.
When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.
- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to teh cover page for area or colour)
Parts without these indications can be used for all areas.
- Warning: This product uses a laser diode. Refer to caution statements on "Precaution of Laser Diode".
- Capacitor values are in microfarads (μ F) unless specified otherwise, P= Pico-farads (pF), F= Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM).
- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
- [M] Indicates in the Remarks columns indicates parts supplied by **MESA**.
- The "(SF)" mark denotes the standard part.
- Remote Control Unit: Supply period for three years from terminal of production.
- Reference for O/I book languages are as follows:

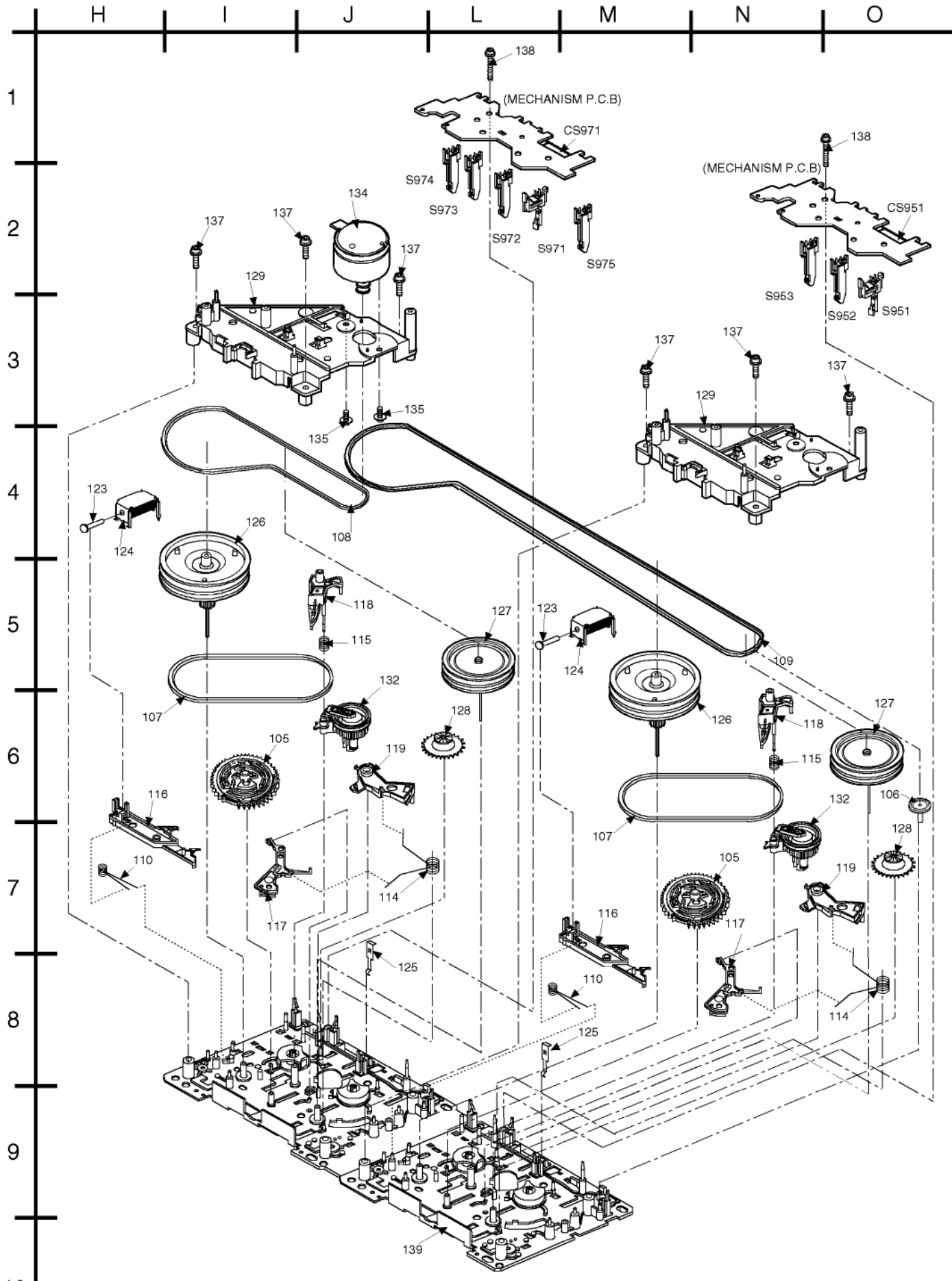
Ar :	Arabic	Du :	Dutch	It :	Italian	Sp :	Spanish
Cf :	Canadian French	En :	English	Ko :	Korean	Sw :	Swedish
Cz :	Czech	Fr :	French	Po :	Polish	Co :	Traditional Chinese
Da :	Danish	Ge :	German	Ru :	Russian	Cn :	Simplified Chinese

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20.1. Deck Mechanism (RAA4501-S)

20.1.1. Deck Mechanism Parts Location





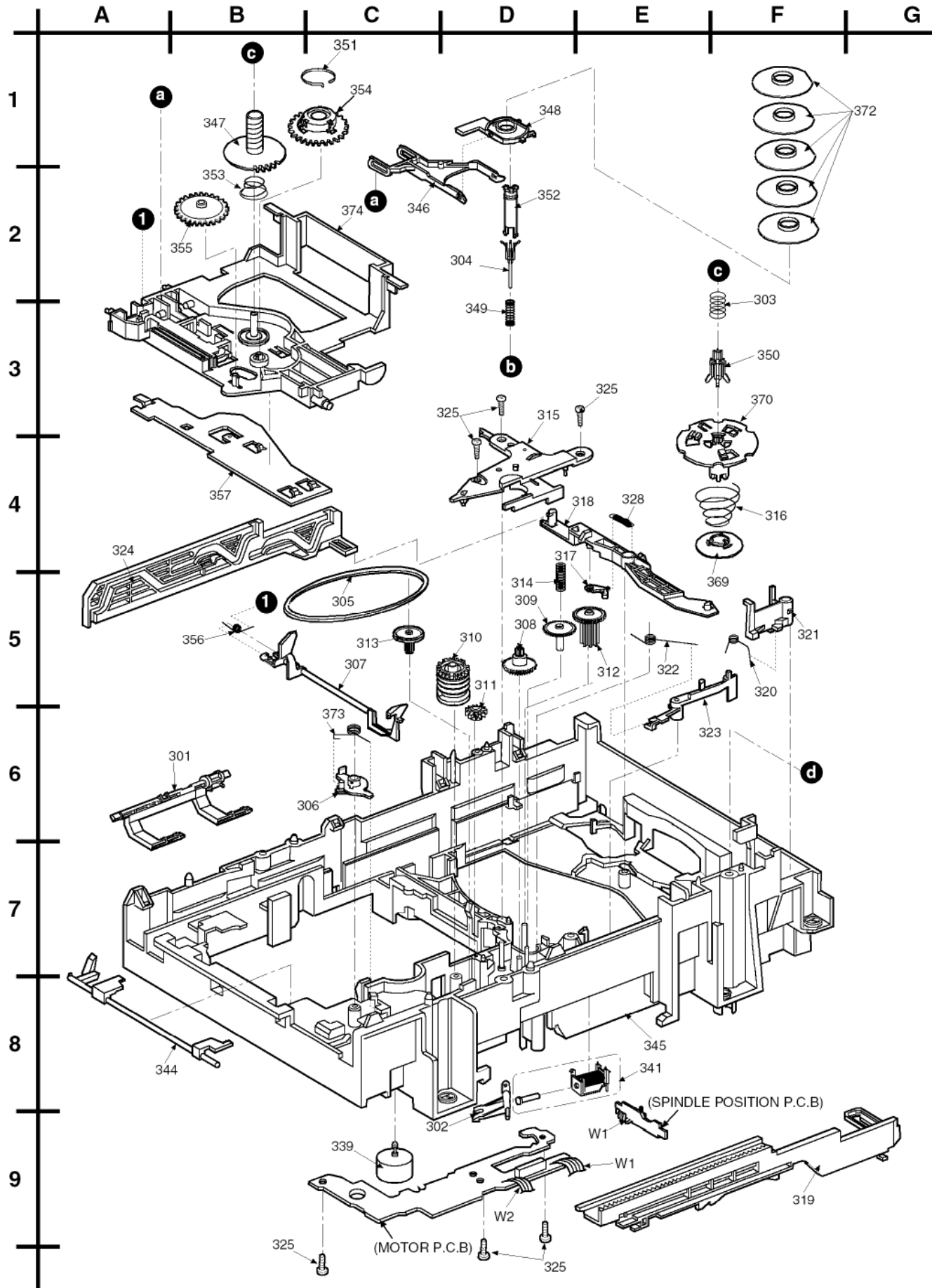
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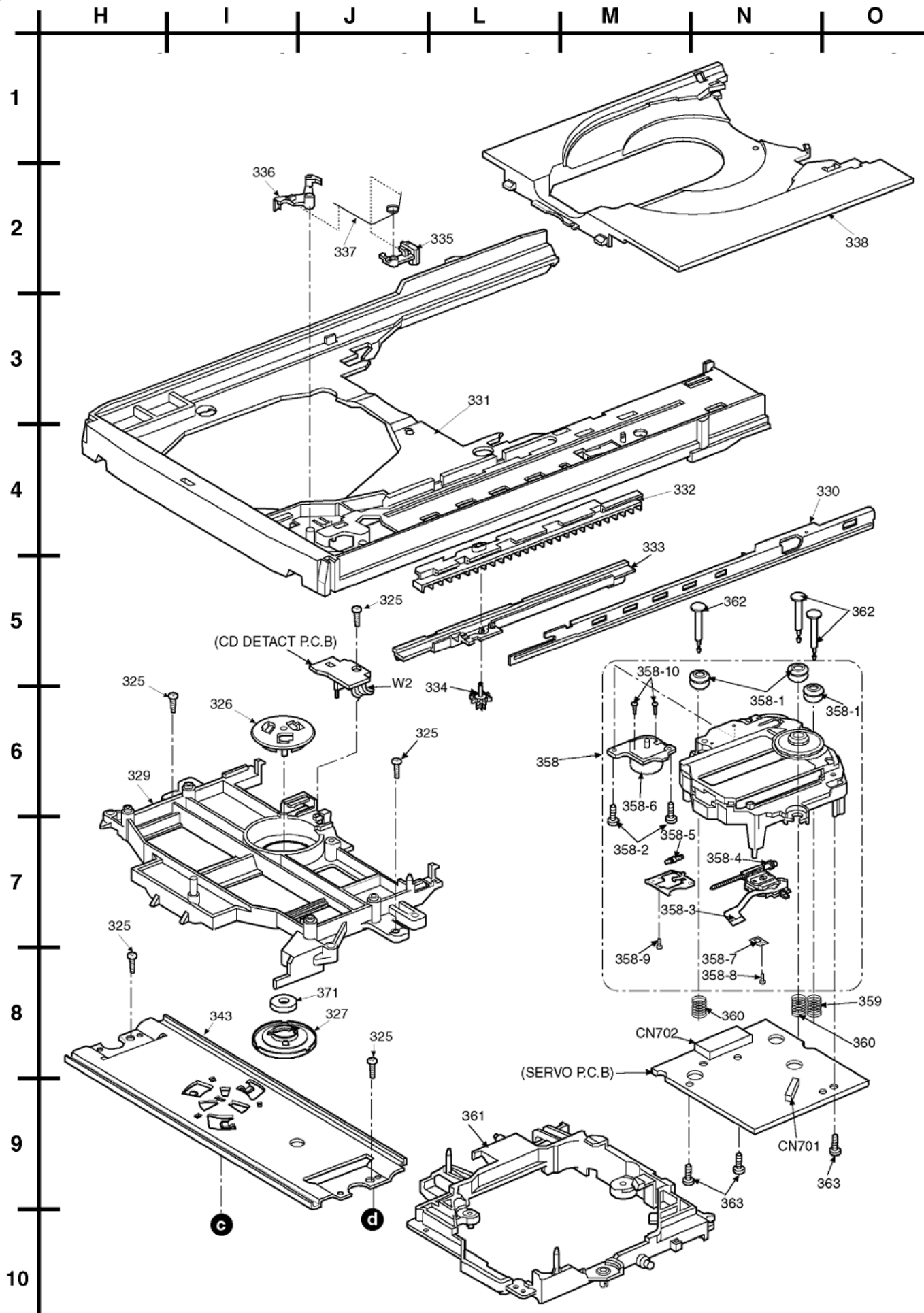
20.1.2. Deck Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CASSETTE DECK	
101	RED0067	HEAD BLOCK UNIT	[M]
102	RED0068	R/P HEAD BLOCK UNIT	[M]
103	RDG0300	REEL BASE GEAR	[M]
104	RDG0301	WINDING RELAY GEAR	[M]
105	RDK0026	MAIN GEAR	[M]
106	RDR0029	RELAY PULLEY	[M]
107	RDV0033-4	WINDING BELT	[M]
108	RDV0064	CAPSTAN BELT	[M]
109	RDV0057	MAIN BELT B	[M]
110	RMB0312	TRIGGER LEVER SPRING	[M]
111	RMB0400	REEL SPRING	[M]
112	RMB0403	HEAD PANEL SPRING	[M]
113	RMB0404	BRAKE ROD SPRING	[M]
114	RMB0406	FR LEVER SPRING	[M]
115	RMB0408	THRUST SPRING	[M]
116	RML0370	TRIGGER LEVER	[M]
117	RML0371	FR LEVER	[M]
118	RML0372	WINDING LEVER	[M]
119	RML0374	EJECT LEVER	[M]
120	RMM0131	BRAKE ROD	[M]
121	RMM0133-1	EJECT ROD	[M]
122	RMQ0519	REEL HUB	[M]
123	RMS0398-1	MOVING CORE	[M]
124	RSJ0003	PLUNGER ASS'Y	[M]
125	RMC0061	PACK SPRING	[M]
126	RXF0049	FLYWHEEL F ASS'Y	[M]
127	RXF0050	FLYWHEEL R ASS'Y	[M]
128	RXG0040	FF RELAY GEAR ASS'Y	[M]
129	RMK0283A-J	SUB-CHASSIS	[M]
130	RXL0124	PINCH ROLLER F ASS'Y	[M]
130-1	RMB0401	PINCH ARM SPRING F	[M]
132	RXL0126	WINDING ARM ASS'Y	[M]
133	RXQ0412	HEAD PANEL ASS'Y	[M]
133-1	RMB0405	FR ROD SPRING	[M]
133-2	RMM0132	FR ROD	[M]
134	REM0070	CAP MOTOR ASS'Y	[M]
135	RHD26022	MOTOR SCREW	[M]
136	XTW2+5L	HEAD BLOCK UNIT SCRE	[M]
137	XTW26+10S	SUB-CHASSIS SCREW	[M]
138	XYC2+JF17	PCB EARTH SCREW	[M]
139	RFKJAA4501-S	CHASSIS ASS'Y	[M]

20.2. CD Loading Mechanism (RD-DAC026-S)

20.2.1. CD Loading Mechanism Parts Location





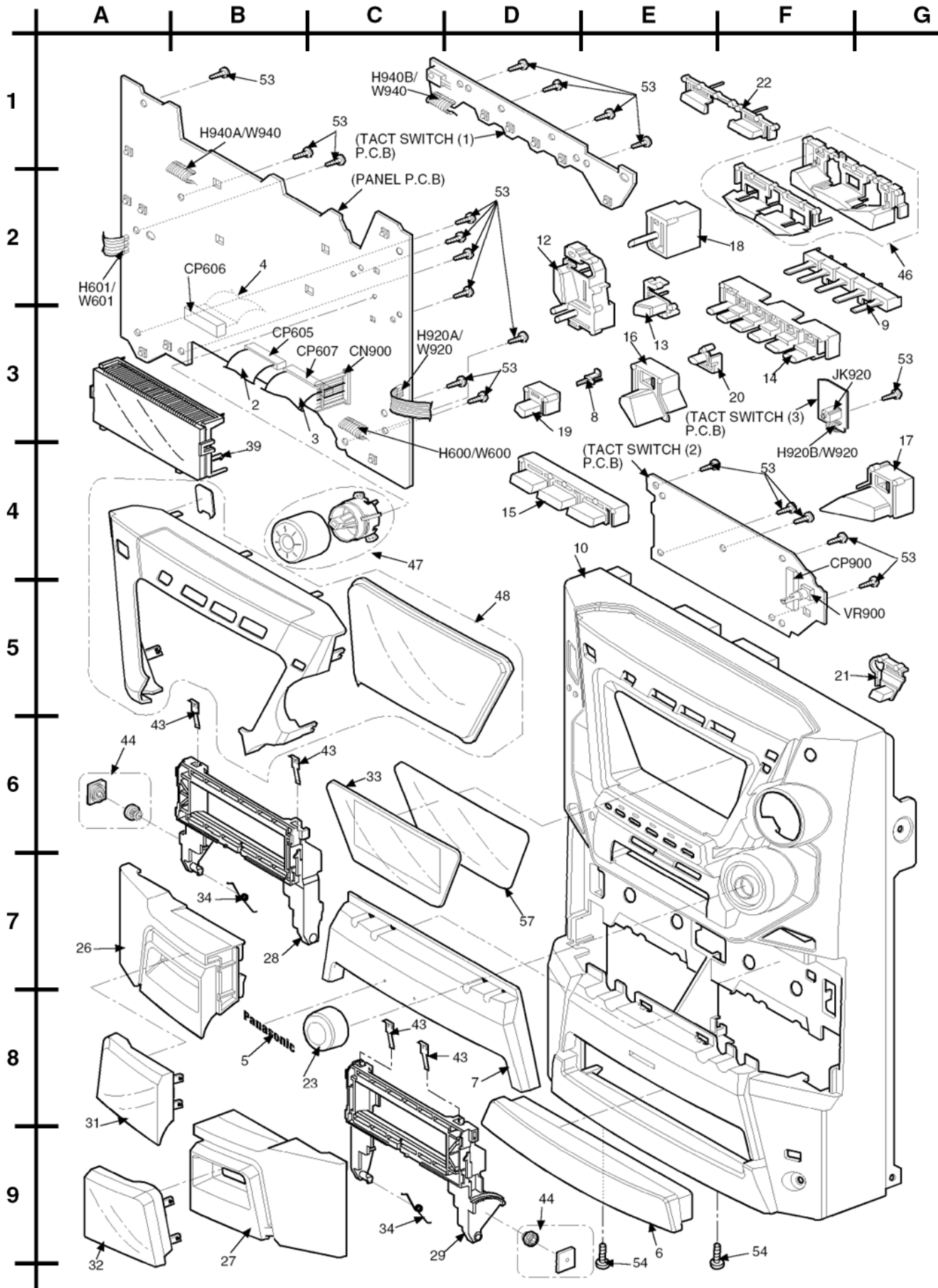
20.2.2. CD Loading Mechanism Parts List

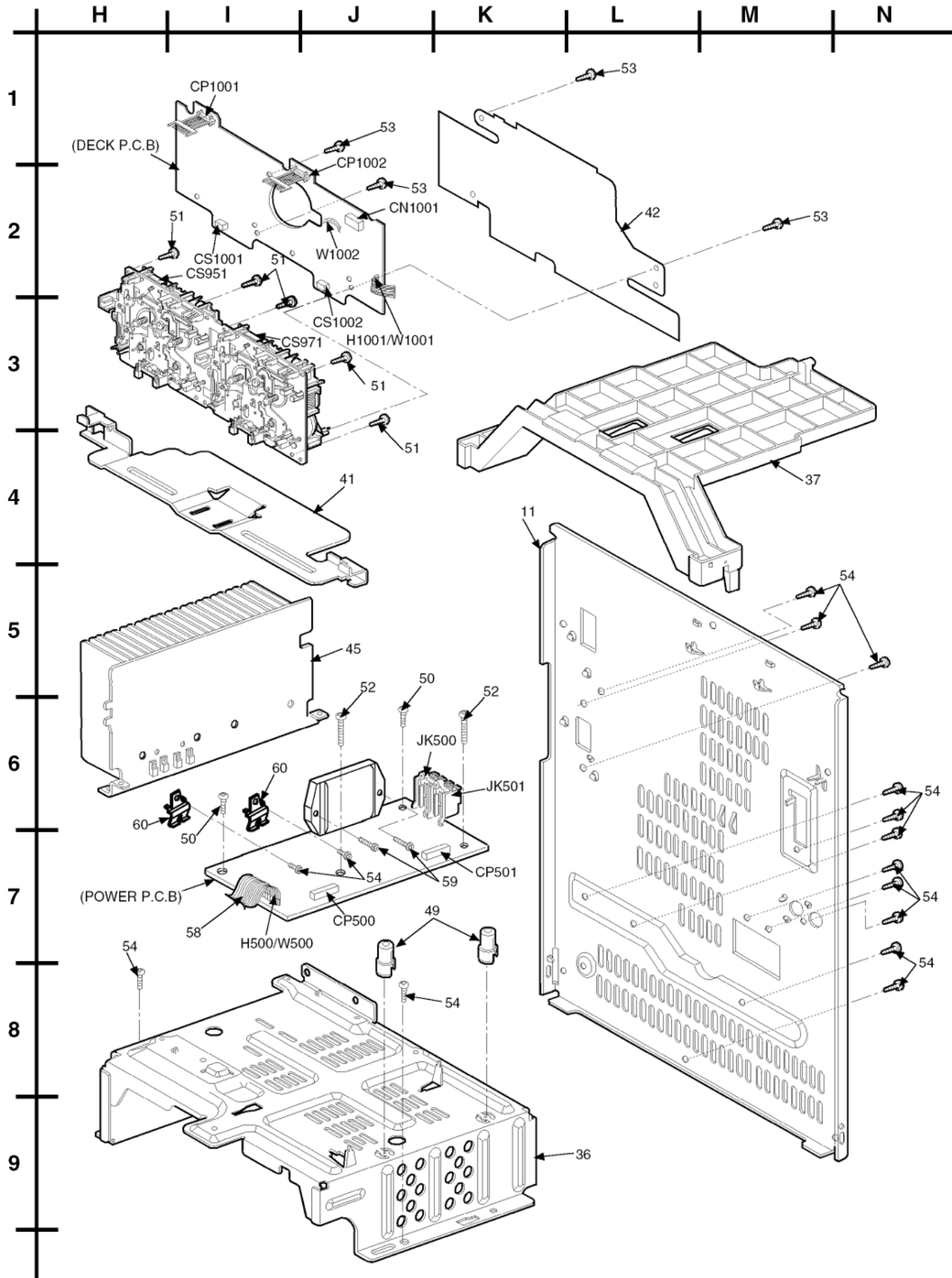
Ref. No.	Part No.	Part Name & Description	Remarks
		TRAVERSE DECK	
301	RML0517	TIMING LEVER	[M]
302	RML0516	PLUNGER LEVER	[M]
303	RMB0551	UPPER SPINDLE SPRING	[M]
304	RMQ0744	LOWER HOOK	[M]
305	RDV0056	BELT	[M]
306	RML0525	FRONT LOCK LEVER	[M]
307	RML0526	DISC LEVER	[M]
308	RDG0424	DRIVE GEAR	[M]
309	RDG0425	CHANGE GEAR	[M]
310	RDG0427	TRAVERSE CAM GEAR	[M]
311	RDG0428	TRAVERSE RELAY GEAR	[M]
312	RDG0426	UP/DOWN GEAR	[M]
313	RDG0429	PULLEY GEAR	[M]
314	RMB0549-1	CHANGE GEAR SPRING	[M]
315	RMQ0748	PITCH PLATE	[M]
316	RMB0553	PUSH SPRING	[M]
317	RML0530	ASSIST LEVER	[M]
318	RML0518	CONNECTION LEVER	[M]
319	RMM0201	SLIDE PLATE 1	[M]
320	RME0258	REAR LOCK SPRING	[M]
321	RML0521	REAR LOCK	[M]
322	RME0257	TRAY LOCK LEVER SPRI	[M]
323	RML0520	TRAY LOCK	[M]
324	RMM0202	SLIDE PLATE 2	[M]
325	XTB3+10J	SCREW	[M]
326	RMR0334	FIXED PLATE	[M]
327	RMR0624-W2	CLAMPER	[M]
328	RMB0561	ASSIST LEVER SPRING	[M]
329	RMR1121-K	MECHA COVER	[M]
330	RMA1110-2	TRAY ANGLE	[M]
331	RMR1122-H1	TRAY BASE	[M]
332	RMM0204	CARRIER	[M]
333	RMM0203	DRIVE RACK	[M]
334	RDG0432	SPEED UP GEAR	[M]
335	RML0524	SLIDE LOCK	[M]
336	RML0523	CARRIER LOCK	[M]
337	RME0260-1	SLIDE LOCK SPRING	[M]
338	RMR1123-H	TRAY	[M]
339	RXQ0595	MOTOR SUB ASS'Y	[M]
341	RSJ0003	SOLENOID ASS'Y	[M]
343	RMA1106	UPPER PLATE	[M]
344	RML0519	8CD LEVER	[M]
345	RFKNAK27GCS	MECHA BASE ASS'Y	[M]
346	RML0522	TURNING STOPPER	[M]
347	RMQ0745	LOWER SPINDLE	[M]
348	RMQ0746	UP/DOWN BASE	[M]
349	RMB0550	LOWER SPINDLE SPRING	[M]
350	RMQ0747	UPPER HOOK	[M]
351	RME0263	CLICK SPRING	[M]
352	RMQ0743	SPINDLE SHAFT	[M]
353	RMB0552	CUSHION SPRING	[M]
354	RDG0430	RELAY GEAR 'A'	[M]
355	RDG0431	RELAY GEAR 'B'	[M]
356	RME0262	DISK LEVER SP.	[M]
357	RMA1105	SUPPORT PLATE	[M]
358	RAE0152Z-3	TRAVERSE	[M]
358-1	SHGD113-1	FLOATING CUSHION	[M]
358-10	XQS17+A35FZ	TRAVERSE MOTOR SCREW	[M]
358-2	SNSD38	TRV MOTOR ASSY SCREW	[M]
358-3	RAF0150A-4S	50A OPTICAL PICKUP	[M]
358-4	RDG0247	DRIVE GEAR	[M]
358-5	RDG0248	RELAY GEAR	[M]
358-6	RXQ0339	TRAVERSE MOTOR ASSY	[M]
358-7	RXQ0304-1	NUT PLATE ASSY	[M]
358-8	XQN17+CG5	NUT PLATE ASSY SCREW	[M]
358-9	XQS2+A3FZ	SPINDLE MOTOR SCREW	[M]
359	RME0142	FLOATING SPRING A	[M]
360	RME0109	FLOATING SPRING B	[M]
361	RMR1124-K1	TRAVERSE CHASSIS	[M]
362	RMS0632	TRAVERSE PIN	[M]

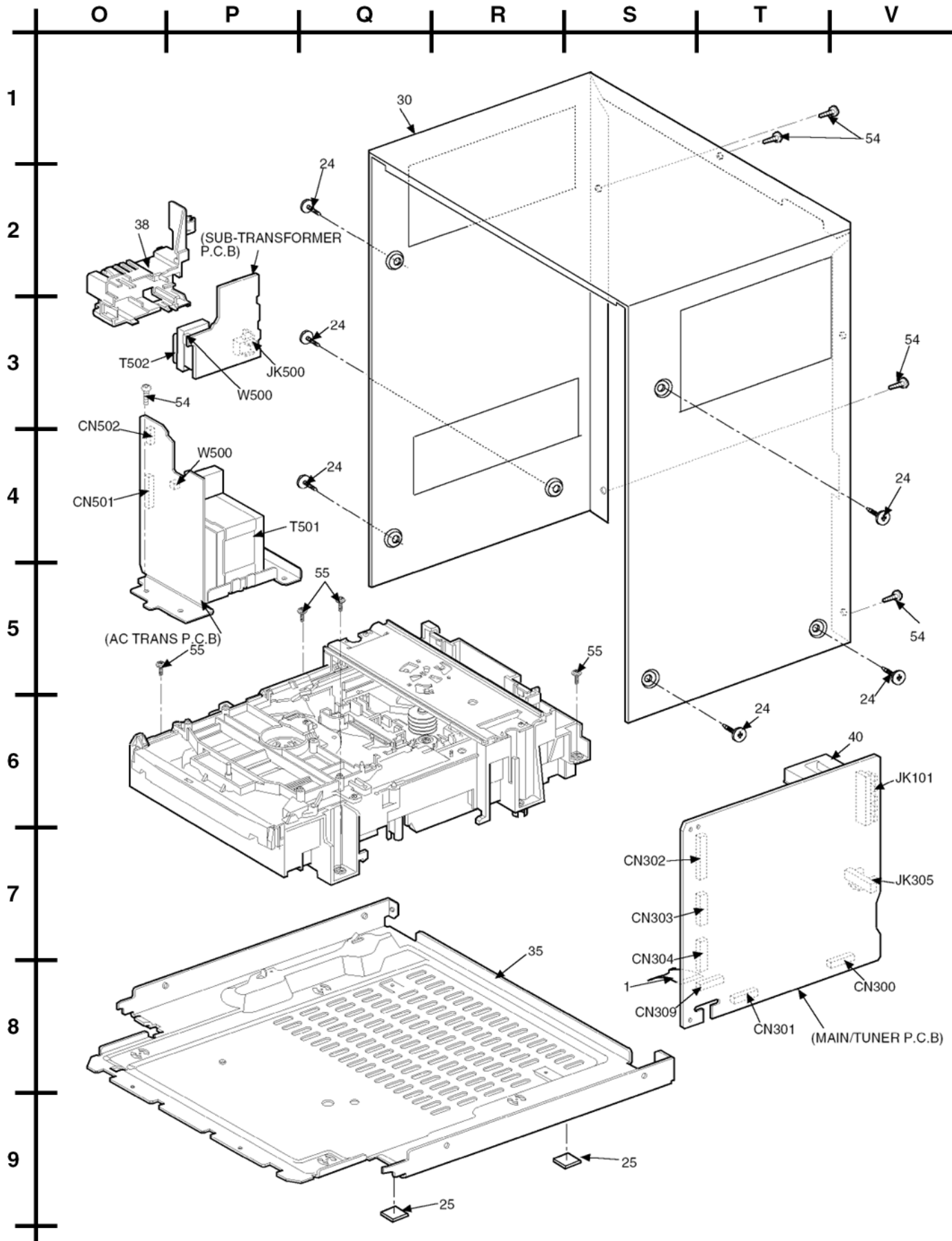
Ref. No.	Part No.	Part Name & Description	Remarks
363	XTN2+6G	SCREW	[M]
369	RMX0141	PUSH SPACER	[M]
370	RMQ0749	UPPER SPINDLE	[M]
371	RHM0001	MAGNET	[M]
372	RMX0140	DISC SPACER	[M]
373	RME0261	FRONT LOCK SPRING	[M]
374	RMQ0742	SPINDLE BASE	[M]

20.3. Cabinet

20.3.1. Cabinet Parts Location







20.3.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	REEX0129	14P FFC WIRE	[M]
2	REEX0101	28P FFC WIRE	[M]
3	REEX0127	20P FFC	[M]
4	REEX0128	19P FFC WIRE	[M]
5	RGB0113-N	PANA BADGE (HOOK TYP	[M]
6	RGKX0070-S	CD LID	[M]
7	RGKX0082-A	CD ORNAMENT	[M]
8	RGLX0028-Q	POWER LIGHTING CHIP	[M]
9	RGLX0030-Q	DISC LIGHT CHIP	[M]
10	RGFX0038C-SJ	FRONT PANEL	[M]
11	RGRX0017E-A	REAR PANEL	[M]P
11	RGRX0017E-B	REAR PANEL	[M]PC
12	RGUX0368-SA	POWER BUTTON	[M]
13	RGUX0369-SA	CD EJECT BUTTON	[M]
14	RGUX0371-S	DISC BUTTON	[M]
15	RGUX0372A-SA	DECK BUTTON	[M]
16	RGUX0378-SA	DECK EJECT BUTTON L	[M]
17	RGUX0379-SA	DECK EJECT BUTTON R	[M]
18	RGUX0397-SA	DISPLAY BUTTON	[M]
19	RGUX0400-SA	AUXILIARY BUTTON	[M]
20	RGUX0410-Q	S. WOOFER BUTTON	[M]
21	RGUX0411-Q	AMAZING BUTTON	[M]
22	RGUX0412-S	FUNCTION BUTTON	[M]
23	RGWX0055-S	VOLUME KNOB	[M]
24	RHD30002-H	SCREW	[M]
25	RKA0059-K	LEG RUBBER	[M]
26	RKFX0083-S	CASS. LID (L)	[M]
27	RKFX0084-S	CASS. LID (R)	[M]
28	RKFX0085-K	CASS. HOLDER (L)	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
29	RKFX0086-K	CASS. HOLDER (R)	[M]
30	RKMX0057-S	TOP CABINET (BENT)	[M]
31	RKWX0148-A	CASS. WINDOW (L)	[M]
32	RKWX0149-A	CASS. WINDOW (R)	[M]
33	RKWX0156A	FL FILTER	[M]
34	RMBX0016-1	CASS. OPEN SPRING	[M]
35	RMKX0043	BOTTOM CHASSIS	[M]
36	RMKX0044	INNER CHASSIS	[M]
37	RMKX0045	T BRACKET	[M]
38	RMNX0039-H	SUB TRANS SUPPORT	[M]
39	RMNX0048-A	FL HOLDER	[M]
40	RSC0027-2	TUNER PACK	[M]
41	RSCX0052	SHIELD PLATE HEAD	[M]
42	RSCX0058	SHIELD PLATE	[M]
43	RUS757ZAA	CASSETTE HALF SPRING	[M]
44	RXGX0001	DAMPER GEAR	[M]
45	RXXX0021	HEAT SINK UNIT	[M]
46	RYQX0040-S	CONTROL BUTTON UNIT	[M]
47	RYQX0042-S	JOY JOG UNIT	[M]
48	RKWX0157-A	FL ORNAMENT	[M]
49	SHE187-5	PCB SUPPORT (NO PIN)	[M]
50	XTB3+10J	SCREW	[M]
51	XTB3+10JFZ	SCREW	[M]
52	XTB3+20J	SCREW	[M]
53	XTBS26+10J	SCREW	[M]
54	XTBS3+8JFZ1	SCREW	[M]
55	XTW3+8T	SCREW	[M]
57	RKWX0158	FL FILTER	[M]
58	REXX0259	HEAD SHIELD WIRE U1	[M]
59	XTW3+15T	SCREW	[M]
60	RMC0158-S	TR-FIXTURE	[M]

20.4. Electrical Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PRINTED CIRCUIT BOARD	
	REPX0192D	CD SERVO P.C.B.	[M] (RTL)
	REPX0232D	MAIN/TUNER P.C.B.	[M] (RTL)
	REPX0231E	PANEL P.C.B.	[M] (RTL)
	REPX0231E	HEADPHONE P.C.B.	[M] (RTL)
	REPX0231E	TACT SWITCH (2) P.C.B.	[M] (RTL)
	REPX0231E	TACT SWITCH (1) P.C.B.	[M] (RTL)
	REPX0108H	MECHANISM (DECK 1) P.C.B.	[M] (RTL)
	REPX0108F	MECHANISM (DECK 2) P.C.B.	[M] (RTL)
	REP1999B	TUNER PACK P.C.B.	[M] (RTL)
	REP2578A-N	CD LOADING P.C.B.	[M] (RTL)
	REP2578A-N	CD DETACT P.C.B.	[M] (RTL)
	REP2578A-N	SPINDLE POSITION P.C.B.	[M] (RTL)
	REPX0198B	DETECT P.C.B.	[M] (RTL)
	REPX0253A	POWER P.C.B.	[M] (RTL) P
	REPX0253B	POWER P.C.B.	[M] (RTL) PC
	REPX0256A	AC TRANSFORMER P.C.B.	[M] (RTL)
	REPX0256A	SUB TRANSFORMER P.C.B.	[M] (RTL)
		INTEGRATED CIRCUITS	
IC1	TA7291P	IC DRIVE	[M]
IC101	LA1833NMNTLM	IC IF & MPX	[M]
IC102	LC72131MDTRM	IC PLL	[M]
IC301	BH3874AKS2	IC ASP	[M]
IC302	M5218AP	IC BUFFER AMP	[M]
IC500	RSN3502C	IC HIC	[M] △
IC600	M38B79MFA053	IC MICON	[M]
IC601	BU2090AF-E2	IC I/O EXPANDER	[M]
IC603	93LC46B	IC EEPROM	[M]
IC701	AN8885SBE1	IC RFAMP	[M]
IC702	MN662790RSC	IC LSI	[M]
IC703	AN8739SBE2	IC 4CH DRIVER	[M]
IC951	ON2180RLC1	IC PHOTO INTERRUPTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
IC971	ON2180RLC1	IC PHOTO INTERRUPTOR	[M]
IC1001	AN7348STA-E1	IC TAPE PB	[M]
IC1002	BU2090AF-E2	IC I/O EXPANDER	[M]
IC1003	BA4558FE2	IC	[M]
IC1004	BA7755A	IC SW	[M]
		TRANSISTORS	
Q1	2SK544F-AC	TRANSISTOR	[M]
Q1	RVTDT143EST	TRANSISTOR	[M]
Q2	2SC2786MTA	TRANSISTOR	[M]
Q3	2SC2787FL1TA	TRANSISTOR	[M]
Q4	2SC2787FL1TA	TRANSISTOR	[M]
Q101	2SC2058SPTA	TRANSISTOR	[M]
Q106	KRA102MTA	TRANSISTOR	[M] △
Q200	KTD1304TA	TRANSISTOR	[M]
Q250	KTD1304TA	TRANSISTOR	[M]
Q306	KRA102STA	TRANSISTOR	[M]
Q307	KRC111STA	TRANSISTOR	[M]
Q308	2SB621ARSTA	TRANSISTOR	[M] △
Q311	2SD1859QRTV2	TRANSISTOR	[M]
Q350	2SB621ARSTA	TRANSISTOR	[M]
Q351	KRC102STA	TRANSISTOR	[M]
Q400	KTD1304TA	TRANSISTOR	[M]
Q450	KTD1304TA	TRANSISTOR	[M]
Q503	KTA1046	TRANSISTOR	[M]
Q504	KTC3199GRTA	TRANSISTOR	[M]
Q505	KTC3199GRTA	TRANSISTOR	[M]
Q506	KTC3199GRTA	TRANSISTOR	[M] △
Q507	2SD2144STA	TRANSISTOR	[M]
Q509	KTA12710YTA	TRANSISTOR	[M]
Q510	KRA110MTA	TRANSISTOR	[M]
Q511	KTC3199GRTA	TRANSISTOR	[M]
Q512	KRA110MTA	TRANSISTOR	[M] △
Q513	KTC32030YTA	TRANSISTOR	[M] △
Q514	KTC3199GRTA	TRANSISTOR	[M]

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Ref. No.	Part No.	Part Name & Description	Remarks
Q515	KTC3199GRTA	TRANSISTOR	[M]
Q517	KTC2026	TRANSISTOR	[M] △
Q518	2SA933SSTA	TRANSISTOR	[M] △
Q519	KTA1046	TRANSISTOR	[M] △
Q520	KTC2026	TRANSISTOR	[M] △
Q570	KTC3205YTA	TRANSISTOR	[M] △
Q571	KTC3199GRTA	TRANSISTOR	[M]
Q572	KRC102MTA	TRANSISTOR	[M]
Q600	KTA12710YTA	TRANSISTOR	[M] △
Q601	KRC103MTA	TRANSISTOR	[M]
Q602	KRC102MTA	TRANSISTOR	[M] △
Q603	2SA933SSTA	TRANSISTOR	[M] △
Q604	KRC101MTA	TRANSISTOR	[M]
Q605	KRC101MTA	TRANSISTOR	[M]
Q606	KRC101MTA	TRANSISTOR	[M]
Q607	KTC3199GRTA	TRANSISTOR	[M]
Q608	KTC3199GRTA	TRANSISTOR	[M]
Q701	2SA1037AKSTX	TRANSISTOR	[M]
Q1001	KTC3875GRTA	TRANSISTOR	[M]
Q1003	2SD2144STA	TRANSISTOR	[M]
Q1004	2SD2144STA	TRANSISTOR	[M]
Q1005	2SD2144STA	TRANSISTOR	[M]
Q1006	KRC114STA	TRANSISTOR	[M]
Q1007	KTC3875GRTA	TRANSISTOR	[M]
Q1008	KTC3875GRTA	TRANSISTOR	[M]
Q1009	KTC3875GRTA	TRANSISTOR	[M]
Q1010	KTC3875GRTA	TRANSISTOR	[M]
Q1011	KTC3875GRTA	TRANSISTOR	[M]
Q1012	KTD1304TA	TRANSISTOR	[M]
Q1013	KTD1304TA	TRANSISTOR	[M]
Q1014	2SC2412KT96R	TRANSISTOR	[M]
Q1015	2SC2412KT96R	TRANSISTOR	[M]
Q1016	KRA102STA	TRANSISTOR	[M]
Q1017	KTD1146YTA	TRANSISTOR	[M]
Q1018	KTA12710YTA	TRANSISTOR	[M]
Q1019	KTA12710YTA	TRANSISTOR	[M]
Q1020	KTD1304TA	TRANSISTOR	[M]
Q1021	KTD1304TA	TRANSISTOR	[M]
Q1022	KRA102STA	TRANSISTOR	[M]
Q1023	KRA102STA	TRANSISTOR	[M]
Q1024	2SD2144STA	TRANSISTOR	[M]
		DIODES	
D1	GP1S94	DIODE	[M]
D1	SVC211SPA-AL	DIODE	[M]
D2	MTZJ4R7BTA	DIODE	[M]
D2	SVC211SPA-AL	DIODE	[M]
D3	SVC211SPA-AL	DIODE	[M]
D101	UDZSTE175R1B	DIODE	[M]
D307	DAP202KT146	DIODE	[M]
D308	DAP202KT146	DIODE	[M]
D309	1SS355TE17	DIODE	[M]
D310	DAP202KT146	DIODE	[M]
D312	RL1N4003S-P	DIODE	[M]
D313	RL1N4003S-P	DIODE	[M]
D314	RL1N4003S-P	DIODE	[M]
D315	MA8300MTX	DIODE	[M]
D316	RL1N4003S-P	DIODE	[M]
D317	UDZSTE179R1B	DIODE	[M]
D318	UDZSTE177R5B	DIODE	[M]
D501	1N5402BM21	DIODE	[M]
D502	1N5402BM21	DIODE	[M]
D503	1N5402BM21	DIODE	[M]
D504	1N5402BM21	DIODE	[M]
D506	RL1N4003S-P	DIODE	[M]
D507	RL1N4003S-P	DIODE	[M]
D508	RL1N4003S-P	DIODE	[M]
D509	RL1N4003S-P	DIODE	[M]
D510	RL1N4003S-P	DIODE	[M]
D511	RL1N4003S-P	DIODE	[M]
D512	RL1N4003S-P	DIODE	[M]
D513	RVD1SS133TA	DIODE	[M]
D514	RVD1SS133TA	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D515	MA165TA	DIODE	[M]
D518	MTZJ5R6BTA	DIODE	[M]
D521	MTZJ10BTA	DIODE	[M]
D522	RVD1SS133TA	DIODE	[M]
D526	MTZJ15CTA	DIODE	[M]
D529	RVD1SS133TA	DIODE	[M]
D530	RVD1SS133TA	DIODE	[M]
D570	1T3T	DIODE	[M]
D571	1T3T	DIODE	[M]
D572	MTZJ6R8BTA	DIODE	[M]
D573	RVD1SS133TA	DIODE	[M]
D574	1T3T	DIODE	[M]
D575	1T3T	DIODE	[M]
D605	SLI325URCT31	DIODE	[M]
D610	MA723TA	DIODE	[M]
D611	RVD1SS133TA	DIODE	[M]
D612	RVD1SS133TA	DIODE	[M]
D613	MA4020LTA	DIODE	[M]
D614	MA700ATA	DIODE	[M]
D615	MA700ATA	DIODE	[M]
D616	MA700ATA	DIODE	[M]
D617	MA700ATA	DIODE	[M]
D618	RVD1SS133TA	DIODE	[M]
D619	RVD1SS133TA	DIODE	[M]
D620	1SS291TA	DIODE	[M]
D621	1SS291TA	DIODE	[M]
D650	RVD1SS133TA	DIODE	[M]
D651	RVD1SS133TA	DIODE	[M]
D697	RVD1SS133TA	DIODE	[M]
D914	SLR325MCT31W	DIODE	[M]
D915	SLR325MCT31W	DIODE	[M]
D916	SLR325MCT31W	DIODE	[M]
D917	SLR325MCT31W	DIODE	[M]
D918	SLR325MCT31W	DIODE	[M]
D949	SLR325MCT31W	DIODE	[M]
D951	MA165TA	DIODE	[M]
D971	MA165TA	DIODE	[M]
D1002	1SS355TE17	DIODE	[M]
D1003	1SS355TE17	DIODE	[M]
D1004	UDZTE173R6B	DIODE	[M]
		VARIABLE RESISTORS	
VR900	EVEKE2F2524B	VOLUME JOG	[M]
		SWITCHES	
S701	RSH1A043-U	SW REST	[M]
S900	EVQ21405R	SW CD MANAGER	[M]
S901	EVQ21405R	SW CD 1	[M]
S902	EVQ21405R	SW CD 2	[M]
S903	EVQ21405R	SW CD 3	[M]
S904	EVQ21405R	SW CD 4	[M]
S905	EVQ21405R	SW CD 5	[M]
S906	EVQ21405R	SW REC/STOP	[M]
S907	EVQ21405R	SW REV MODE	[M]
S908	EVQ21405R	SW TAPE EDIT	[M]
S909	EVQ21405R	SW TUNER DOWN	[M]
S910	EVQ21405R	SW FM MDOE/BP	[M]
S911	EVQ21405R	SW MEMORY	[M]
S912	EVQ21405R	SW TUNE MODE	[M]
S913	EVQ21405R	SW TUNE UP	[M]
S920	EVQ21405R	SW CD EJECT	[M]
S940	EVQ21405R	SW AUX	[M]
S941	EVQ21405R	SW TUNER	[M]
S942	EVQ21405R	SW TAPE	[M]
S943	EVQ21405R	SW CD	[M]
S945	EVQ21405R	SW SUPER SOUND EQ	[M]
S950	EVQ21405R	SW DECK 2	[M]
S951	RSH1A018-3U	SW MODE	[M]
S952	RSH1A019-2U	SW LEAF	[M]
S953	RSH1A019-2U	SW LEAF	[M]
S956	EVQ21405R	SW POWER	[M]
S958	EVQ21405R	SW PLAY/REC TIMER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
S959	EVQ21405R	SW CLOCK/TIMER	[M]
S961	EVQ21405R	SW DISPLAY CHARACTER	[M]
S962	EVQ21405R	SW DECK 1	[M]
S971	RSH1A019-2U	SW LEAF	[M]
S972	RSH1A019-2U	SW LEAF	[M]
S973	RSH1A019-2U	SW LEAF	[M]
S974	RSH1A019-2U	SW LEAF	[M]
S975	RSH1A019-2U	SW LEAF	[M]
S975	RSH1A019-2U	SW LEAF	[M]
S976	RSH1A019-2U	SW LEAF	[M]
		SWITCHES	
SW1	RSH1A032-U	SW PUSH	[M]
SW2	RSH1A032-U	SW PUSH	[M]
SW3	RSH1A005-1U	SW LEAF	[M]
SW4	RSH1A912A-A	SW CD	[M]
SW5	RSP1A017-A	SW LOCK	[M]
SW600	ESE24SV2	SW JOY JOG	[M]
		CONNECTORS	
CN1	RJS1A9414	FF CONNECTOR	[M]
CN300	RJU057G12	12P P2 MQ CONNECTOR	[M]
CN301	RJU057G12	12P P2 MQ CONNECTOR	[M]
CN302	RJS1A9428-1	28P FFC CONNECTOR	[M]
CN303	RJS1A9420	20P FFC CONNECTOR	[M]
CN304	RJS1A5210	10P WIRE HOLDER	[M]
CN309	RJS1A9414-1	14P CONNECTOR	[M]
CN501	RJT029W008-1	8P SIDE CONNECTOR	[M]
CN502	RJP6G18ZA	SOCKET	[M]
CN701	RJS2A6016	16P FFC CONNECTOR	[M]
CN702	RJS1A6719-1Q	19P FFC CONNECTOR	[M]
CN900	RJT066H12F	12P BTB CONNECTOR	[M]
CN1001	RJS8T7ZA	8P MOLEX	[M]
CP500	RJT057G12	12P P2 MQ CONNECTOR	[M]
CP501	RJT057G12	12P P2 MQ CONNECTOR	[M]
CP605	RJS1A9420	20P FFC CONNECTOR	[M]
CP606	RJS1A6219-1	19P FFC CONNECTOR	[M]
CP607	RJS1A9428-1	28P FFC CONNECTOR	[M]
CP900	RJU066H12M	12P BTB CONNECTOR	[M]
CP1001	RJT071K09A	9P B/B CONNECTOR	[M]
CP1002	RJT071K09A	9P B/B CONNECTOR	[M]
CS951	RJU071H09M1	CONNECTOR	[M]
CS971	RJU071H09M1	CONNECTOR	[M]
CS1001	RJS1A6805-J	5P CONNECTOR SOCKET	[M]
CS1002	RJS1A6805-J	5P CONNECTOR SOCKET	[M]
		COILS & TRANSFORMERS	
L1	RLQZP1R2KT-Y	COIL	[M]
L2	RLQZP47KT-Y	COIL	[M]
L102	RLQB1R0KTD-D	INDUCTOR	[M]
L603	RLQB3R3JTD-D	COIL	[M]
L605	RLQB101JTD-D	INDUCTOR	[M]
L920	RLQZP101KT-Y	INDUCTOR	[M]
L921	RLQB101JTD-D	INDUCTOR	[M]
L922	RLQZP100KT-Y	INDUCTOR	[M]
L1001	RLQB470JTD-D	RF CHOKE COIL	[M]
L1002	7L1A62N	BIAS OSC COIL	[M]
T501	RTP2N3C011	MAIN TRANSFORMER	[M] △
T502	RTP1I3E002-V	BACK UP TRANSFORMER	[M] △
		COMPONENT COMBINATIO	
Z101	RLA2Z007-T	COIL	[M]
Z102	RLI2Z021M-T	AM IF BLOCK	[M]
Z501	ERZV10V511CS	ZENER	[M] △
Z940	RCD37142TC5	REMOTE CONTROL SENSO	[M]
Z971	RGSD12A1445T	RADA RESISTOR	[M]
Z1001	RGSD12A1445T	SENSOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Z1002	RGSD12A1445T	SENSOR	[M]
		CERAMIC FILTERS	
CF201	RLFFETWND01M	FM CF	[M]
CF202	RLFFETWND01M	FM CF	[M]
		RELAY	
RL502	RSY0056M-C	PRIMAY RELAY	[M] △
		OSCILLATORS	
X102	RLFDFT22DD	DISCRIMINATOR	[M]
X103	RSXC7M20S05T	CRYSTAL OSCILLATOR	[M]
X600	RSXZ4M19D01T	CERAMIC OSCILLATOR	[M]
X601	RSXD32K7S02	CRYSTAL OSCILLATOR	[M]
X701	RSXZ16M9M01T	CERAMIC OSCILLATOR	[M]
		DISPLAY TUBE	
FL600	RSL0314-F	FL	[M]
		FUSES	
F1	XBA1C31NBAL	FUSE	[M] △
		FUSE HOLDERS	
FC1	EYF52BC	FUSE HOLDER	[M]
FC2	EYF52BC	FUSE HOLDER	[M]
		HOLDERS	
H500	RJS1A5508	WIRE HOLDER	[M]
H600	RMR0317	8P CABLE HOLDER	[M]
H601	RMR0315	6P CABLE HOLDER	[M]
H920A	RMR0315	6P CABLE HOLDER	[M]
H920B	RMR0315	6P CABLE HOLDER	[M]
H940A	RMR0318	9P CABLE HOLDER	[M]
H940B	RMR0318	9P CABLE HOLDER	[M]
H1001	RMR0319	10P CABLE HOLDER	[M]
		JACKS	
JK101	RJH5414-1	JK ANTENNA	[M]
JK305	RJH2213L-1	JK 2P RCA	[M]
JK500	SJSD16-J	JK AC INLET	[M] △
JK501	RJR0054B-L	JK SPEAKER	[M]
JK920	RJJ37TK07-X	JK HP/MIC	[M]
		EARTH TERMINAL	
E500	SNE1004-2	EARTH TERMINAL	[M]
		WIRES	
W1	REEX0032	PRI WIRE (BLACK)	[M]
W1	REZ1023-1	4P WIRE	[M]
W2	REEX0089	PRIMARY WIRE (YELLOW)	[M]
W2	REZ1024	3P WIRE	[M]
W500	REXX0202	2P STANDBY WIRE	[M]
W600	RWJ0208155RX	WIRE 8P PANEL TO DEC	[M]
W601	REXX0253	6P WIRE	[M]
W920	RWJ0206250XX	6P (2) FLAT WIRE	[M]
W940	RWJ1109140RR	9P WIRE	[M]
W1001	RWJ8010160RX	10P WIRE	[M]
W1002	RWJ0102065CK	WIRE	[M]
		RESISTORS	
R1	ERDS2TJ102T	1K 1/4W	[M]
R1	ERDS2TJ104T	100K 1/4W	[M]
R2	ERDS2TJ104T	100K 1/4W	[M]

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Ref. No.	Part No.	Part Name & Description	Remarks
R3	ERDS2TJ221T	220 1/4W	[M]
R4	ERDS2TJ104T	100K 1/4W	[M]
R5	ERDS2TJ564T	560K 1/4W	[M]
R6	ERDS2TJ391T	390 1/4W	[M]
R7	ERDS2TJ272T	2.7K 1/4W	[M]
R8	ERDS2TJ684T	680K 1/4W	[M]
R9	ERDS2TJ391T	390 1/4W	[M]
R10	ERDS2TJ391T	390 1/4W	[M]
R11	ERDS2TJ684T	680K 1/4W	[M]
R101	ERJ3GEY0R00V	0 1/16W	[M]
R102	ERJ3GEYJ472V	4.7K 1/16W	[M]
R103	ERJ3GEYJ271V	270 1/16W	[M]
R104	ERJ3GEYJ102V	1K 1/16W	[M]
R105	ERJ3GEYJ471V	470 1/16W	[M]
R106	ERJ3GEYJ474V	470K 1/16W	[M]
R107	ERJ3GEYJ331V	330 1/16W	[M]
R110	ERJ3GEYJ102V	1K 1/16W	[M]
R111	ERJ3GEYJ391V	390 1/16W	[M]
R112	ERJ3GEYJ104V	100K 1/16W	[M]
R113	ERJ3GEYJ103V	10K 1/16W	[M]
R114	ERJ3GEYJ562V	5.6K 1/16W	[M]
R115	ERJ3GEYJ561V	560 1/16W	[M]
R116	ERJ3GEYJ102V	1K 1/16W	[M]
R117	ERJ3GEYJ473V	47K 1/16W	[M]
R118	ERJ3GEYJ332V	3.3K 1/16W	[M]
R119	ERJ3GEYJ472V	4.7K 1/16W	[M]
R120	ERJ3GEYJ473V	47K 1/16W	[M]
R121	ERJ3GEYJ223V	22K 1/16W	[M]
R122	ERJ3GEYJ272V	2.7K 1/16W	[M]
R123	ERJ3GEYJ683V	68K 1/16W	[M]
R124	ERJ3GEYJ330V	33 1/16W	[M]
R125	ERJ3GEYJ471V	470 1/16W	[M]
R126	ERJ3GEYJ102V	1K 1/16W	[M]
R127	ERJ3GEYJ471V	470 1/16W	[M]
R128	ERJ3GEYJ820V	82 1/16W	[M]
R129	ERJ3GEYJ273V	27K 1/16W	[M]
R130	ERJ3GEYJ103V	10K 1/16W	[M]
R131	ERJ3GEYJ680V	68 1/16W	[M]
R132	ERJ3GEYJ103V	10K 1/16W	[M]
R133	ERJ3GEYJ102V	1K 1/16W	[M]
R134	ERJ3GEYJ471V	470 1/16W	[M]
R135	ERJ3GEYJ102V	1K 1/16W	[M]
R136	ERJ3GEYJ102V	1K 1/16W	[M]
R137	ERJ3GEYJ102V	1K 1/16W	[M]
R138	ERJ3GEYJ332V	3.3K 1/16W	[M]
R141	ERJ3GEYJ682V	6.8K 1/16W	[M]
R142	ERJ3GEYJ682V	6.8K 1/16W	[M]
R143	ERJ3GEYJ223V	22K 1/16W	[M]
R145	ERJ3GEYJ104V	100K 1/16W	[M]
R146	ERJ3GEYJ104V	100K 1/16W	[M]
R151	ERJ3GEYJ820V	82 1/16W	[M]
R152	ERJ3GEY0R00V	0 1/16W	[M]
R201	ERJ3GEYJ272V	2.7K 1/16W	[M]
R202	ERJ3GEYJ103V	10K 1/16W	[M]
R207	ERJ3GEYJ152V	1.5K 1/16W	[M]
R208	ERJ3GEYJ103V	10K 1/16W	[M]
R209	ERJ3GEYJ473V	47K 1/16W	[M]
R210	ERJ3GEYJ102V	1K 1/16W	[M]
R211	ERJ3GEYJ222V	2.2K 1/16W	[M]
R212	ERJ3GEYJ472V	4.7K 1/16W	[M]
R213	ERJ3GEYJ563V	56K 1/16W	[M]
R214	ERJ3GEYJ103V	10K 1/16W	[M]
R215	ERJ3GEYJ102V	1K 1/16W	[M]
R220	ERJ3GEYJ104V	100K 1/16W	[M]
R221	ERJ3GEYJ152V	1.5K 1/16W	[M]
R222	ERJ3GEYJ472V	4.7K 1/16W	[M]
R223	ERJ3GEYJ473V	47K 1/16W	[M]
R224	ERJ3GEYJ153V	15K 1/16W	[M]
R225	ERJ3GEYJ332V	3.3K 1/16W	[M]
R226	ERJ3GEYJ121V	1.2K 1/16W	[M]
R227	ERJ3GEYJ682V	6.8K 1/16W	[M]
R233	ERJ3GEYJ102V	1K 1/16W	[M]
R248	ERJ3GEYJ121V	1.2K 1/16W	[M]
R249	ERJ3GEYJ121V	1.2K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R250	ERJ3GEYJ121V	1.2K 1/16W	[M]
R251	ERJ3GEYJ121V	1.2K 1/16W	[M]
R253	ERJ3GEYJ223V	22K 1/16W	[M]
R300	ERJ3GEYJ472V	4.7K 1/16W	[M]
R301	ERJ3GEYJ104V	100K 1/16W	[M]
R302	ERJ3GEYJ104V	100K 1/16W	[M]
R303	ERJ3GEYJ103V	10K 1/16W	[M]
R304	ERDS1FVJ470T	47 1/2W	[M]
R305	ERDS1FVJ470T	47 1/2W	[M]
R313	ERJ3GEYJ393V	39K 1/16W	[M]
R316	ERJ3GEYJ153V	15K 1/16W	[M]
R328	ERJ3GEYJ333V	33K 1/16W	[M]
R329	ERJ3GEYJ473V	47K 1/16W	[M]
R330	ERJ3GEYJ151V	150 1/16W	[M]
R331	ERJ3GEYJ472V	4.7K 1/16W	[M]
R332	ERD2FCVJ4R7T	4.7 1/4W	[M]
R345	ERJ3GEYJ221V	220 1/16W	[M]
R346	ERJ3GEYJ223V	22K 1/16W	[M]
R347	ERJ3GEYJ123V	12K 1/16W	[M]
R349	ERJ3GEYJ103V	10K 1/16W	[M]
R350	ERJ3GEYJ102V	1K 1/16W	[M]
R351	ERJ3GEYJ103V	10K 1/16W	[M]
R353	ERJ3GEYJ103V	10K 1/16W	[M]
R354	ERJ3GEYJ123V	12K 1/16W	[M]
R355	ERJ3GEYJ223V	22K 1/16W	[M]
R358	ERJ3GEYJ473V	47K 1/16W	[M]
R359	ERJ3GEYJ473V	47K 1/16W	[M]
R362	ERDS1FVJ331T	330 1/2W	[M]
R367	ERJ3GEYJ103V	10K 1/16W	[M]
R371	ERJ3GEYJ472V	4.7K 1/16W	[M]
R372	ERJ3GEYJ103V	10K 1/16W	[M]
R373	ERJ3GEYJ153V	15K 1/16W	[M]
R374	ERJ3GEYJ823V	82K 1/16W	[M]
R375	ERJ3GEYJ823V	82K 1/16W	[M]
R376	ERJ3GEYJ153V	15K 1/16W	[M]
R377	ERJ3GEYJ223V	22K 1/16W	[M]
R378	ERJ3GEYJ823V	82K 1/16W	[M]
R379	ERJ3GEYJ472V	4.7K 1/16W	[M]
R380	ERJ3GEYJ102V	1K 1/16W	[M]
R381	ERJ3GEYJ823V	82K 1/16W	[M]
R382	ERJ3GEYJ394V	390K 1/16W	[M]
R383	ERJ3GEYJ332V	3.3K 1/16W	[M]
R384	ERJ3GEYJ394V	390K 1/16W	[M]
R385	ERJ3GEYJ473V	47K 1/16W	[M]
R391	ERDS1FVJ470T	47 1/2W	[M]
R392	ERDS1FVJ470T	47 1/2W	[M]
R401	ERJ3GEYJ272V	2.7K 1/16W	[M]
R402	ERJ3GEYJ103V	10K 1/16W	[M]
R407	ERJ3GEYJ152V	1.5K 1/16W	[M]
R408	ERJ3GEYJ103V	10K 1/16W	[M]
R409	ERJ3GEYJ473V	47K 1/16W	[M]
R410	ERJ3GEYJ102V	1K 1/16W	[M]
R411	ERJ3GEYJ222V	2.2K 1/16W	[M]
R412	ERJ3GEYJ472V	4.7K 1/16W	[M]
R413	ERJ3GEYJ563V	56K 1/16W	[M]
R414	ERJ3GEYJ103V	10K 1/16W	[M]
R415	ERJ3GEYJ102V	1K 1/16W	[M]
R420	ERJ3GEYJ104V	100K 1/16W	[M]
R421	ERJ3GEYJ152V	1.5K 1/16W	[M]
R422	ERJ3GEYJ472V	4.7K 1/16W	[M]
R423	ERJ3GEYJ473V	47K 1/16W	[M]
R424	ERJ3GEYJ153V	15K 1/16W	[M]
R425	ERJ3GEYJ332V	3.3K 1/16W	[M]
R426	ERJ3GEYJ121V	1.2K 1/16W	[M]
R427	ERJ3GEYJ682V	6.8K 1/16W	[M]
R433	ERJ3GEYJ102V	1K 1/16W	[M]
R448	ERJ3GEYJ121V	1.2K 1/16W	[M]
R449	ERJ3GEYJ820V	1.2K 1/16W	[M]
R450	ERJ3GEYJ820V	1.2K 1/16W	[M]
R451	ERJ3GEYJ121V	1.2K 1/16W	[M]
R453	ERJ3GEYJ223V	22K 1/16W	[M]
R500	ERD2FCVJ270T	27 1/4W	[M]
R501	ERDS1FVJ150T	15 1/2W	[M]
R502	ERDS2TJ332T	3.3K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R503	ERDS2TJ272T	2.7K 1/4W	[M]
R504	ERDS2TJ102T	1K 1/4W	[M]
R505	ERDS2TJ102T	1K 1/4W	[M]
R506	ERDS2TJ272T	2.7K 1/4W	[M]
R507	ERDS2TJ561T	560 1/4W	[M]
R508	ERDS2TJ562T	5.6K 1/4W	[M]
R510	ERDS2TJ2R2T	2.2 1/4W	[M]
R511	ERDS2TJ683T	68K 1/4W	[M]
R512	ERDS2TJ103T	10K 1/4W	[M]
R513	ERDS2TJ683T	68K 1/4W	[M]
R514	ERDS2TJ222T	2.2K 1/4W	[M]
R515	ERDS2TJ392T	3.9K 1/4W	[M]
R517	ERDS2TJ331T	330 1/4W	[M]
R518	ERDS2TJ683T	68K 1/4W	[M]
R519	ERDS2TJ101T	100 1/4W	[M]
R520	ERD25FVJ4R7T	4.7 1/4W	[M]
R522	ERDS2TJ562T	5.6K 1/4W	[M]
R523	ERDS2TJ683T	68K 1/4W	[M]
R524	RSFMB10KT-L	PROTECTOR	[M] △
R525	ERDS2TJ334T	330K 1/4W	[M]
R526	ERDS2TJ223T	22K 1/4W	[M]
R527	ERDS2TJ2R2T	2.2 1/4W	[M]
R528	ERDS2TJ2R2T	2.2 1/4W	[M]
R529	ERDS2TJ2R2T	2.2 1/4W	[M]
R530	ERDS2TJ122T	1.2K 1/4W	[M]
R531	ERDS2TJ103T	10K 1/4W	[M]
R532	ERDS2TJ331T	330 1/4W	[M]
R533	ERDS2TJ273T	27K 1/4W	[M]
R534	ERDS2TJ273T	27K 1/4W	[M]
R535	ERDS2TJ102T	1K 1/4W	[M]
R536	ERDS2TJ102T	1K 1/4W	[M]
R537	ERDS2TJ823T	82K 1/4W	[M]
R538	ERDS2TJ823T	82K 1/4W	[M]
R539	ERDS2TJ103T	10K 1/4W	[M]
R540	ERDS2TJ823T	82K 1/4W	[M]
R541	ERDS2TJ104T	100K 1/4W	[M]
R542	ERDS2TJ154T	150K 1/4W	[M]
R543	ERDS2TJ151T	150 1/4W	[M]
R544	ERDS1FVJ100T	10 1/2W	[M]
R545	ERDS1FVJ100T	10 1/2W	[M]
R546	ERDS2TJ104T	100K 1/4W	[M]
R547	ERDS2TJ151T	150 1/4W	[M]
R549	ERDS2TJ222T	2.2K 1/4W	[M]
R550	ERDS2TJ151T	150 1/4W	[M]
R551	ERDS1FVJ3R9T	3.9 1/2W	[M]
R552	ERDS1FVJ3R9T	3.9 1/2W	[M]
R553	ERDS1FVJ3R9T	3.9 1/2W	[M]
R554	ERDS1FVJ3R9T	3.9 1/2W	[M]
R555	ERDS1FVJ3R9T	3.9 1/2W	[M]
R556	ERDS1FVJ2R2T	2.2 1/2W	[M]
R557	ERDS1FVJ2R2T	2.2 1/2W	[M]
R558	ERDS2TJ563T	56K 1/4W	[M]
R559	ERDS2TJ104T	100K 1/4W	[M]
R560	ERDS2TJ104T	100K 1/4W	[M]
R568	ERDS2TJ332T	3.3K 1/4W	[M]
R580	ERDS2TJ821T	820 1/4W	[M]
R581	ERDS2TJ151T	150 1/4W	[M]
R582	ERDS1FVJ220T	22 1/2W	[M]
R583	ERDS1FVJ180T	18 1/2W	[M]
R584	ERDS1FVJ180T	18 1/2W	[M]
R585	ERDS2TJ150T	15 1/4W	[M]
R586	RSFMB40KT-L	FUSE PROTECTOR	[M] △
R587	ERC12UGK335D	3.3 1/4W	[M]
R588	ERDS2TJ102T	1K 1/4W	[M]
R589	ERDS2TJ103T	10K 1/4W	[M]
R590	ERDS2TJ103T	10K 1/4W	[M]
R600	ERDS2TJ472T	4.7K 1/4W	[M]
R601	ERDS2TJ472T	4.7K 1/4W	[M]
R602	ERDS2TJ472T	4.7K 1/4W	[M]
R605	ERDS2TJ392T	3.9K 1/4W	[M]
R611	ERDS2TJ104T	100K 1/4W	[M]
R612	ERDS2TJ104T	100K 1/4W	[M]
R613	ERDS2TJ104T	100K 1/4W	[M]
R614	ERDS2TJ104T	100K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R615	ERDS2TJ104T	100K 1/4W	[M]
R616	ERDS2TJ104T	100K 1/4W	[M]
R617	ERDS2TJ104T	100K 1/4W	[M]
R618	ERDS2TJ104T	100K 1/4W	[M]
R619	ERDS2TJ104T	100K 1/4W	[M]
R620	ERDS2TJ104T	100K 1/4W	[M]
R621	ERDS2TJ104T	100K 1/4W	[M]
R622	ERDS2TJ104T	100K 1/4W	[M]
R623	ERDS2TJ152T	1.5K 1/4W	[M]
R624	ERDS2TJ223T	22K 1/4W	[M]
R625	ERDS2TJ102T	1K 1/4W	[M]
R626	ERDS2TJ102T	1K 1/4W	[M]
R628	ERDS2TJ103T	10K 1/4W	[M]
R629	ERDS2TJ103T	10K 1/4W	[M]
R630	ERDS2TJ103T	10K 1/4W	[M]
R631	ERDS2TJ101T	100 1/4W	[M]
R632	ERDS2TJ101T	100 1/4W	[M]
R633	ERDS2TJ101T	100 1/4W	[M]
R634	ERDS2TJ102T	1K 1/4W	[M]
R635	ERDS2TJ102T	1K 1/4W	[M]
R636	ERDS2TJ101T	100 1/4W	[M]
R637	ERDS2TJ223T	22K 1/4W	[M]
R638	ERDS2TJ681T	680 1/4W	[M]
R639	ERDS2TJ101T	100 1/4W	[M]
R640	ERDS2TJ101T	100 1/4W	[M]
R641	ERDS2TJ473T	47K 1/4W	[M]
R642	ERDS2TJ223T	22K 1/4W	[M]
R643	ERDS2TJ103T	10K 1/4W	[M]
R644	ERDS2TJ471T	470 1/4W	[M]
R645	ERDS2TJ102T	1K 1/4W	[M]
R646	ERDS2TJ223T	22K 1/4W	[M]
R647	ERDS2TJ101T	100 1/4W	[M]
R648	ERDS2TJ101T	100 1/4W	[M]
R649	ERDS2TJ472T	4.7K 1/4W	[M]
R650	ERDS2TJ474T	470K 1/4W	[M]
R651	ERDS2TJ680T	68 1/4W	[M]
R652	ERDS2TJ680T	68 1/4W	[M]
R653	ERDS2TJ472T	4.7K 1/4W	[M]
R654	ERDS2TJ472T	4.7K 1/4W	[M]
R655	ERDS2TJ472T	4.7K 1/4W	[M]
R656	ERDS2TJ103T	10K 1/4W	[M]
R657	ERDS2TJ102T	1K 1/4W	[M]
R658	ERDS2TJ103T	10K 1/4W	[M]
R659	ERDS2TJ103T	10K 1/4W	[M]
R660	ERDS2TJ103T	10K 1/4W	[M]
R661	ERDS2TJ472T	4.7K 1/4W	[M]
R662	ERDS2TJ103T	10K 1/4W	[M]
R663	ERDS2TJ562T	5.6K 1/4W	[M]
R664	ERDS2TJ101T	100 1/4W	[M]
R665	ERDS2TJ101T	100 1/4W	[M]
R666	ERDS2TJ101T	100 1/4W	[M]
R667	ERDS2TJ562T	5.6K 1/4W	[M]
R668	ERDS2TJ562T	5.6K 1/4W	[M]
R669	ERDS2TJ562T	5.6K 1/4W	[M]
R670	ERDS2TJ104T	100K 1/4W	[M]
R671	ERDS2TJ104T	100K 1/4W	[M]
R672	ERDS2TJ104T	100K 1/4W	[M]
R673	ERDS2TJ223T	22K 1/4W	[M]
R674	ERDS2TJ102T	1K 1/4W	[M]
R675	ERDS2TJ472T	4.7K 1/4W	[M]
R676	ERDS2TJ472T	4.7K 1/4W	[M]
R677	ERDS2TJ681T	680 1/4W	[M]
R678	ERDS2TJ334T	330K 1/4W	[M]
R679	ERDS2TJ106T	10M 1/4W	[M]
R680	ERDS2TJ103T	10K 1/4W	[M]
R681	ERDS2TJ103T	10K 1/4W	[M]
R682	ERDS2TJ123T	12K 1/4W	[M]
R683	ERDS2TJ223T	22K 1/4W	[M]
R684	ERDS2TJ104T	100K 1/4W	[M]
R686	ERDS2TJ562T	5.6K 1/4W	[M]
R687	ERDS2TJ223T	22K 1/4W	[M]
R688	ERDS2TJ223T	22K 1/4W	[M]
R689	ERDS2TJ472T	4.7K 1/4W	[M]
R690	ERDS2TJ101T	100 1/4W	[M]

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Ref. No.	Part No.	Part Name & Description	Remarks
R691	ERDS2TJ473T	47K 1/4W	[M]
R692	ERDS2TJ473T	47K 1/4W	[M]
R693	ERDS2TJ473T	47K 1/4W	[M]
R694	ERDS2TJ473T	47K 1/4W	[M]
R695	ERDS2TJ473T	47K 1/4W	[M]
R696	ERDS2TJ102T	1K 1/4W	[M]
R697	ERDS2TJ473T	47K 1/4W	[M]
R699	ERDS2TJ103T	10K 1/4W	[M]
R701	ERJ3GEYJ4R7V	4.7 1/16W	[M]
R702	ERJ3GEYJ103V	10K 1/16W	[M]
R704	ERJ3GEYJ102V	1K 1/16W	[M]
R705	ERJ3GEYJ154V	150K 1/16W	[M]
R706	ERJ3GEYJ102V	1K 1/16W	[M]
R707	ERJ3GEYJ393V	39K 1/16W	[M]
R708	ERJ3GEYJ223V	22K 1/16W	[M]
R709	ERJ3GEYJ473V	47K 1/16W	[M]
R711	ERJ3GEYJ823V	82K 1/16W	[M]
R712	ERJ3GEYJ221V	220 1/16W	[M]
R714	ERJ3GEYJ080V	0 1/16W	[M]
R715	ERJ3GEYJ102V	1K 1/16W	[M]
R717	ERJ3GEYJ102V	1K 1/16W	[M]
R718	ERJ3GEYJ102V	1K 1/16W	[M]
R721	ERJ3GEYJ101V	100 1/16W	[M]
R723	ERJ3GEYJ682V	6.8K 1/16W	[M]
R724	ERJ6GEYJ183V	18K 1/10W	[M]
R725	ERJ3GEYJ391V	390 1/16W	[M]
R727	ERJ3GEYJ392V	3.9K 1/16W	[M]
R728	ERJ3GEYJ392V	3.9K 1/16W	[M]
R729	ERJ3GEYJ392V	3.9K 1/16W	[M]
R731	ERJ6GEYJ682V	6.8K 1/10W	[M]
R735	ERJ6GEYJ101V	100 1/10W	[M]
R736	ERJ3GEYJ101V	100 1/16W	[M]
R741	ERJ3GEYJ473V	47K 1/16W	[M]
R742	ERJ6GEYJ224V	220K 1/10W	[M]
R744	ERJ3GEYJ124V	120K 1/16W	[M]
R749	ERJ3GEYJ472V	4.7K 1/16W	[M]
R750	ERJ6GEYJ4R7V	4.7 1/10W	[M]
R753	ERJ3GEYJ100V	10 1/16W	[M]
R900	ERDS2TJ223T	22K 1/4W	[M]
R901	ERDS2TJ102T	1K 1/4W	[M]
R902	ERDS2TJ102T	1K 1/4W	[M]
R903	ERDS2TJ122T	1.2K 1/4W	[M]
R904	ERDS2TJ182T	1.8K 1/4W	[M]
R905	ERDS2TJ222T	2.2K 1/4W	[M]
R906	ERDS2TJ102T	1K 1/4W	[M]
R907	ERDS2TJ102T	1K 1/4W	[M]
R908	ERDS2TJ122T	1.2K 1/4W	[M]
R909	ERDS2TJ182T	1.8K 1/4W	[M]
R910	ERDS2TJ222T	2.2K 1/4W	[M]
R911	ERDS2TJ272T	2.7K 1/4W	[M]
R912	ERDS2TJ472T	4.7K 1/4W	[M]
R913	ERDS2TJ682T	6.8K 1/4W	[M]
R914	ERDS2TJ471T	470 1/4W	[M]
R915	ERDS2TJ471T	470 1/4W	[M]
R916	ERDS2TJ471T	470 1/4W	[M]
R917	ERDS2TJ471T	470 1/4W	[M]
R918	ERDS2TJ471T	470 1/4W	[M]
R919	ERDS2TJ123T	12K 1/4W	[M]
R920	ERDS2TJ683T	68K 1/4W	[M]
R940	ERDS2TJ272T	2.7K 1/4W	[M]
R941	ERDS2TJ472T	4.7K 1/4W	[M]
R942	ERDS2TJ682T	6.8K 1/4W	[M]
R943	ERDS2TJ103T	10K 1/4W	[M]
R944	ERDS2TJ223T	22K 1/4W	[M]
R945	ERDS2TJ683T	68K 1/4W	[M]
R949	ERDS2TJ471T	470 1/4W	[M]
R950	ERDS2TJ103T	10K 1/4W	[M]
R951	ERDS2TJ223T	22K 1/4W	[M]
R952	ERDS2TJ102T	1K 1/4W	[M]
R952	ERDS2TJ821T	820 1/4W	[M]
R953	ERDS2TJ102T	1K 1/4W	[M]
R953	ERDS2TJ393T	39K 1/4W	[M]
R954	ERDS2TJ122T	1.2K 1/4W	[M]
R955	ERDS2TJ182T	1.8K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R956	ERDS2TJ222T	2.2K 1/4W	[M]
R957	ERDS2TJ272T	2.7K 1/4W	[M]
R958	ERDS2TJ472T	4.7K 1/4W	[M]
R959	ERDS2TJ682T	6.8K 1/4W	[M]
R960	ERDS2TJ103T	10K 1/4W	[M]
R961	ERDS2TJ223T	22K 1/4W	[M]
R972	ERDS2TJ821T	820 1/4W	[M]
R973	ERDS2TJ393T	39K 1/4W	[M]
R996	ERDS2TJ103T	10K 1/4W	[M]
R998	ERDS2TJ122T	1.2K 1/4W	[M]
R999	ERDS2TJ102T	1K 1/4W	[M]
R1001	ERJ3GEYJ1R0V	1 1/16W	[M]
R1003	ERJ3GEYJ103V	10K 1/16W	[M]
R1004	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1005	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1006	ERJ3GEYJ102V	1K 1/16W	[M]
R1007	ERD25FVJ4R7T	4.7 1/4W	[M]
R1008	ERJ3GEYJ223V	22K 1/16W	[M]
R1009	ERJ3GEYJ183V	18K 1/16W	[M]
R1010	ERJ3GEYJ183V	18K 1/16W	[M]
R1011	ERJ3GEYJ103V	10K 1/16W	[M]
R1012	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1013	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1014	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1015	ERJ3GEYJ470V	47 1/16W	[M]
R1016	ERJ3GEYJ470V	47 1/16W	[M]
R1017	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1018	ERJ3GEYJ392V	3.9K 1/16W	[M]
R1019	ERJ3GEYJ392V	3.9K 1/16W	[M]
R1020	ERJ3GEYJ470V	47 1/16W	[M]
R1022	ERJ3GEYJ103V	10K 1/16W	[M]
R1024	ERJ3GEYJ563V	56K 1/16W	[M]
R1026	ERJ3GEYJ102V	1K 1/16W	[M]
R1027	ERJ3GEYJ104V	100K 1/16W	[M]
R1028	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1029	ERJ3GEYJ475V	4.7M 1/16W	[M]
R1030	ERJ3GEYJ101V	100 1/16W	[M]
R1031	ERJ3GEYJ273V	27K 1/16W	[M]
R1032	ERJ3GEYJ103V	10K 1/16W	[M]
R1035	ERJ3GEYJ103V	10K 1/16W	[M]
R1036	ERJ3GEYJ470V	47 1/16W	[M]
R1037	ERJ3GEYJ104V	100K 1/16W	[M]
R1038	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1039	ERJ3GEYJ153V	15K 1/16W	[M]
R1040	ERJ3GEYJ563V	56K 1/16W	[M]
R1045	ERJ3GEYJ104V	100K 1/16W	[M]
R1046	ERJ3GEYJ104V	100K 1/16W	[M]
R1047	ERJ3GEYJ102V	1K 1/16W	[M]
R1048	ERJ3GEYJ102V	1K 1/16W	[M]
R1049	ERJ3GEYJ105V	1M 1/16W	[M]
R1050	ERJ3GEYJ105V	1M 1/16W	[M]
R1051	ERJ3GEYJ221V	220 1/16W	[M]
R1052	ERJ3GEYJ221V	220 1/16W	[M]
R1053	ERJ3GEYJ681V	680 1/16W	[M]
R1054	ERJ3GEYJ681V	680 1/16W	[M]
R1055	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1056	ERJ3GEYJ221V	220 1/16W	[M]
R1057	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1058	ERJ3GEYJ272V	2.7K 1/16W	[M]
R1059	ERJ3GEYJ103V	10K 1/16W	[M]
R1060	ERJ3GEYJ391V	390 1/16W	[M]
R1061	ERJ3GEYJ2R7V	2.7 1/16W	[M]
R1062	ERJ3GEYJ2R7V	2.7 1/16W	[M]
R1063	ERJ3GEYJ102V	1K 1/16W	[M]
R1064	ERJ3GEYJ102V	1K 1/16W	[M]
R1065	ERJ3GEYJ102V	1K 1/16W	[M]
R1066	ERJ3GEYJ102V	1K 1/16W	[M]
R1067	ERJ3GEYJ153V	15K 1/16W	[M]
R1068	ERJ3GEYJ153V	15K 1/16W	[M]
R1069	ERJ3GEYJ682V	6.8K 1/16W	[M]
R1070	ERJ3GEYJ103V	10K 1/16W	[M]
R1071	ERJ3GEYJ103V	10K 1/16W	[M]
R1072	ERJ3GEYJ331V	330 1/16W	[M]
R1073	ERJ3GEYJ682V	6.8K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1074	ERJ3GEYJ823V	82K 1/16W	[M]
R1075	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1076	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1077	ERJ3GEYJ393V	39K 1/16W	[M]
R1078	ERJ3GEYJ682V	6.8K 1/16W	[M]
R1079	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1080	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1081	ERJ3GEYJ102V	1K 1/16W	[M]
R1082	ERJ3GEYJ393V	39K 1/16W	[M]
R1083	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1084	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1085	ERJ3GEYJ473V	47K 1/16W	[M]
R1086	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1087	ERJ3GEYJ473V	47K 1/16W	[M]
R1088	ERJ3GEYJ223V	22K 1/16W	[M]
R1089	ERJ3GEYJ223V	22K 1/16W	[M]
R1090	ERJ3GEYJ331V	330 1/16W	[M]
R1091	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1092	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1093	ERJ3GEYJ102V	1K 1/16W	[M]
R1094	ERJ3GEYJ102V	1K 1/16W	[M]
R1095	ERJ3GEYJ104V	100K 1/16W	[M]
R1096	ERJ3GEYJ104V	100K 1/16W	[M]
R1097	ERJ3GEYJ473V	47K 1/16W	[M]
R1098	ERJ3GEYJ473V	47K 1/16W	[M]
		CAPACITORS	
C1	ECBT1H5R6KC5	5.6P 50V	[M]
C1	ECEA1CKA101B	100 16V	[M]
C2	ECBT1E103ZF5	0.01 25V	[M]
C2	RCBS1H102KBY	1000P 50V	[M]
C3	ECBT1H2R2KC5	2.2P 50V	[M]
C4	ECBT1H181KB5	180P 50V	[M]
C5	ECBT1H5R6KC5	5.6P 50V	[M]
C6	ECBT1H3R3KC5	3.3P 50V	[M]
C7	ECBT1H4R7KC5	4.7P 50V	[M]
C8	ECBT1H3R3KC5	3.3P 50V	[M]
C9	ECBT1H2R2KC5	2.2P 50V	[M]
C10	ECBT1H180JC5	18P 50V	[M]
C11	RCBS1H102KBY	1000P 50V	[M]
C101	ECUV1E103KBV	0.01 25V	[M]
C102	ECEA1CKA100B	10 16V	[M]
C103	ECUV1E103KBV	0.01 25V	[M]
C104	ECUV1H102KBV	1000P 50V	[M]
C106	ECUV1E103KBV	0.01 25V	[M]
C107	ECUV1E473ZFN	0.047 25V	[M]
C108	ECUV1H080DCV	8P 50V	[M]
C109	ECUV1H102KBV	1000P 50V	[M]
C110	ECUV1E103KBV	0.01 25V	[M]
C111	ECEA1HKA4R7B	4.7 50V	[M]
C112	ECUV1E103KBV	0.01 25V	[M]
C113	ECUV1H102KBV	1000P 50V	[M]
C114	ECEA1HKA3R3B	3.3 50V	[M]
C115	ECEA1HKA4R7B	4.7 50V	[M]
C116	ECUV1C333KBV	0.033 16V	[M]
C117	ECUV1E103KBV	0.01 25V	[M]
C118	ECUV1E103KBV	0.01 25V	[M]
C119	ECQP2A681JZT	680P 100V	[M]
C120	ECEA1CKA100B	10 16V	[M]
C121	ECEA1HKAR47B	0.47 50V	[M]
C122	ECEA1HKA010B	1 50V	[M]
C123	ECEA1HKA010B	1 50V	[M]
C124	ECUV1H101KCV	100P 50V	[M]
C125	ECEA1CKA220B	22 16V	[M]
C126	ECUV1C105ZFN	10 16V	[M]
C127	ECEA1CKA220B	22 16V	[M]
C129	ECEA0JKA101B	100 6.3V	[M]
C130	ECEA0JKA101B	100 6.3V	[M]
C131	ECUV1H151JCV	150P 50V	[M]
C132	ECUV1H102KBV	1000P 50V	[M]
C133	ECUV1H270JCV	27P 50V	[M]
C134	ECUV1H270JCV	27P 50V	[M]
C136	ECUV1H102KBV	1000P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C137	ECUV1H332KBV	3300P 50V	[M]
C138	ECUV1E103KBV	0.01 25V	[M]
C139	ECEA1HKA4R7B	4.7 50V	[M]
C141	ECEA1HKA010B	1 50V	[M]
C142	ECEA1HKA010B	1 50V	[M]
C143	ECUV1H682KBV	6800P 50V	[M]
C144	ECUV1H682KBV	6800P 50V	[M]
C147	ECUV1H102KBV	1000P 50V	[M]
C148	ECUV1E103KBV	0.01 25V	[M]
C149	ECUV1C104ZFN	0.1 16V	[M]
C201	ECUV1H101KCV	100P 50V	[M]
C202	ECUV1H101KCV	100P 50V	[M]
C204	ECUV1H221KBV	220P 50V	[M]
C207	ECEA1CKA100B	10 16V	[M]
C225	ECEA1HKA3R3B	3.3 50V	[M]
C226	ECUV1H563KBV	0.056 50V	[M]
C227	ECUV1H222KBV	2200P 50V	[M]
C228	ECEA1CKA100B	10 16V	[M]
C229	ECUV1H101KCV	100P 50V	[M]
C230	ECUV1H470JCV	47P 50V	[M]
C231	ECEA1CKA100B	10 16V	[M]
C232	ECUV1H332KBV	3300P 50V	[M]
C233	ECEA1HKA2R2B	2.2 50V	[M]
C234	ECEA1HKA4R7B	4.7 50V	[M]
C235	ECEA1HKA2R2B	2.2 50V	[M]
C236	ECEA1HKA2R2B	2.2 50V	[M]
C237	ECUV1H102KBV	1000P 50V	[M]
C238	ECEA1CKA470B	47 16V	[M]
C300	ECUV1E103KBV	0.01 25V	[M]
C301	ECUV1H102KBV	1000P 50V	[M]
C303	ECEA1CKA100B	10 16V	[M]
C304	ECUV1C473KBV	0.047 16V	[M]
C305	ECUV1H472KBV	4700P 50V	[M]
C306	ECEA1HKAR33B	0.33 50V	[M]
C307	ECEA1HKAR33B	0.33 50V	[M]
C308	ECUV1C104KBV	0.1 16V	[M]
C310	ECUV1C473KBV	0.047 16V	[M]
C311	ECEA1HKAR33B	0.33 50V	[M]
C312	ECEA1HKAR33B	0.33 50V	[M]
C313	ECUVNA154KBV	0.15 10V	[M]
C314	ECUVNA154KBV	0.15 10V	[M]
C315	ECUVNA154KBV	0.15 10V	[M]
C316	ECUVNA154KBV	0.15 10V	[M]
C317	ECEA1HKN4R7B	4.7 50V	[M]
C318	ECUV1E103KBV	0.01 25V	[M]
C320	ECUV1E103KBV	0.01 25V	[M]
C322	ECUV1E273KBV	0.027 25V	[M]
C323	ECUV1E273KBV	0.027 25V	[M]
C324	ECUV1E273KBV	0.027 25V	[M]
C331	ECEA1HKA4R7B	4.7 50V	[M]
C333	ECUV1E273KBV	0.027 25V	[M]
C334	ECUV1H562KBV	5600P 50V	[M]
C335	ECUV1H562KBV	5600P 50V	[M]
C336	ECUV1H562KBV	5600P 50V	[M]
C340	ECUV1H562KBV	5600P 50V	[M]
C341	ECUV1H152KBV	1500P 50V	[M]
C342	ECUV1H152KBV	1500P 50V	[M]
C343	ECUV1C683KBV	0.068 16V	[M]
C344	ECUV1C683KBV	0.068 16V	[M]
C345	ECUV1C683KBV	0.068 16V	[M]
C346	ECUV1C683KBV	0.068 16V	[M]
C347	ECUV1C683KBV	0.068 16V	[M]
C348	ECUV1C683KBV	0.068 16V	[M]
C349	ECQV1H104JZ3	0.1 50V	[M]
C350	ECUV1C104KBV	0.1 16V	[M]
C351	ECUV1A224KBV	0.22 10V	[M]
C352	ECUV1A224KBV	0.22 10V	[M]
C353	ECUV1C104KBV	0.1 16V	[M]
C354	ECEA1AM221B	220 10V	[M]
C355	ECEA1CKA100B	10 16V	[M]
C356	ECQV1H224JL3	0.27 50V	[M]
C357	ECEA1CKA100B	10 16V	[M]
C358	ECEA2AM100B	10 100V	[M]
C359	ECKR1H103ZF5	0.01 50V	[M]

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Ref. No.	Part No.	Part Name & Description	Remarks
C360	ECEALJM101B	100 63V	[M]
C363	ECUV1H101KCV	100P 50V	[M]
C364	ECUV1H101KCV	100P 50V	[M]
C365	ECUV1C474ZV	0.47 16V	[M]
C374	ECKR1H102ZF5	1000P 50V	[M]
C375	ECUV1H102KBV	1000P 50V	[M]
C376	ECEALCM221B	220 16V	[M]
C377	ECKR1H103ZF5	0.01 50V	[M]
C378	ECUVNA154KBV	0.15 10V	[M]
C379	ECUVNA154KBV	0.15 10V	[M]
C380	ECUVNA154KBV	0.15 10V	[M]
C381	ECUVNA154KBV	0.15 10V	[M]
C401	ECUV1H101KCV	100P 50V	[M]
C402	ECUV1H101KCV	100P 50V	[M]
C404	ECUV1H221KBV	220P 50V	[M]
C407	ECEALCKA100B	10 16V	[M]
C425	ECEALHKA3R3B	3.3 50V	[M]
C426	ECUV1H563KBV	0.056 50V	[M]
C427	ECUV1H222KBV	2200P 50V	[M]
C428	ECEALCKA100B	10 16V	[M]
C429	ECUV1H101KCV	100P 50V	[M]
C430	ECUV1H470JCV	47P 50V	[M]
C431	ECEALCKA100B	10 16V	[M]
C432	ECUV1H332KBV	3300P 50V	[M]
C433	ECEALHKA2R2B	2.2 50V	[M]
C434	ECEALHKA4R7B	4.7 50V	[M]
C435	ECEALHKA2R2B	2.2 50V	[M]
C436	ECEALHKA2R2B	2.2 50V	[M]
C437	ECUV1H102KBV	1000P 50V	[M]
C438	ECEALCKA470B	47 16V	[M]
C505	ECEALHKA010B	1 50V	[M]
C506	ECBT1H102KB5	1000P 50V	[M]
C508	ECBT1H331KB5	330P 50V	[M]
C510	ECBT1H331KB5	330P 50V	[M]
C511	ECBT1H102KB5	1000P 50V	[M]
C514	ECBT1H150J5	15P 50V	[M]
C515	ECKR1H103ZF5	0.01 50V	[M]
C516	ECEALAKA330B	33 10V	[M]
C517	ECEA2AU100B	10 100V	[M]
C518	ECEALHKA010B	1 50V	[M]
C519	ECBT1H150J5	15P 50V	[M]
C520	ECEA2AU100B	10 100V	[M]
C521	ECKR1H103ZF5	0.01 50V	[M]
C522	ECKR1H103ZF5	0.01 50V	[M]
C523	ECEALHKA330B	33 25V	[M]
C524	ECEALHKAR15B	0.15 50V	[M]
C525	ECEALHKA3R3B	3.3 50V	[M]
C526	ECEALHKAR15B	0.15 50V	[M]
C527	ECEALHKA3R3B	3.3 50V	[M]
C533	ECQE2104KF3	0.01 500V	[M]
C534	ECEALCKA101B	100 16V	[M]
C536	RCEALE222B-S	2200P 25V	[M]
C537	ECEA0JKA221B	220 6.3V	[M]
C539	ECBT1H102KB5	1000P 50V	[M]
C542	ECBT1H473KB5	0.047 50V	[M]
C544	ECBT1H473KB5	0.047 50V	[M]
C545	ECEALJM222B	2200 63V	[M]
C546	ECEALJM222B	2200P 63V	[M]
C547	ECKR2H103ZF5	0.01 500V	[M]
C549	ECKR1H103ZF5	0.01 50V	[M]
C550	ECKR1H103ZF5	0.01 50V	[M]
C551	ECEA2AU100B	10 100V	[M]
C552	ECEALHM101B	100 50V	[M]
C553	ECQV1H474JL3	0.47 50V	[M]
C554	ECEALHKA100B	10 50V	[M]
C556	ECQV1H184JZ3	0.18 50V	[M]
C570	RCEALC102B-S	1000P 16V	[M]
C571	RCEALC102B-S	1000P 16V	[M]
C572	ECKR1H103ZF5	0.01 50V	[M]
C573	ECKR1H103ZF5	0.01 50V	[M]
C574	ECEALHKA470B	47 25V	[M]
C575	ECKR1H103ZF5	0.01 50V	[M]
C576	ECEALVKA4R7B	4.7 35V	[M]
C600	ECEALVKA220B	22 35V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C606	ECBT1H101KB5	100P 50V	[M]
C607	ECBT1H101KB5	100P 50V	[M]
C608	ECBT1H331KB5	330P 50V	[M]
C609	ECEA0JKA101B	100 6.3V	[M]
C610	ECBT1E104ZF5	0.1 25V	[M]
C611	RCEA0J102B-S	1000P 6.3V	[M]
C612	ECBT1H102KB5	1000P 50V	[M]
C613	ECBT1H101KB5	100P 50V	[M]
C614	ECBT1H101KB5	100P 50V	[M]
C616	ECEALHKA010B	1 50V	[M]
C617	ECEALHKA2R2B	2.2 50V	[M]
C618	ECBT1E104ZF5	0.1 25V	[M]
C619	ECBT1H101KB5	100P 50V	[M]
C620	ECBT1H101KB5	100P 50V	[M]
C621	ECBT1E103ZF5	0.01 25V	[M]
C622	ECEALAKA220B	22 10V	[M]
C623	ECBT1H561KB5	560P 50V	[M]
C624	ECBT1H561KB5	560P 50V	[M]
C625	ECBT1H561KB5	560P 50V	[M]
C626	ECBT1H561KB5	560P 50V	[M]
C627	ECBT1H561KB5	560P 50V	[M]
C628	ECBT1H561KB5	560P 50V	[M]
C629	ECBT1H561KB5	560P 50V	[M]
C630	ECBT1H561KB5	560P 50V	[M]
C631	ECBT1E103ZF5	0.01 25V	[M]
C632	ECBT1H561KB5	560P 50V	[M]
C633	ECBT1H101KB5	100P 50V	[M]
C634	ECEALVKA220B	22 35V	[M]
C636	ECBT1H561KB5	560P 50V	[M]
C637	ECBT1H561KB5	560P 50V	[M]
C638	ECBT1H561KB5	560P 50V	[M]
C639	ECBT1E103ZF5	0.01 25V	[M]
C640	ECBT1H102KB5	1000P 50V	[M]
C641	ECBT1H102KB5	1000P 50V	[M]
C642	ECBT1H560J5	56P 50V	[M]
C643	ECBT1H560J5	56P 50V	[M]
C644	ECBT1H680J5	68P 50V	[M]
C645	ECBT1H680J5	68P 50V	[M]
C646	ECBT1H180JC5	18P 50V	[M]
C647	ECBT1H150JC5	15P 50V	[M]
C650	ECBT1H331KB5	330P 50V	[M]
C660	ECEALHKA3R3B	3.3 50V	[M]
C661	ECBT1E104ZF5	0.1 25V	[M]
C667	ECBT1E223ZF5	0.022 25V	[M]
C696	ECBT1H101KB5	100P 50V	[M]
C697	ECBT1H101KB5	100P 50V	[M]
C698	ECBT1H101KB5	100P 50V	[M]
C699	ECBT1E104ZF5	0.1 25V	[M]
C701	ECEA0JKA330I	33 6.3V	[M]
C702	ECUV1C104KBV	0.1 16V	[M]
C703	ECEA0JKA101I	100 6.3V	[M]
C704	ECUV1C104KBV	0.1 16V	[M]
C706	ECUV1H272KBV	2700P 50V	[M]
C707	ECUV1E273KBV	0.027 25V	[M]
C710	ECUV1H121KCV	120P 50V	[M]
C711	ECUV1C104ZV	0.1 16V	[M]
C712	ECUV1C104ZV	0.1 16V	[M]
C713	ECUV1C104KBV	0.1 16V	[M]
C714	ECEA0JKA101I	100 6.3V	[M]
C715	ECUV1H272KBV	2700P 50V	[M]
C716	ECUV1H821KBN	820P 50V	[M]
C717	ECUV1C104ZV	0.1 16V	[M]
C718	ECUV1A224KBV	0.22 10V	[M]
C721	ECUV1H100DCV	10P 50V	[M]
C722	ECUV1H100DCV	10P 50V	[M]
C723	ECEALAKA221I	220 10V	[M]
C724	ECUZ1E104MBN	0.1 25V	[M]
C725	ECUV1H102KBV	1000P 50V	[M]
C726	ECUV1H102KBV	1000P 50V	[M]
C727	ECEALHAK010XI	1 50V	[M]
C728	ECEALHAK010XI	1 50V	[M]
C730	ECUV1C104ZV	0.1 16V	[M]
C731	ECEA0JKA221I	220 6.3V	[M]
C732	ECEA0JKA221I	220 6.3V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C733	ECUV1C104KBV	0.1 16V	[M]
C734	ECEA1AKA221I	220 10V	[M]
C735	ECUVNE104ZFN	0.1 25V	[M]
C736	ECUV1C104ZFV	0.1 16V	[M]
C737	ECUV1C104ZFV	0.1 16V	[M]
C738	ECUV1H103KBN	0.01 50V	[M]
C739	ECUV1H152KBV	1500P 50V	[M]
C742	ECUV1E273KBV	0.027 25V	[M]
C743	ECUV1C104ZFV	0.1 16V	[M]
C744	ECUV1H562KBV	5600P 50V	[M]
C745	ECUV1H102KBV	1000P 50V	[M]
C747	ECUV1H181KCV	180P 50V	[M]
C749	ECUV1H222KBV	2200P 50V	[M]
C750	ECUZ1E104MBN	0.1 25V	[M]
C751	ECUV1C104KBV	0.1 16V	[M]
C752	ECUV1H102KBV	1000P 50V	[M]
C753	ECUV1H471KBV	470P 50V	[M]
C754	ECUV1H471KBV	470P 50V	[M]
C900	ECBT1H101KB5	100P 50V	[M]
C919	ECBT1H101KB5	100P 50V	[M]
C920	ECBT1E223ZF5	0.022 25V	[M]
C921	ECBT1E223ZF5	0.022 25V	[M]
C940	ECBT1H102KB5	1000P 50V	[M]
C941	ECBT1E103ZF5	0.01 25V	[M]
C1001	ECUV1H103ZFV	0.01 50V	[M]
C1002	ECEA1HKN2R2B	2.2 50V	[M]
C1003	ECQP1152JZT	1500P 100V	[M]
C1006	ECEA1HKA010B	1 50V	[M]
C1007	ECQP2A472JZT	4700P 100V	[M]
C1008	ECEA1HKA010B	1 50V	[M]
C1009	ECEA1AKA470B	47 10V	[M]
C1010	ECEA1EM101B	100 25V	[M]
C1011	ECQV1H473JL3	0.047 50V	[M]
C1012	ECUV1H102KBV	1000P 50V	[M]
C1013	ECUV1H102KBV	1000P 50V	[M]
C1014	ECUV1H102KBV	1000P 50V	[M]
C1015	ECUV1H102KBV	1000P 50V	[M]
C1016	ECUV1H222KBV	2200P 50V	[M]
C1017	ECUV1H222KBV	2200P 50V	[M]
C1018	ECUV1H103KBV	0.01 50V	[M]
C1019	ECUV1H102KBV	1000P 50V	[M]
C1020	ECUV1H471KBV	470P 50V	[M]
C1021	ECUV1H471KBV	470P 50V	[M]
C1022	ECUV1H102KBV	1000P 50V	[M]
C1023	ECUV1H102KBV	1000P 50V	[M]
C1026	ECEA0JKA470B	47 6.3V	[M]
C1027	ECUV1H102KBV	1000P 50V	[M]
C1030	ECEA1AKA101B	100 10V	[M]
C1031	ECEA1AKA101B	100 10V	[M]
C1032	ECFR1C183KR	0.018 16V	[M]
C1033	ECFR1C183KR	0.018 16V	[M]
C1034	ECEA1HKA3R3B	3.3 50V	[M]
C1035	ECEA1HKA3R3B	3.3 50V	[M]
C1036	ECUV1C333KBV	0.033 16V	[M]
C1037	ECEA1HKA3R3B	3.3 50V	[M]
C1038	ECUV1H221KBV	220P 50V	[M]
C1039	ECUV1H221KBV	220P 50V	[M]
C1040	ECEA1CKA100B	10 16V	[M]
C1041	ECEA1CKA100B	10 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C1042	ECEA1CKA220B	22 16V	[M]
C1043	ECEA1HKA4R7B	4.7 50V	[M]
C1044	ECEA1AKA330B	33 10V	[M]
C1045	ECEA1AKA220B	22 10V	[M]
C1046	ECEA1AKA221Q	220 10V	[M]
C1047	ECEA1HKA010B	1 50V	[M]
C1048	ECEA1HKA010B	1 50V	[M]
C1049	ECUV1H102KBV	1000P 50V	[M]
C1050	ECUV1H102KBV	1000P 50V	[M]
C1051	ECEA1HKA010B	1 50V	[M]
C1052	ECEA1HKA010B	1 50V	[M]
C1053	ECEA1CM221B	220 16V	[M]
C1054	ECEA1HKA3R3B	3.3 50V	[M]
C1055	ECEA1HKA0R1B	0.1 50V	[M]
C1056	ECUV1H103KBV	0.01 50V	[M]
C1057	ECEA1HKA3R3B	3.3 50V	[M]
C1058	ECUV1H470JCV	47P 50V	[M]
C1059	ECUV1H101KBV	100P 50V	[M]
C1060	ECUV1H472KBV	4700P 50V	[M]
C1061	ECUV1H101KBV	100P 50V	[M]
C1062	ECUV1C104ZFV	0.1 16V	[M]
C1063	ECUV1C104ZFV	0.1 16V	[M]
C1064	ECEA1HKA3R3B	3.3 50V	[M]
C1065	ECUV1H103ZFV	0.01 50V	[M]
		CHIP JUMPER	
RJ701	ERJ6GEY0R00V	0 1/10W	[M]
RJ702	ERJ6GEY0R00V	0 1/10W	[M]
RJ704	ERJ6GEY0R00V	0 1/10W	[M]
RJ710	ERJ6GEY0R00V	0 1/10W	[M]
RJ712	ERJ6GEY0R00V	0 1/10W	[M]
RJ713	ERJ6GEY0R00V	0 1/10W	[M]
RJ714	ERJ6GEY0R00V	0 1/10W	[M]
RJ721	ERJ3GEY0R00V	0 1/16W	[M]
RJ722	ERJ3GEY0R00V	0 1/16W	[M]
RJ723	ERJ3GEY0R00V	0 1/16W	[M]
RJ724	ERJ3GEY0R00V	0 1/16W	[M]
RJ725	ERJ3GEY0R00V	0 1/16W	[M]
RJ726	ERJ3GEY0R00V	0 1/16W	[M]
RJ727	ERJ3GEY0R00V	0 1/16W	[M]
RJ728	ERJ3GEY0R00V	0 1/16W	[M]
RJ729	ERJ3GEY0R00V	0 1/16W	[M]
RJ730	ERJ3GEY0R00V	0 1/16W	[M]
RJ731	ERJ3GEY0R00V	0 1/16W	[M]
RJ732	ERJ3GEY0R00V	0 1/16W	[M]
RJ733	ERJ3GEY0R00V	0 1/16W	[M]
RJ734	ERJ3GEY0R00V	0 1/16W	[M]
RJ735	ERJ3GEY0R00V	0 1/16W	[M]
RJ736	ERJ3GEY0R00V	0 1/16W	[M]
RJ737	ERJ3GEY0R00V	0 1/16W	[M]
RJ738	ERJ3GEY0R00V	0 1/16W	[M]
RJ739	ERJ3GEY0R00V	0 1/16W	[M]
RJ740	ERJ3GEY0R00V	0 1/16W	[M]
RJ741	ERJ3GEY0R00V	0 1/16W	[M]
RJ742	ERJ3GEY0R00V	0 1/16W	[M]
		TEST JUMPER	
TJ701	EYF8CU	TEST JUMPER	[M]

20.5. Packing Materials & Accessories Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPGX0755	PACKING CASE	[M]P
P1	RPGX0756	PACKING CASE	[M]PC
P2	RPNX0122	POLYFOAM	[M]
P3	RPFX0007	MIRAMAT BAG	[M]
		ACCESSORIES	

Ref. No.	Part No.	Part Name & Description	Remarks
A1	N2QAGB000002	REMOTE CONTROLLER	[M]
A1-1	RKK-HTR0280	R/C BATTERY COVER	[M]
A2	RJA0065-A	AC CORD	[M] △
A3	RQT5621-P	O/I BOOK (En)	[M]
A3	RQT5622-M	O/I BOOK (Sp)	[M]P
A3	RQT5661-C	O/I BOOK (Cf)	[M]PC
A4	RSA0006-J	FM ANTENNA	[M]
A5	RSA0029	AM LOOP ANTENNA	[M]

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20.6. Packaging

P2 (RPNX0122) [*P2 (A)
*P2 (B)

