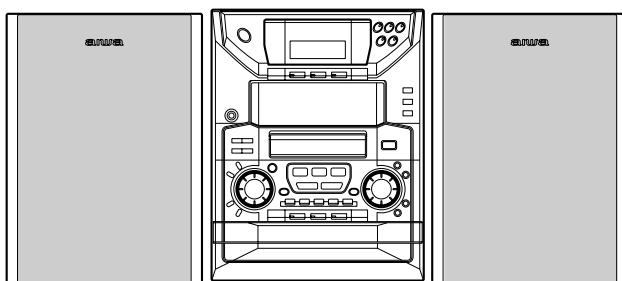




XR-HG7MD

EZ,K



SERVICE MANUAL

MD/CD
STEREO SYSTEM

BASIC TAPE MECHANISM : AZM-1 A1
BASIC CD MECHANISM : AZG-1 SB3RNMD
BASIC MD MECHANISM : AZG-TD

SYSTEM	MD/CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
XR-HG7MD	CX-NHG7MD	SX-WNH81	RC-ZAS18

This Service Manual is the "Revision Publishing" and replaces "Simple Manual" (S/M Code No. 09-008-349-4T1).

If requiring information about the CD mechanism, see Service Manual of AZG-1 (S/M Code No. 09-001-335-3NE).

If requiring information about the MD mechanism, see Service Manual of AZG-T (S/M Code No. 09-007-348-1N2).

aiwa
S/M Code No. 09-008-349-4R1

REVISION
DATA

SPECIFICATIONS

Main unit CX-NHG7MD		Compact disc player section	
FM tuner section		Laser	Semiconductor laser ($\lambda = 780$ nm)
Tuning range	87.5 MHz to 108 MHz	D-A converter	1 bit dual
Usable sensitivity (IHF)	16.8 dBf	Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Antenna terminal	75 ohms (unbalanced)	Harmonic distortion	0.05 % (1 kHz, 0 dB)
AM (MW) tuner section		Wow and flutter	Unmeasurable
Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)	MD recorder section	
Usable sensitivity	350 μ V/m	Scanning method	Non-contact optical scanner (Semiconductor laser application)
Antenna	Loop antenna	Recording system	Magnetic polarity modulation overwrite system
LW tuner section		Rotation speed	Approx. 400 - 900 rpm (CLV)
Tuning range	144 kHz to 290 kHz	Sampling frequency	44.1 kHz
Usable sensitivity	1400 μ V/m	No. of channels	Stereo: 2 channels Monaural: 1 channel
Antenna	Loop antenna	A-D, D-A converter	1-bit
Amplifier section		Frequency	20 to 20000 Hz + 0.5 - -1.5 dB
Mid-high frequency amplifier		Wow & Flutter	Unmeasurable
Power output	Rated: 20 W + 20 W (8 ohms, T.H.D. 1 %, 1 kHz/DIN 45500) Reference : 25 W + 25 W (8 ohms, T.H.D. 10 %, 1 kHz/DIN 45324) DIN MUSIC POWER: 40 W + 40 W	Cassette deck section	
Total harmonic distortion	0.1 % (10 W, 1 kHz, 8 ohms, DIN AUDIO)	Track format	4 tracks, 2 channels stereo
Low frequency amplifier		Frequency response	50 Hz - 15000 Hz
Power output	Rated: 60 W + 60 W (6 ohms, T.H.D. 1 %, 130 Hz/DIN 45500) Reference : 75 W + 75 W (6 ohms, T.H.D. 10 %, 130 Hz/DIN 45324) DIN MUSIC POWER: 130 W + 130 W	Recording system	AC bias
Total harmonic distortion	0.1 % (30W, 130 Hz, 6 ohms, DIN AUDIO)	Heads	Recording/playback head x 1, erase head x 1
Inputs	VIDEO/AUX: 316 mV DIGITAL IN (OPTICAL)	General	
Outputs	SPEAKERS LOW FREQ: accept speakers of 6 ohms or more SPEAKERS HIGH FREQ: accept speakers of 8 ohms or more SURROUND SPEAKERS: accept speakers of 8 ohms to 16 ohms PHONES (stereo jack): accepts headphones of 32 ohms or more CD DIGITAL OUT (OPTICAL) jack	Power requirements	230 V AC, 50 Hz
		Power consumption	160 W
		Power consumption in standby mode	If the power-economizing mode is ECO OFF: 22 W If the power-economizing mode is ECO ON or ECO AUTO: 0.9 W
		Dimensions of main unit (W x H x D)	260 x 324 x 394 mm
		Weight of main unit	11 kg
		Speaker system SX-WNH81	
		Speaker system	3 way, Built-in subwoofer (magnetic shielded type)
		Speaker units	Subwoofer: 200 mm cone type Full range: 120 mm cone type Super tweeter: 20 mm ceramic type
		Impedance	6 ohms/8 ohms
		Sensitivity	87 dB/W/m
		Dimensions (W x H x D)	240 x 324 x 285 mm
		Weight	5.7 kg

- Design and specifications are subject to change without notice.
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- Under license from BBE Sound, Inc.

ACCESSORIES LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

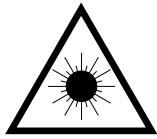
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-DB6-915-010		IB,K(E)I<K>
1	8A-DB6-916-010		IB,EZ(9L)I<EZ>
2	8Z-NB5-703-010		RC UNIT,RC-ZAS18
3	87-006-225-010		ANT,LOOP ANT NC2
4	87-A90-118-010		ANT,WIRE FM(Z)
5	87-099-811-010		PLUG,ADPTR CONV(K)<K>

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käytööhjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylit-täälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

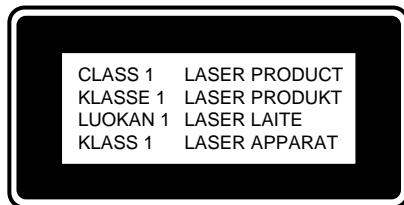
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the rear exterior.

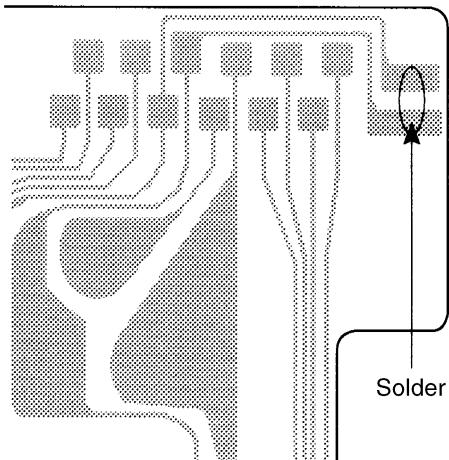


Precaution to replace Optical block (KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

- 1) After the connection, remove solder shown in the right figure.

PICK-UP Assy P.C.B



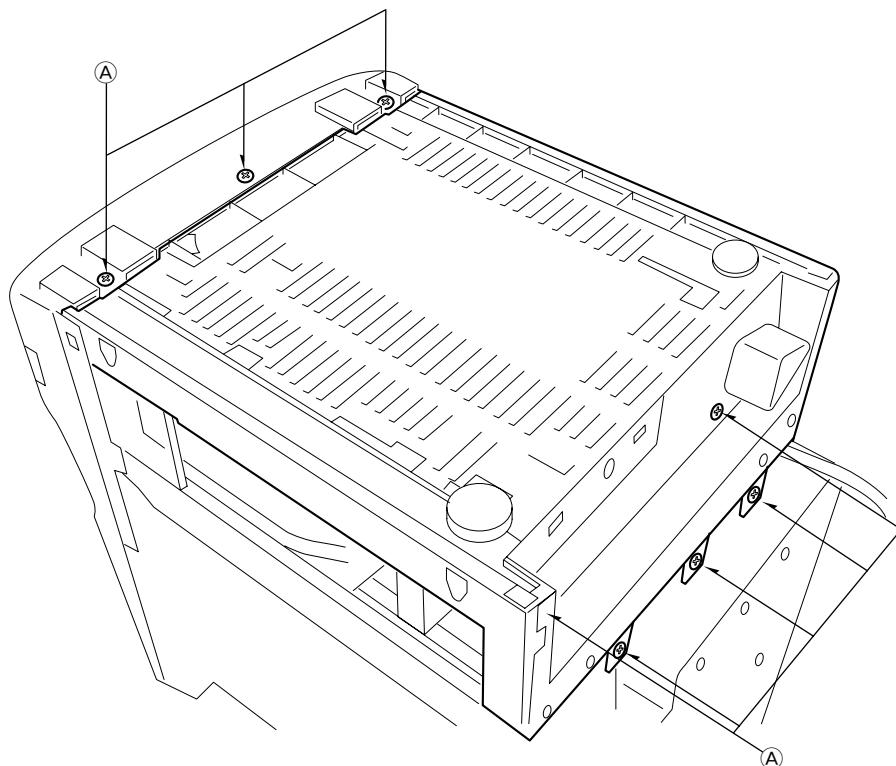
NOTE ON BEFORE STARTING REPAIR

- CD service position

Remove the CABI, STEEL.

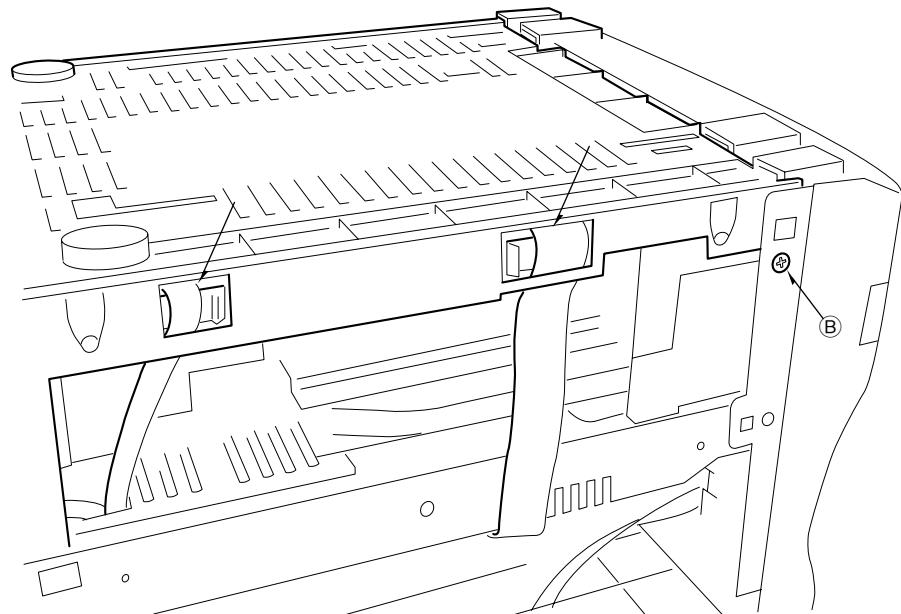
Remove the five screws (BVT2+3-10) Ⓐ.

Turn over the unit and remove the CABI, BOTTOM.

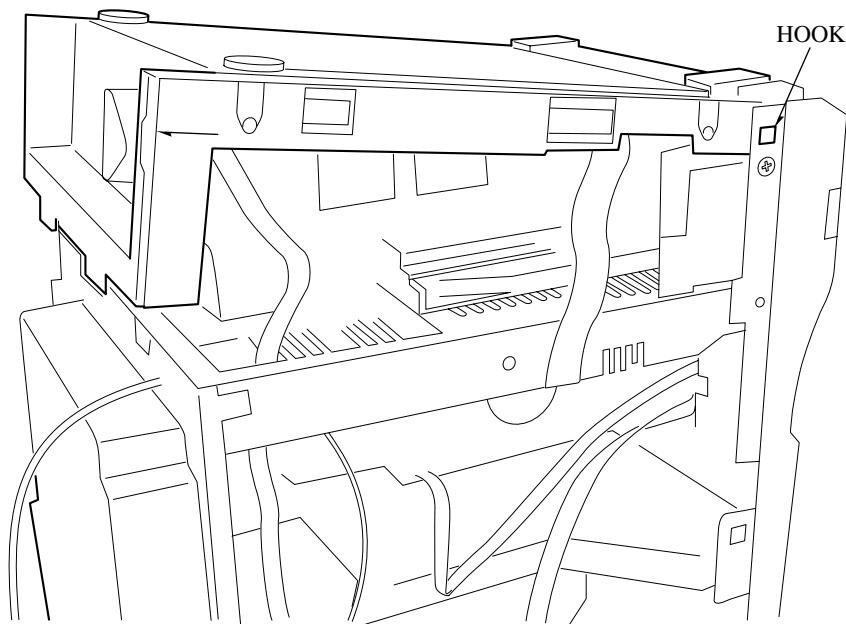


Remove the two FFCs (13P and 6P) the CD block from the hook of the CABI, BOTTOM.

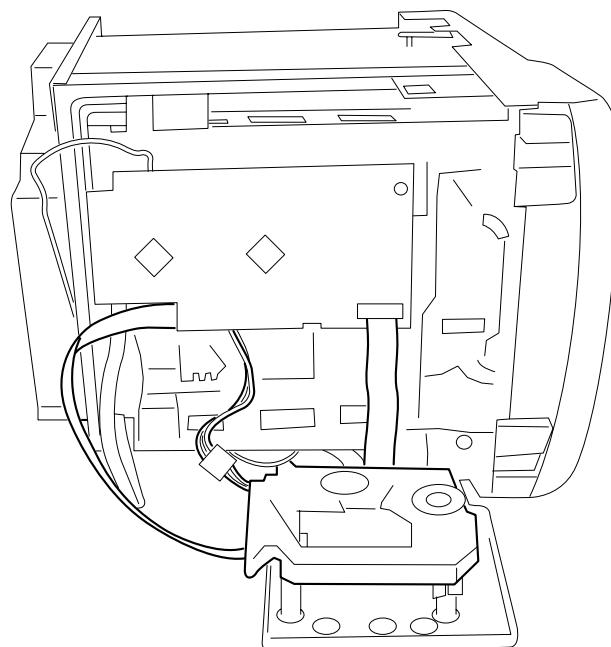
Loosen the two screws (QT2+3-12) Ⓑ of the AZG-1 CABI, FR. (The screws are used at the both sides.)



Remove the hooks in the direction of the arrow. (The hooks are used at the both sides.) Pull the CABI, BOTTOM up to the diagonally top right and remove it.



Lay down the unit and remove the 3ZG-2 mechanism.
Extend the 3ZG-2 mechanism using the respective extension jigs.



Service position

TEST MODE <CD>

1. How to Activate CD Test Mode

While pressing the CD function button, insert the AC plug to the outlet. The message "CD TEST" appears on the display.

2. How to Cancel CD Test Mode

Exit the CD test mode by any of the following procedures.

- Press the function button (except the CD function button.)
- Press the power button.
- Disconnect the AC plug.

3. CD Test Mode functions

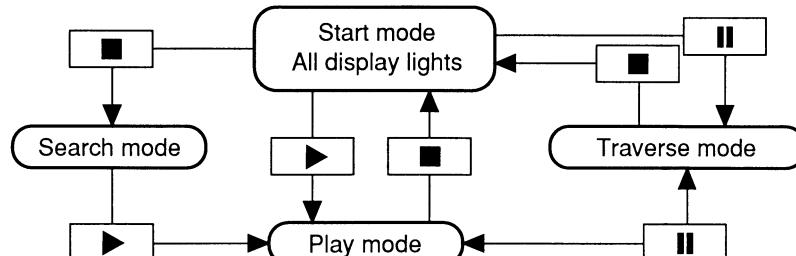
No	Mode	Operation	FL display	Operation	Checking item
1	Start mode		All lit		<ul style="list-style-type: none"> • FL item • Microprocessor
2	Search mode	■	TOC READING	<ul style="list-style-type: none"> • LD lights • Continuous focus search*1 	<ul style="list-style-type: none"> • APC circuit • Laser current • Focus search waveform • Focus error waveform (FOK and FZC are not monitored in the search mode)
3	Play mode	◀▶	Normal time display (spectrum analyzer)	<ul style="list-style-type: none"> • Normal playback • If TOC cannot be read, focus search of "2" is continued 	<ul style="list-style-type: none"> • Focus servo • Tracking servo • Sled servo • Spindle servo • FOK • RF waveform
4	Traverse mode		Normal time display	<ul style="list-style-type: none"> • Turning off/on repeats each time tracking servo OFF/ON is pressed 	<ul style="list-style-type: none"> • Tracking servo • Traverse waveform
5	Sled mode	◀◀ ▶▶	CD TEST	<ul style="list-style-type: none"> • Pickup moves to the outermost track *2 • Pickup moves to the innermost track (normal operation during playback) 	<ul style="list-style-type: none"> • Sled circuit • Mechanism

* Note 1: The driver IC (IC501) heats up and the protection circuit starts working when the focus search is continued for 10 minutes or longer. There can be a case that operations cannot be performed correctly.
In such a case, turn off the main power. After cooling down, restart the unit.

* Note 2: Be careful not to damage the gear because the sled motor rotates while the FF or RWD button is being pressed even if the pick-up is located in the innermost track or the outermost track.

4. Overview of Operation

The each mode can be operated one after another using each button in the order that is shown by the arrow mark in the illustration from the "Start" mode.



MD TEST MODE

1. Starting up the MD Test Mode

While pressing the MD function button, insert the AC plug into the outlet.

- Notes: 1) Mechanical abnormalities are ignored while the test mode is starting up.
If any abnormality occurs, disconnect the plug immediately.
2) During test mode operation, playback and recording are not possible.

2. Checking the MD Test Mode

Indication

About five seconds after the test mode starts, characters are displayed as shown below on the display and the test mode becomes usable.



3. Canceling the MD Test Mode

- 1) Keep pressing the MD EJECT button to eject the disk.
- 2) Disconnect the AC plug.
* If the MD test mode is canceled by procedures other than the above, the unit sometimes runs incorrectly when the power is turned on again. If this happens, disconnect the AC plug.

4. Switching to the Servo Standby Mode

After starting up the test mode, press the STOP button to switch to the servo standby mode. (Indication: ALL SVoFF)
Change from this mode to other modes.

When the STOP button is pressed in each mode, the display returns to "ALL SVoFF".



4-1. Audio System Output Check

The signal of 1 kHz, -17 dBV (140 mV) can be checked using the MD board AOUTL, AOUTR in the test mode.

5. Checking the Sled Feed Operation

- 1) Press the CD → 1MD REC button to load the mechanism.
- 2) Press the F.SKIP button in the "ALL SVoFF" state to move the pickup to the outer circumference.
Then "T.SLED fwd" is displayed.
- 3) Press the B.SKIP button in the "ALL SVoFF" state to move the pickup to the inner circumference.
Then "T.SLED rvs" is displayed. Turn on the INSIDE LIMIT switch to turn on the graphic equalizer "CLASSIC".
- 4) After checking, press the B.SKIP button to move the pickup to the innermost circumference (CLASSIC lights) and press the MD EJECT button to unload the mechanism.

6. Checking the Laser Power

- 1) Every time the EDIT button is pressed in the "ALL SVoFF" state, the laser power is switched. The display is switched as shown below.



- 2) After checking, press the STOP button to return the display to "ALL SVoFF".

7. Checking the Loading Mechanism and OWH

To check the operations of the loading mechanism and OWH, follow the procedure given below.

Method 1: Insert the MO disk into the desired slot of magazines 1 to 3 and press the MD DISC DIRECT PLAY button of the slot.

After loading, confirm that the OWH moves up.

Method 2: Press CD → 1MD button in the “ALL SVoFF” state. The mechanism is loaded regardless of whether a disk is inserted.

To load the disk, insert the disk into the slot at the position where the elevator stops.

Every time the CD → 1MD REC button or MD EJECT button is pressed during loading, the OWH moves up or down.

CD → 1MD The OWH moves down.

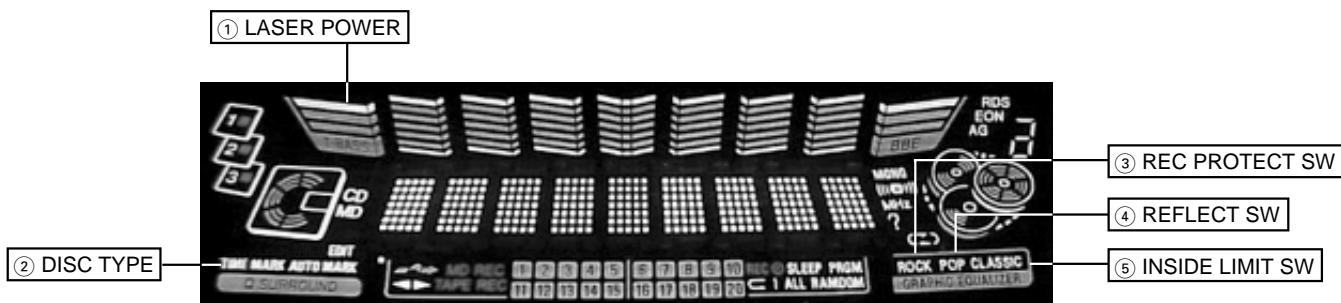
MD EJECT button..... The OWH moves up and is unloaded.

Note: Even if the MD DISC DIRECT PLAY button is pressed when a disk is not inserted into the slot, loading is not performed.

8. Display Indication

The state of the circuits, selected disk and switches can be checked on the display.

	Function	Display	Pict indication	During pict on	During pict off
①	Laser power	LA READ-1/2-WRITE	T-BASS	Displayed using the three-step level meter	
②	Disk type	SEL GRV	AUTO MARK	MO DISC (for recording and playback)	
		SEL PIT	TIME MARK	PIT DISC (for playback)	
③	REC PROTECT SW		ROCK	REC is possible	REC protect
④	REFLECT SW		POP	PIT DISC	MO DISC
⑤	INSIDE LIMIT SW		CLASSIC	SW ON (innermost circumference)	SW OFF



9. Checking the Servo Operation

9-1. Checking the Focus Search and Spindle Kick 1 (checking the S-curve)

- 1) When the RANDOM/REPEAT button of the remote control is pressed in the “ALL SVoFF” state, the focus search is performed. Then “FOCUS CHK” is displayed. These operations are repeated regardless of whether a disk is installed. Therefore, the S-curve can be checked with the disk inserted.
- 2) After checking, press the STOP button to return the display to “ALL SVoFF”.

9-2. Checking the Focus Search and Spindle Kick 2

- 1) When the PLAY button is pressed in the “ALL SVoFF” state without inserting a disk, the search and spindle kick are performed at the same time. Then “FOCUS SCH” is displayed.
- 2) After checking, press the STOP button to return the display to “ALL SVoFF”.

9-3. Checking the Focus Servo

- 1) Insert a disk.
- 2) Press the MODE button and set the servo mode according to the inserted disk as shown below.
 - MO disk Indication “SEL GRV” appears and “TIME MARK” lights.
 - PIT disk Indication “SEL PIT” appears and “AUTO MARK” lights.
- 3) Press the PLAY button.
If the focus servo is normal, “FOCUS SRCH” appears and “FOCUS ON!” appears.
- 4) After checking, press the STOP button to return the display to “ALL SVoFF”.

9-4. Checking the All Servo ON

- 1) When the ENTER button is pressed in the “FOCUS ON!” state, the tracking sled servo is turned on and all servos run. If the servos are all normal, “ALL SV ON” is displayed.
- 2) After checking, press the STOP button to return the display to “ALL SVoFF”.

ELECTRICAL ADJUSTMENT

All the adjustments and checks of the MD block are performed in the test mode.
When “No Adjust” appears on the display, follow sections 1 through 3 to adjust.

1. Temperature Compensation Adjustment

- * Normally, do not perform the temperature compensation adjustment.
If the adjustment value is extensively different, perform the adjustment as given below in a suitable environment for measuring the correct temperature near the unit.
- Test point: Check the test point on the display.
- Tool: Thermometer
- 1) After the MD test mode starts up, press the STOP button to display “ALL SVoFF”.
- 2) Press the DISPLAY button to display “TEMP = \$**”.
- 3) Press the PAUSE button to display “T + **C :+ 00”.
- 4) Put the thermometer near the MD mechanism to measure the room temperature.
- 5) Check the values of the thermometer and press the B.SKIP button and the F.SKIP button until the value is the same as ** of the display. Press the ENTER button to store the value.
- 6) After adjustment, press the STOP button to return the display to “ALL SVoFF”.
- * When “No Adjust” is displayed, perform 1) to 3) and press the ENTER button without changing the adjustment value using the B/F.SKIP button.

2. Laser Power Adjustment

- Test point: Check the display/Pickup laser output
- Tool: Laser power meter (meters that can measure up to 10 mW)

2-1. Playback Laser Power Adjustment

- 1) Press the EDIT button in the “ALL SVoFF” state to change the display to “LA READ”.
- 2) Press the PAUSE button once to display “LASER = \$**”.
- 3) Adjust “LASER=\$11” using the B.SKIP and F.SKIP buttons and press the ENTER button.
- 4) Measure the pickup laser output using the laser power meter and check that it is about 0.68mW.
- 5) After adjustment, press the STOP button to change the display to “ALL SVoFF”.

2-2. Record Laser Power Adjustment

- 1) Press the EDIT button three times in the “ALL SVoFF” state to change the display to “LA WRITE”.
- 2) Press the PAUSE button once to display “LASER = \$**”.
- 3) Adjust “LASER=\$9F” using the B.SKIP and F.SKIP buttons and press the ENTER button.
- 4) Measure the pickup laser output using the laser power meter and check that it is about 6.8mW.
- 5) After adjustment, press the STOP button to return the display to “ALL SVoFF”.

Note: If the laser power exceeds 7.0 mW, the pickup may be damaged.

3. Automatic Sequence Adjustment (EFB/IVR/FOCUS AGC/TRACKING AGC adjustment)

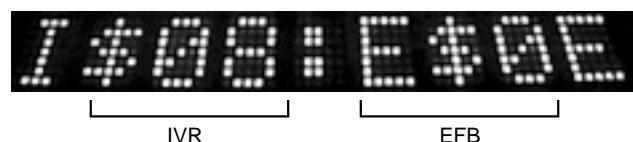
- Test point: Check the test point on the display.
- Test disk: MDW-74, TGYS-1 or equivalent

3-1. Adjusting the MO Disk

- 1) Load the MDW-74.
- 2) Press the MODE button to display “SEL GRV”.
- 3) Press the MD function button to display “AUTO ADJ”. After adjustment, “DONE” is displayed.
(If the adjustment failed, “FAILED” appears.)
- 4) Then, press the STOP button to return the display to “ALL SVoFF”.

3-2. IVR, EFB, Focus/Tracking/Sled Gain Check of MO Disk

- 1) Move the pickup to the center of the disk using the B.SKIP button and F.SKIP button.
- 2) Press the PLAY button to display “FOCUS ON!”.
- 3) Press the ENTER button to display “ALL SV ON”.
- 4) Press the STOP button and press the DISPLAY button twice. Confirm that the values of “I\$**; E\$◇◇” are within the range shown below. (hexadecimal)
I\$“**” 03 to 0A
E\$ “◇◇” 09 to 15



- 5) Press the DISPLAY once again.

Confirm that the values of “f**t##s△△” are within the range shown below. (hexadecimal)

f “**” 1A to 40

t “#” 0C to 30

s “△△” 0C to 30

f2F t.2E s2E

FOCUS GAIN TRACKING GAIN SLED GAIN

- 6) After adjustment, press the STOP button to return the display to “ALL SVoFF”.

3-3. Adjusting the PIT Disk

- 1) Insert the TGYS-1.
- 2) Press the MODE button to display “SEL PIT”.
- 3) Press the MD function button to display “AUTO ADJ”. After adjustment, “DONE” is displayed. (If the adjustment failed, “FAILED” appears.)
- 4) Then, press the STOP button to return the display to “ALL SVoFF”.

3-4. IVR, EFB, Focus/Tracking/Sled Gain Check of PIT Disk

- 1) Move the pickup to the center of the disk using the B.SKIP button and F.SKIP button.
 - 2) Press the PLAY button to display “FOCUS ON!”.
 - 3) Press the ENTER button to display “ALL SV ON”.
 - 4) Press the STOP button and press the DISPLAY button twice. Confirm that the values of “I\$**: E\$◇◇” are within the range shown below. (hexadecimal)
- | | |
|-------------------------|-------------------------|
| I\$ “**” 14 to 19 | E\$ “◇◇” 09 to 15 |
|-------------------------|-------------------------|

I#16:E\$6D

IVR EFB

- 5) Press the DISPLAY button once again. Confirm that the values of “f**t##s△△” are within the range shown below. (hexadecimal)

f “**” 1A to 45

t “#” 0C to 3F

s “△△” 0C to 3F

f2F t.2E s2E

FOCUS GAIN TRACKING GAIN SLED GAIN

- 6) After adjustment, press the STOP button to return the display to “ALL SVoFF”.

4. Playback Error Rate Check (PIT DISC)

- Test point: Check the test point on the display.

- Test disk: TSYS-1 or equivalent

- 1) Load the TGYS-1.
- 2) Move the pickup to the center of the disk using the B.SKIP button and F.SKIP button.
- 3) Press the MODE (MD) button to display “SEL PIT”.
- 4) Press the PLAY button to display “FOCUS ON!”.
- 5) Press the ENTER button to display “ALL SV ON”.
- 6) Press the DISPLAY button once to confirm that counting of the address indication is stable.
- 7) Press the DISPLAY button once again to display the playback error rate.
Confirm that the numbers of “****,****” (underlined portion) is “0030” or lower.
- 8) After checking, press the STOP button to return the display to “ALL SVoFF”.

5. Record/Playback Error Rate Check (MO DISC)

- Test point: Check the test point on the display.
 - Test disk: MDW-74
- 1) Load the MDW-74.
 - 2) Move the pickup to the center of the disk using the B.SKIP button and F.SKIP button.
 - 3) Press the CD function button. Recording starts automatically in cluster 600.
 - 4) After recording for about 15 seconds, press the STOP button.
 - 5) Press the AUX/D-IN function button move the pickup to around cluster 600 and enter the “ALL SV ON” state (the display is in the state of the address indication). Press the DISPLAY button in or after cluster 600. Then confirm that the values of “*****.*****” (underlined portion) is “0030” or lower.
 - 6) After checking, press the STOP button to return the display to “ALL SVoFF”.

6. How to Initialize the EEPROM

Do the following procedure to set the adjustment value of the EEPROM to the default (standard value).

- 1) Press the BBE button.
- 2) Turn on the power again and confirm that “No Adjust” is displayed.

* Even when “No Adjust” is displayed, MDs can be operated.

Note: When initializing the EEPROM, be sure to do 1 to 3 of the MD electrical adjustment.

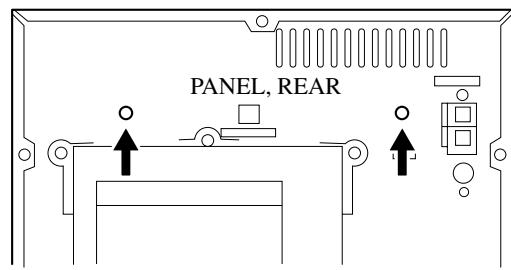


DISASSEMBLY INSTRUCTIONS

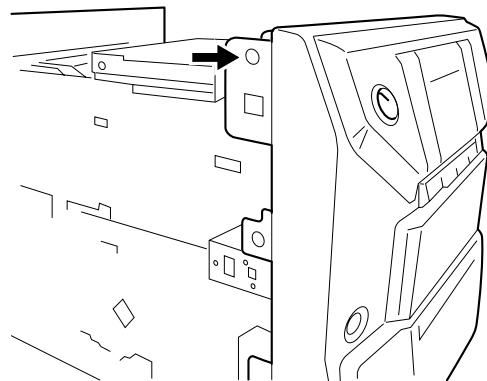
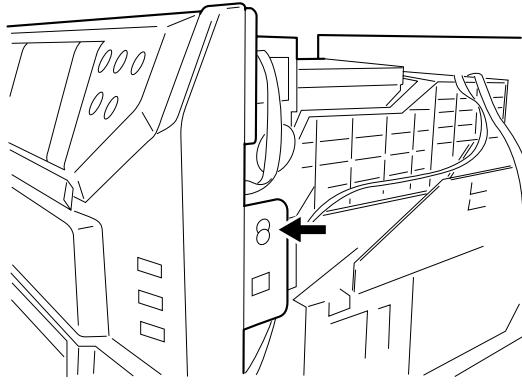
DISASSEMBLY INSTRUCTION

Removing the MD Block

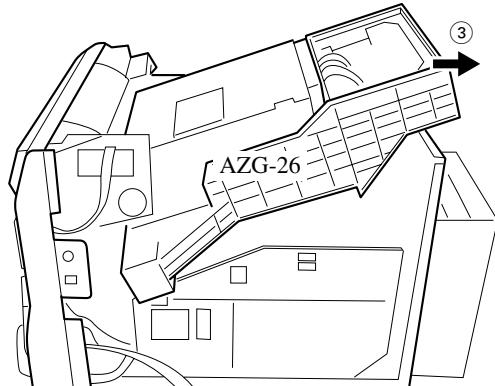
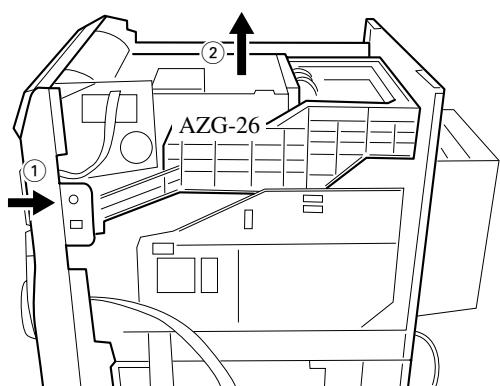
- 1) Remove the PANEL, REAR in advance.
- 2) Remove the two screws.



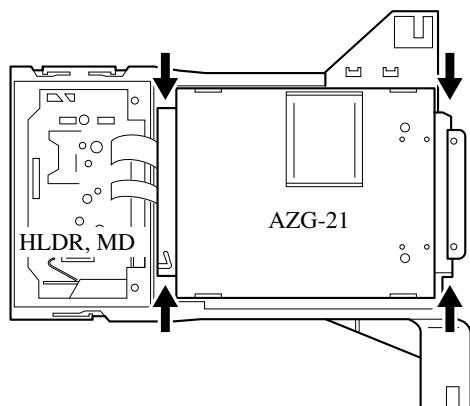
- 3) Remove the two screws.



- 4) Release the hook ① and remove the AZG-26 in the order of ②→③.



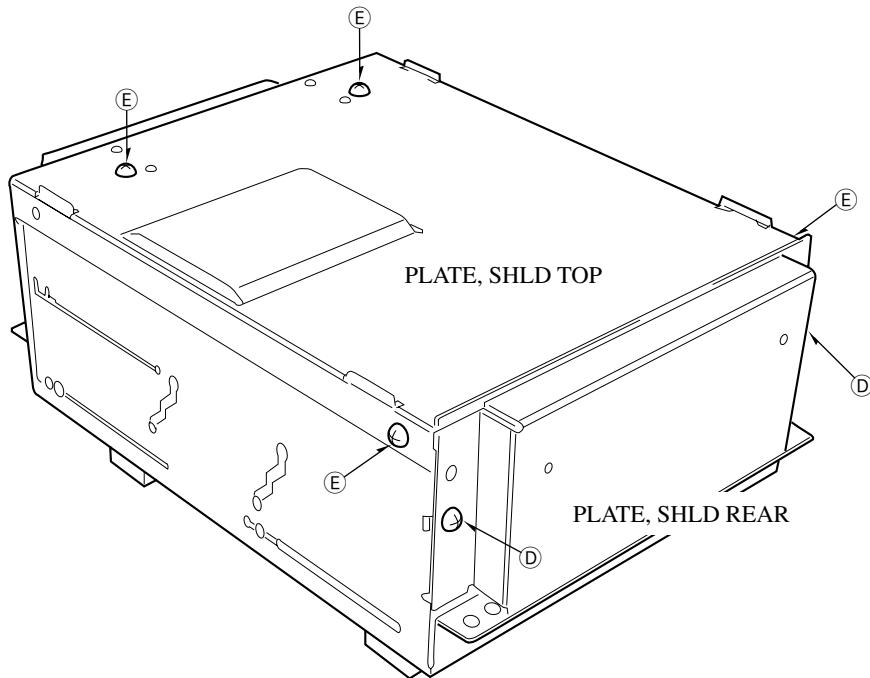
- 5) Remove the four screws and remove the AZG-21 from the HLDR, MD.



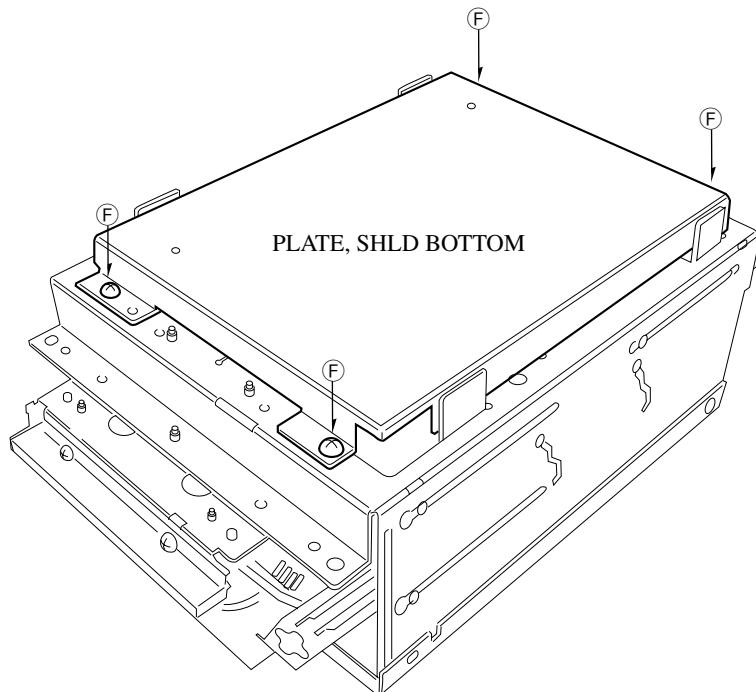
Disassembling the MD block

Remove the AZG-21.

- 1) Remove the two screws (UT2+2.6-6 GLD) ④ from the PLATE, SHLD REAR. Remove the PLATE, SHLD REAR.
- 2) Remove the four screws (U+2+2.6-6) ⑤ from the PLATE, SHLD TOP. Remove the PLATE, SHLD TOP.



- 3) Remove the four screws (UT2+2.6-6 GLD) ⑥ and remove the PLATE, SHLD BOTTOM.

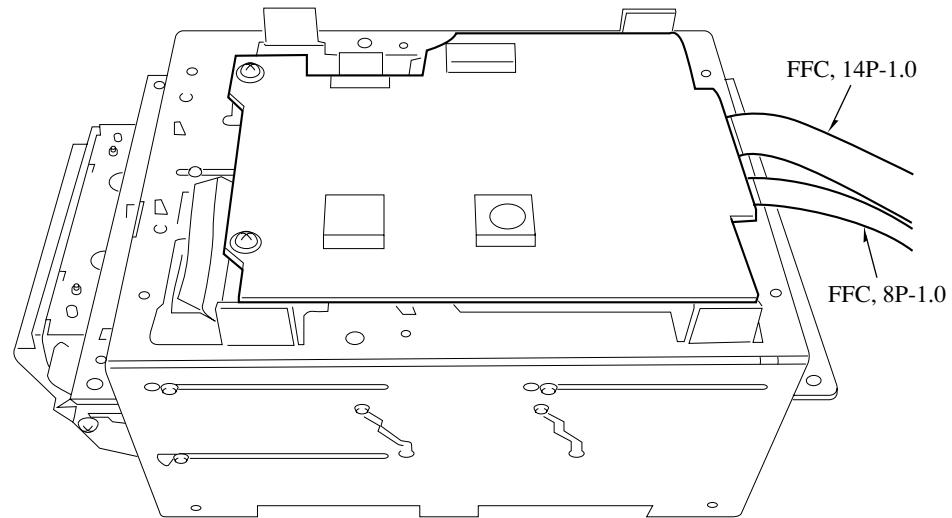


SERVICE POSITION

MD service position

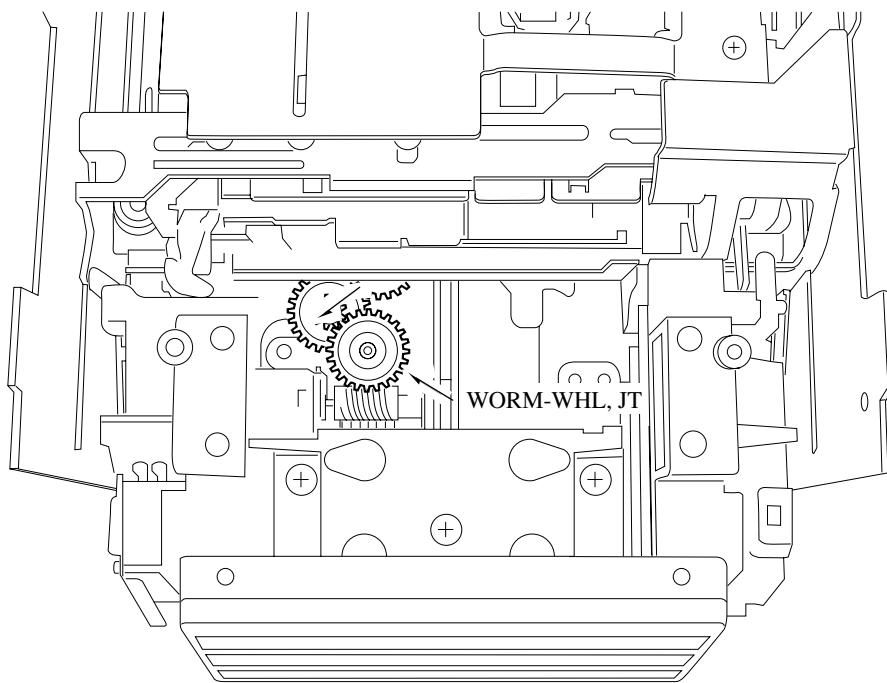
Place the MD block in the service position as follows. Connect the MD block with the interface board using the extension FFC as shown to place the MD block into the service position.

FFC, 8P-1.0 SV-J00-043-010
FFC, 14P-1.0 SV-J00-044-010

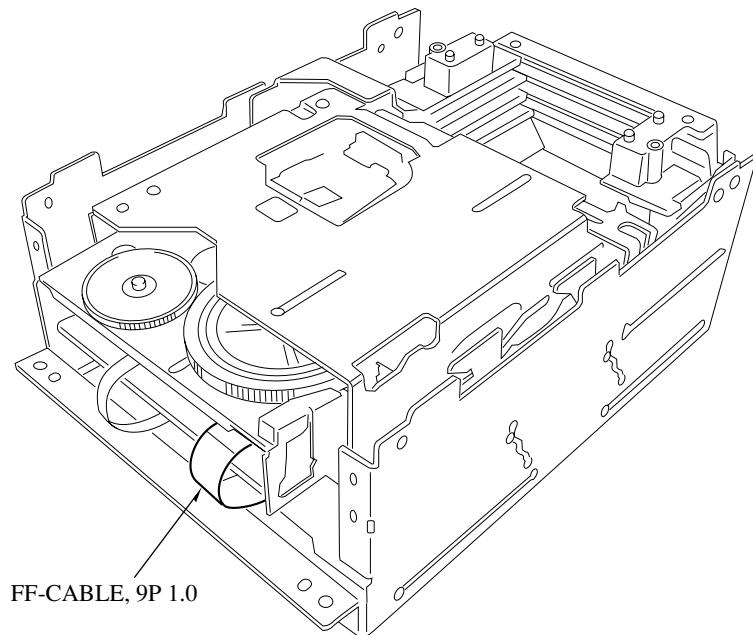


Disassembling the elevator

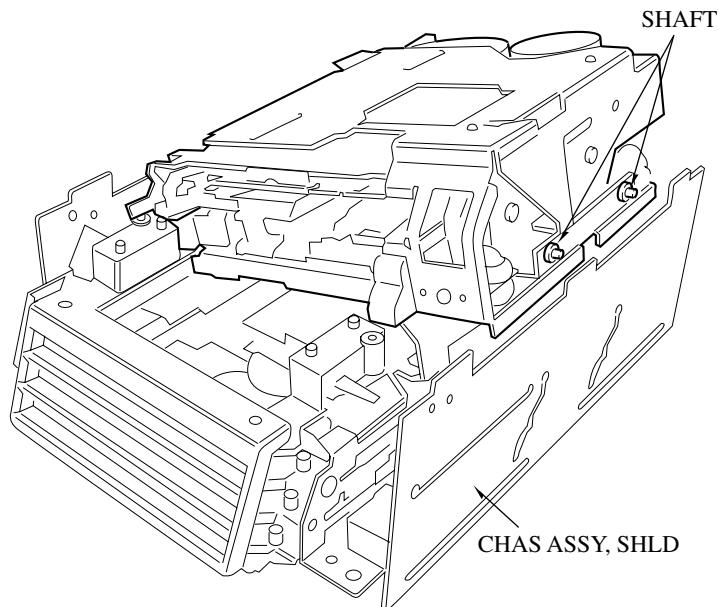
- 1) Rotate the WORM-WHL, JT (the gear shown by the arrow below) counterclockwise to move the elevator to the top position.
Note: If the PANEL, SHLD BOTTOM is not removed, the elevator cannot be removed.



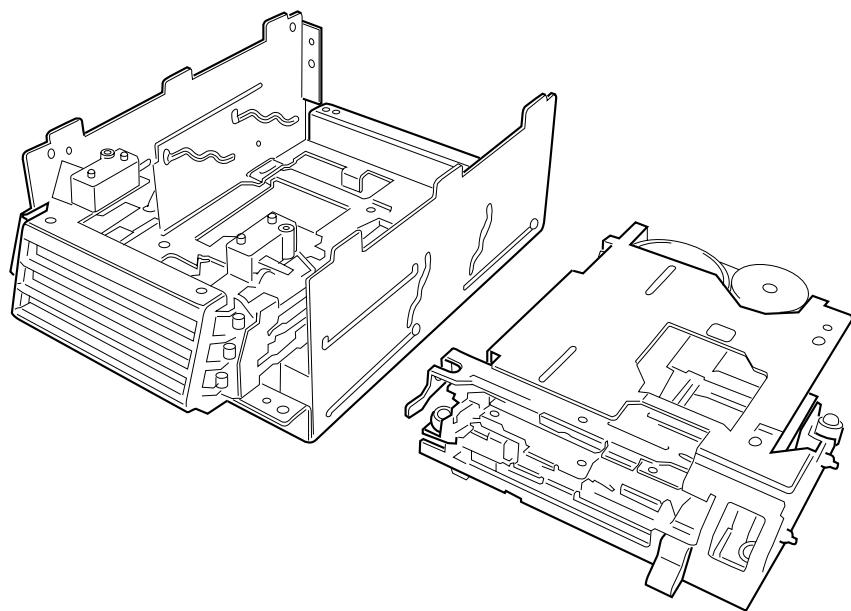
- 2) Remove the FF-CABLE, 9P 1.0 from the LOAD C.B.



- 3) While lifting up the elevator slightly, remove an end of the shaft of the elevator from the guide hole of the CHAS ASSY, SHLD. Remove the other end of the shaft and tilt the elevator as shown below.
While tilting the elevator, short the shorting land.

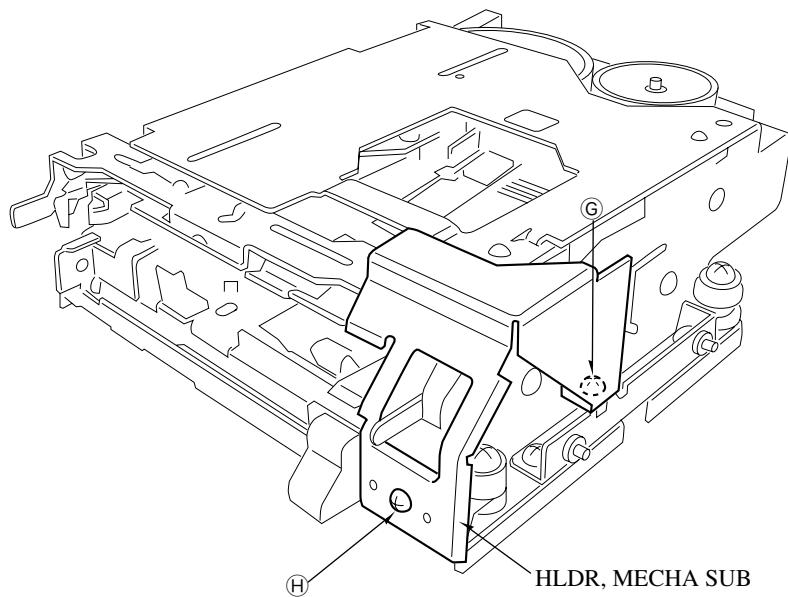


- 4) Remove the PICK UP, FFC and the MECHA C.B, FFC, then remove the elevator block.

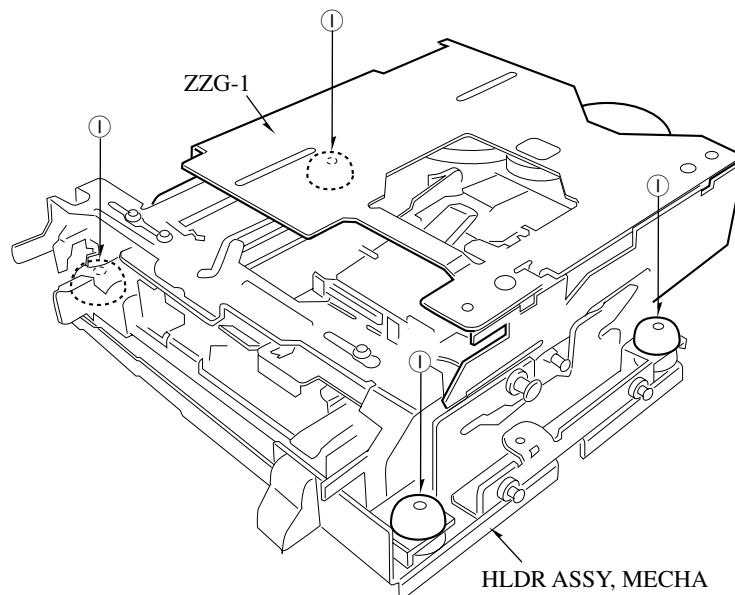


Disassembling the elevator block

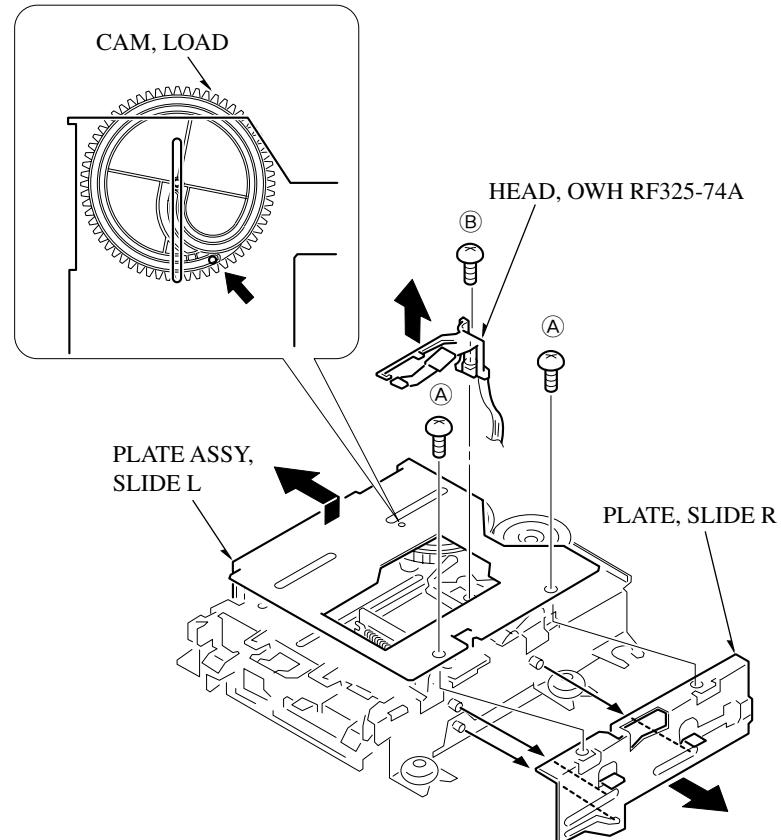
- 1) Remove the screw (UT2+2.6-6 GLD) ⑥ and the screw (VTT+2-4) ⑧. Then remove the HLDR, MECHA SUB.



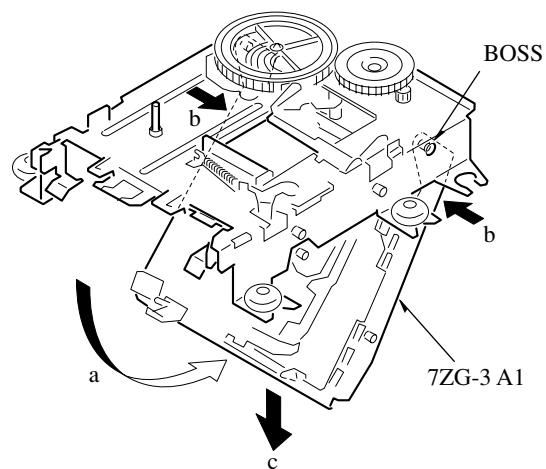
- 2) Remove the four screws (S-SCREW, MD T) ① and remove the ZZG-1 from the HLDR ASSY, MECHA.



- 3) Remove the two screws (VTT+2-4) Ⓐ.
 Remove the PLATE ASSY, SLIDE L and the PLATE, SLIDE R in the direction of the arrow.
 Remove the screw (VW+1.7-5 W/O MFZN2C) Ⓑ.
 Remove the HEAD, OWH RF325-74A.
- Re-assembling:** Align the axis of the PLATE ASSY, SLIDE L with the arrow mark of the CAM, LOAD.



- 4) Move the 7ZG-3 A1 in the direction of (a).
 While pressing the BOSS in the direction of (b), remove the 7ZG-3 A1 in the direction of (c).

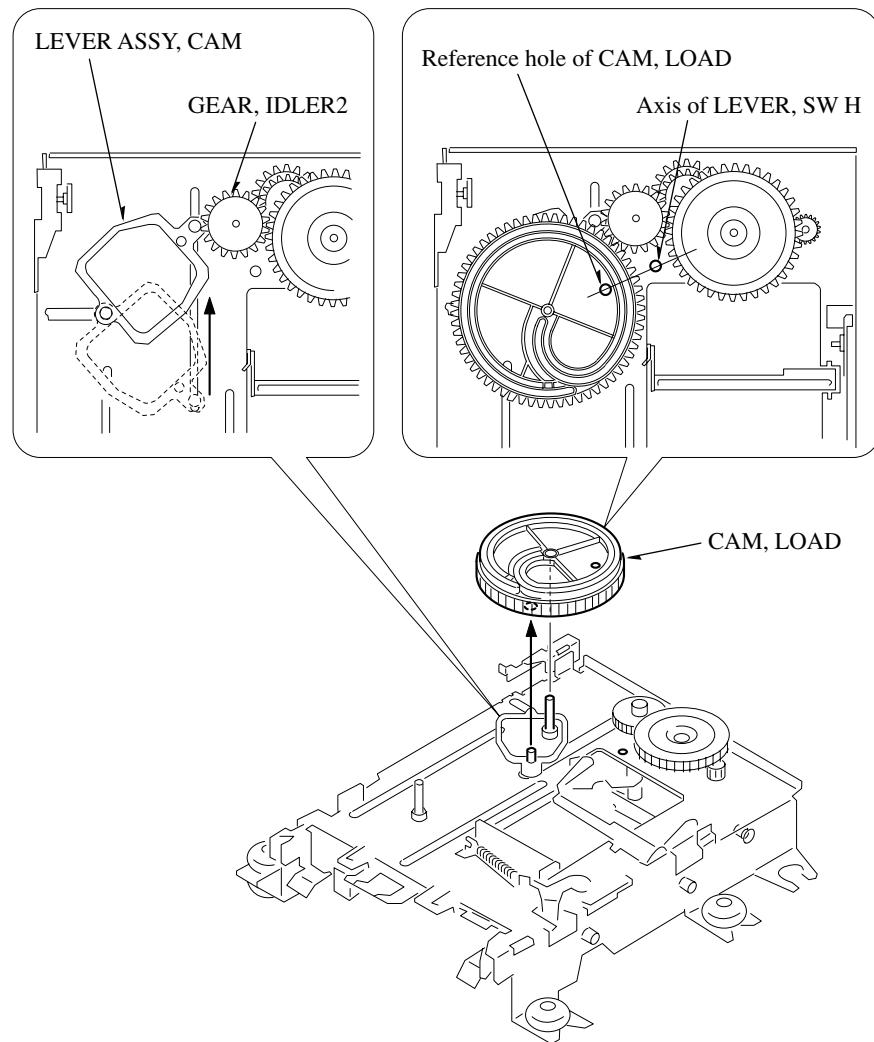


5) Remove the CAM, LOAD in the direction of the arrow.

Re-assembling: Move the LEVER ASSY, CAM in the direction of the arrow mark as much as it can be moved.

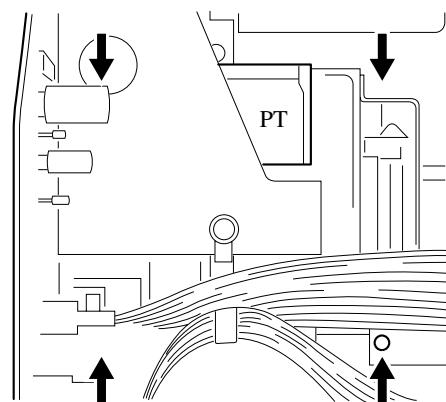
Move the reference hole of the CAM, LOAD closer to the axis of the LEVER, SW H as close as possible.

Align the CAM, LOAD with the gear of the GEAR, IDLER2.

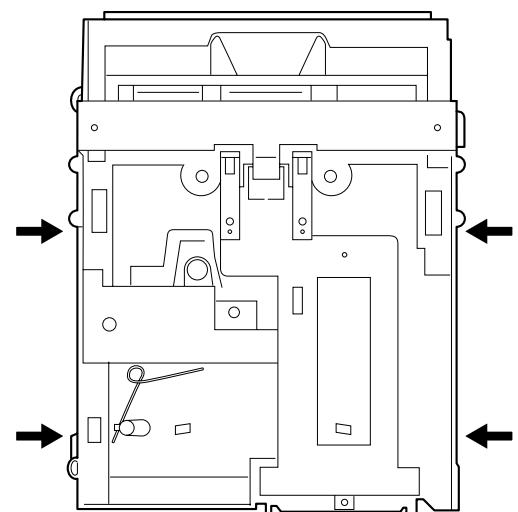


Removing the DECK Block

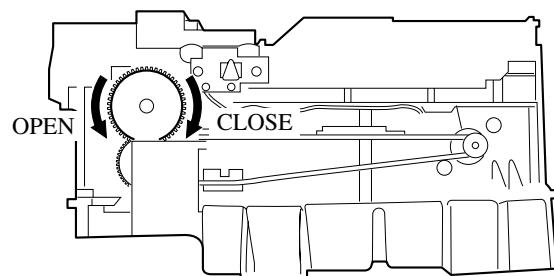
- 1) Remove the MD block and PANEL, DECK in advance.
- 2) Remove the four screws and remove the PT.



- 3) Remove the four screws and remove the AZM-1.



* To open or close the tray, rotate the PULLEY.



ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				C0026	87-010-406-080	CAP,E 22-50 M 11L SME	
87-020-454-010	IC,DN6851			C0027	87-010-406-080	CAP,E 22-50 M 11L SME	
87-A21-417-010	IC,STK490-310			C0028	87-010-406-080	CAP,E 22-50 M 11L SME	
8A-DB6-611-010	C-IC,UPD784975-XXX			C0031	87-010-263-080	CAP,E 100-10 M 11L SME	
87-A20-914-010	IC,SPS-442-1-F			C0032	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
87-A21-396-010	IC,STK490-040			C0034	87-010-384-080	CAP,E 100-25 M 11L SME	
87-A20-783-040	C-IC,BA7762AFS			C0035	87-010-382-080	CAP,E 22-25 M 11L SME	
87-A21-021-040	C-IC,BU2099FV			C0036	87-010-381-080	CAP,E 330-16 M SME	
87-A21-452-030	C-IC,BD3876KS2			C0038	87-010-394-080	CAP,E 220-35 M SME	
87-A21-577-040	C-IC,M61506FP			C0039	87-010-394-080	CAP,E 220-35 M SME	
87-A21-103-040	C-IC,MM1454XFBE			C0040	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
87-A21-560-010	IC,LA1844L-A			C0060	87-010-403-080	CAP,E 3.3-50 M 11L SME	
87-A20-440-040	C-IC,BU1920FS			C0080	87-010-401-080	CAP,E 1-50 M 11L SME	
87-070-127-110	IC,LC72131D			C0081	87-010-374-080	CAP,E 47-10 M 11L SME	
				C0082	87-010-260-080	CAP,E 47-25 M 11L SME	
TRANSISTOR				C0104	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
87-026-245-080	TR,DTC114ES			C0105	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
87-026-609-080	TR,KTA1266GR			C0111	87-010-545-080	CAP,E 0.22-50 M 11L SME	
87-026-610-080	TR,KTC3198GR			C0112	87-010-545-080	CAP,E 0.22-50 M 11L SME	
87-A30-198-080	TR,KTC3199GR			C0113	87-010-545-080	CAP,E 0.22-50 M 11L SME	
87-A30-047-080	TR,CSD655E			C0114	87-010-545-080	CAP,E 0.22-50 M 11L SME	
89-213-702-010	TR,2SB1370E			C0115	87-010-546-080	CAP,E 0.33-50 M 11L SME	
87-A30-202-080	C-TR,RT1P441C			C0116	87-010-546-080	CAP,E 0.33-50 M 11L SME	
87-A30-074-080	C-TR,RT1P 141C			C0121	87-010-546-080	CAP,E 0.33-50 M 11L SME	
87-A30-076-080	C-TR,2SC3052F			C0122	87-010-546-080	CAP,E 0.33-50 M 11L SME	
87-A30-075-080	C-TR,2SA1235F			C0161	87-010-176-080	C-CAP,S 680P-50 J SL	
87-A30-318-080	TR,CSA952K			C0162	87-010-176-080	C-CAP,S 680P-50 J SL	
87-A30-107-070	C-TR,CMBT5401			C0171	87-012-368-080	C-CAP,S 0.1-50 Z F	
87-A30-269-040	C-FET,2SJ461-T1			C0172	87-012-368-080	C-CAP,S 0.1-50 Z F	
87-A30-106-070	C-TR,CMBT5551			C0173	87-012-368-080	C-CAP,S 0.1-50 Z F	
87-A30-087-080	C-FET,2SK2158			C0174	87-012-368-080	C-CAP,S 0.1-50 Z F	
87-A30-071-080	C-TR,RT1N 144C			C0175	87-010-191-080	C-CAP,S 0.015-50 Z F GRM	
87-A30-073-080	C-TR,RT1N 141C			C0176	87-010-191-080	C-CAP,S 0.015-50 Z F GRM	
87-A30-329-080	TR,CD1585BC			C0177	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
87-A30-240-080	TR,CSA1585BC			C0178	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
89-327-143-080	C-TR,2SC27140			C0303	87-012-157-080	C-CAP,S 330P-50 J CH GRM	
87-A30-072-080	C-TR,RT1P 144C			C0304	87-012-157-080	C-CAP,S 330P-50 J CH GRM	
87-A30-086-040	C-TR,CSD1306E			C0307	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
87-A30-484-080	C-TR,KRA102S			C0310	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
89-503-602-080	C-FET,2SK360E			C0311	87-010-198-080	C-CAP,S 0.022-25 K B C2012	
87-A30-234-080	TR,CSC4115BC			C0312	87-010-198-080	C-CAP,S 0.022-25 K B C2012	
DIODE				C0315	87-010-179-080	C-CAP,S 1200P-50 K B GRM	
87-A40-548-090	DIODE,D3SBA20			C0316	87-010-179-080	C-CAP,S 1200P-50 K B GRM	
87-017-654-060	DIODE,GBU6JL6131			C0321	87-016-492-080	C-CAP,S 0.33-16 Z F	
87-A40-269-080	C-DIODE,MC2836			C0322	87-016-492-080	C-CAP,S 0.33-16 Z F	
87-A40-839-090	DIODE,G5SBA60L-6088			C0324	87-010-260-080	CAP,E 47-25 M 11L SME	
87-020-465-080	DIODE,1SS133			C0325	87-010-370-080	CAP,E 330-6.3 M SME	
87-A40-553-080	DIODE,1N4003 LES			C0327	87-010-404-080	CAP,E 4.7-50 M 11L SME	
87-A40-781-080	ZENER,UZ36BSA			C0328	87-010-404-080	CAP,E 4.7-50 M 11L SME	
87-A40-764-080	ZENER,UZ10BSC			C0332	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
87-A40-313-080	C-DIODE,MC2840			C0335	87-010-401-080	CAP,E 1-50 M 11L SME	
87-A40-270-080	C-DIODE,MC2838			C0336	87-010-401-080	CAP,E 1-50 M 11L SME	
87-A40-768-080	ZENER,UZ16BSA			C0337	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
87-A40-234-080	ZENER,MTZJ5.6A			C0339	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
87-A40-468-080	C-DIODE,HSM2836CTR			C0340	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
87-017-978-080	DIODE,1N4003			C0351	87-012-140-080	C-CAP,S 470P-50 J CH	
87-A40-745-080	ZENER,UZ4.7BSA			C0352	87-012-140-080	C-CAP,S 470P-50 J CH	
87-A40-747-080	ZENER,UZ5.1BSB			C0354	87-010-175-080	C-CAP,S 560P-50 J SL	
87-017-149-080	ZENER,HZS6A2L			C0355	87-012-349-080	C-CAP,S 1000P-50 J CH GRM	
MAIN C.B				C0356	87-010-260-080	CAP,E 47-25 M 11L SME	
C0003	87-012-368-080	C-CAP,S 0.1-50 Z F		C0357	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0004	87-012-368-080	C-CAP,S 0.1-50 Z F		C0358	87-010-183-080	C-CAP,S 2700P-50 K B GRM	
C0021	87-016-658-000	CAP,E 4700-35 M SMG		C0359	87-010-183-080	C-CAP,S 2700P-50 K B GRM	
C0022	87-016-658-000	CAP,E 4700-35 M SMG		C0360	87-010-183-080	C-CAP,S 2700P-50 K B GRM	
C0025	87-010-406-080	CAP,E 22-50 M 11L SME		C0370	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
				C0373	87-016-083-080	C-CAP,S 0.15-16 K R	
				C0374	87-016-083-080	C-CAP,S 0.15-16 K R	
				C0378	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
				C0379	87-010-406-080	CAP,E 22-50 M 11L SME	

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C0380	87-010-406-080	CAP,E 22-50 M 11L SME		C0810	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
C0386	87-010-196-080	C-CAP,S 0.1-25 Z F C2012		C0811	87-010-403-080	CAP,E 3.3-50 M 11L SME	
C0388	87-012-156-080	C-CAP,S 220P-50 J CH GRM		C0812	87-010-403-080	CAP,E 3.3-50 M 11L SME	
C0393	87-010-319-080	C-CAP,S 56P-50 J CH		C0814	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0394	87-010-319-080	C-CAP,S 56P-50 J CH		C0815	87-010-403-080	CAP,E 3.3-50 M 11L SME	
C0611	87-010-956-080	C-CAP,S 0.068-25 K B GRM		C0816	87-010-403-080	CAP,E 3.3-50 M 11L SME	
C0612	87-016-369-080	C-CAP,S 0.033-25 K B GRM		C0818	87-010-180-080	C-CAP,S 1500P-50 K B C2012	
C0613	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0821	87-010-405-080	CAP,E 10-50 M 11L SME	
C0614	87-016-669-080	C-CAP,S 0.1-25 K B		C0823	87-012-349-080	C-CAP,S 1000P-50 J CH GRM	
C0616	87-010-184-080	C-CAP,S 3300P-50 K B C2012		C0824	87-010-404-080	CAP,E 4.7-50 M 11L SME	
C0618	87-010-401-080	CAP,E 1-50 M 11L SME		C0825	87-010-596-080	C-CAP,S 0.047-16 K R C2012	
C0619	87-010-263-080	CAP,E 100-10 M 11L SME		C0831	87-010-406-080	CAP,E 22-50 M 11L SME	
C0620	87-016-669-080	C-CAP,S 0.1-25 K B		C0842	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0621	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0843	87-010-190-080	C-CAP,S 0.01-50 Z F C2012	
C0623	87-010-401-080	CAP,E 1-50 M 11L SME		C0844	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0624	87-010-401-080	CAP,E 1-50 M 11L SME		C0845	87-010-190-080	C-CAP,S 0.01-50 Z F C2012	
C0626	87-A11-590-080	C-CAP,S 0.047-16 K B		C0846	87-010-190-080	C-CAP,S 0.01-50 Z F C2012	
C0627	87-010-400-080	CAP,E 0.47-50 M 11L SME		C0847	87-010-190-080	C-CAP,S 0.01-50 Z F C2012	
C0628	87-010-400-080	CAP,E 0.47-50 M 11L SME		C0848	87-010-190-080	C-CAP,S 0.01-50 Z F C2012	
C0629	87-A11-590-080	C-CAP,S 0.047-16 K B		C0849	87-010-190-080	C-CAP,S 0.01-50 Z F C2012	
C0630	87-010-383-080	CAP,E 33-25 M 11L SME		C0850	87-010-260-080	CAP,E 47-25 M 11L SME	
C0631	87-010-185-080	C-CAP,S 3900P-50 K B		C0851	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0632	87-010-185-080	C-CAP,S 3900P-50 K B		C0852	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0633	87-010-178-080	C-CAP,S 1000P-50 K B C2012		C0853	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0634	87-010-196-080	C-CAP,S 0.1-25 Z F C2012		C0858	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
C0635	87-A10-307-080	CAP,M 0.1-50 J		C0859	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
C0636	87-A10-307-080	CAP,M 0.1-50 J		C0860	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0637	87-A10-307-080	CAP,M 0.1-50 J		C0869	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0638	87-A10-307-080	CAP,M 0.1-50 J		C0870	87-010-178-080	C-CAP,S 1000P-50 K B C2012	
C0639	87-010-405-080	CAP,E 10-50 M 11L SME		C0871	87-012-156-080	C-CAP,S 220P-50 J CH GRM	
C0641	87-010-401-080	CAP,E 1-50 M 11L SME		C0872	87-012-156-080	C-CAP,S 220P-50 J CH GRM	
C0642	87-010-401-080	CAP,E 1-50 M 11L SME		C0873	87-012-140-080	C-CAP,S 470P-50 J CH	
C0643	87-010-196-080	C-CAP,S 0.1-25 Z F C2012		C0874	87-010-405-080	CAP,E 10-50 M 11L SME	
C0644	87-010-401-080	CAP,E 1-50 M 11L SME		C0875	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
C0645	87-010-322-080	C-CAP,S 100P-50 J CH GRM		C0876	87-010-405-080	CAP,E 10-50 M 11L SME	
C0671	87-010-322-080	C-CAP,S 100P-50 J CH GRM		C0877	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0672	87-010-322-080	C-CAP,S 100P-50 J CH GRM		C0878	87-010-316-080	C-CAP,S 33P-50 J CH GRM	
C0673	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0879	87-010-314-080	C-CAP,S 22P-50 J CH GRM	
C0679	87-010-196-080	C-CAP,S 0.1-25 Z F C2012		C0940	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0680	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0942	87-010-149-080	C-CAP,S 5P-50 C CH GRM	
C0682	87-010-196-080	C-CAP,S 0.1-25 Z F C2012		C0947	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0771	87-010-263-080	CAP,E 100-10 M 11L SME		C0948	87-012-140-080	C-CAP,S 470P-50 J CH	
C0772	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0952	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0779	87-010-188-080	C-CAP,S 6800P-50 K B C2012		C0957	87-010-311-080	C-CAP,S 12P-50 J CH GRM	
C0780	87-010-188-080	C-CAP,S 6800P-50 K B C2012		C0958	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0782	87-010-197-080	C-CAP,S 0.01-25 Z F C2012		C0959	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
C0783	87-010-197-080	C-CAP,S 0.01-25 Z F C2012		C0960	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
C0784	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0962	87-010-401-080	CAP,E 1-50 M 11L SME	
C0785	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0963	87-015-785-080	C-CAP,S 0.1-25 Z F C3216	
C0786	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0971	87-010-381-080	CAP,E 330-16 M SME	
C0788	87-010-149-080	C-CAP,S 5P-50 C CH GRM		C0972	87-010-404-080	CAP,E 4.7-50 M 11L SME	
C0789	87-A10-592-080	C-CAP,S 0.015-50 J B		C0973	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0790	87-A10-592-080	C-CAP,S 0.015-50 J B		C0974	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0791	87-010-196-080	C-CAP,S 0.1-25 Z F C2012		C0979	87-010-322-080	C-CAP,S 100P-50 J CH GRM	
C0792	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0981	87-010-260-080	CAP,E 47-25 M 11L SME	
C0793	87-010-404-080	CAP,E 4.7-50 M 11L SME		C0982	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
C0794	87-012-155-080	C-CAP,S 180P-50 J CH GRM		C0983	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0795	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0984	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0796	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0985	87-010-322-080	C-CAP,S 100P-50 J CH GRM	
C0797	87-010-405-080	CAP,E 10-50 M 11L SME		C0987	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0798	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0989	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0799	87-010-407-080	CAP,E 33-50 M 11L SME		C0991	87-010-312-080	C-CAP,S 15P-50 J CH GRM	
C0800	87-012-369-080	C-CAP,S 0.047-50 Z F		C0992	87-010-312-080	C-CAP,S 15P-50 J CH GRM	
C0801	87-010-403-080	CAP,E 3.3-50 M 11L SME		C0993	87-010-178-080	C-CAP,S 1000P-50 K B C2012	
C0802	87-012-369-080	C-CAP,S 0.047-50 Z F		C0995	87-010-178-080	C-CAP,S 1000P-50 K B C2012	
C0803	87-010-198-080	C-CAP,S 0.022-25 K B C2012		C0997	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
C0804	87-010-263-080	CAP,E 100-10 M 11L SME		C0998	87-010-260-080	CAP,E 47-25 M 11L SME	
C0807	87-010-400-080	CAP,E 0.47-50 M 11L SME		C0999	87-A11-155-080	CAP,TC U 0.01-16 Z F	
C0808	87-010-401-080	CAP,E 1-50 M 11L SME		CF0831	87-008-423-010	FLTR,CF SFE10.7MS3G-A	
C0809	87-010-401-080	CAP,E 1-50 M 11L SME		CF0832	82-785-747-010	CF,MS2 GHY,R	

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
CN0001	87-A60-996-010	CONN,13P V BLK TAC-L13X-A3		C0184	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
CN0091	87-A60-109-010	CONN,2P V S2M-2W		C0185	87-010-182-080	C-CAP,S 2200P-50 K B C2012	
CN0101	87-A60-996-010	CONN,13P V BLK TAC-L13X-A3		C0186	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
CN0351	87-099-832-010	CONN,8P V S2M-8W		C0187	87-010-182-080	C-CAP,S 2200P-50 K B C2012	
CN0601	87-099-719-010	CONN,30P H BLK TYK-B(X)		C0191	87-012-368-080	C-CAP,S 0.1-50 Z F	
CN0603	87-099-016-010	CONN,14P V BLK 6216		C0281	87-010-060-040	CAP,E 100-16 M 7L SRA	
CN0607	87-099-566-010	CONN,7P TUC-P7P-B1		C0401	87-010-560-040	CAP,E 10-50 M 5L MA	
CNA0001	8A-NF8-653-010	CONN ASSY,9P TID-A(480)		C0402	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
FB0301	87-008-372-080	FLTR,EMI BL01 RN1		C0410	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
FFC0603	88-914-201-110	FF-CABLE, 14P 1.25 200MM		C0451	87-010-412-040	CAP,E 10-25 M 5L SRE	
FFE0831	A8-6ZA-19C-170	6ZA-1 YFEENC		C0501	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
J0102	87-A60-238-010	TERMINAL,SP 4P (MSC)		C0702	87-010-320-080	C-CAP,S 68P-50 J CH GRM	
J0103	87-A60-483-010	JACK,DIA6.3 BLK ST W/S KM		C0703	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
J0604	87-A60-881-010	JACK,PIN 2P MSP 242V05 PBSN		C0704	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
J0832	87-A60-403-010	TERMINAL,ANT PAL 2P HSP-312V05		C0705	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
JW0659	87-008-372-080	FLTR,EMI BL01 RN1		C0706	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
L0101	87-A50-610-010	COIL,1UH K(MDEC)		C0707	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
L0102	87-A50-610-010	COIL,1UH K(MDEC)		CN0101	87-A60-350-010	CONN,30P DF8A-30P	
L0301	87-A50-049-010	COIL,TRAP 85K(COI)		CN0102	87-099-031-010	CONN,14P H BLK 6216	
L0302	87-A50-049-010	COIL,TRAP 85K(COI)		CN0252	87-A60-062-010	CONN,05P V 9604S-05C	
L0351	87-007-342-010	COIL,OSC 85KHZ BIAS		CN0351	87-099-031-010	CONN,14P H BLK 6216	
L0801	87-A50-608-010	COIL,FM DET-N(TOK)		CN0451	87-099-211-010	CONN,4P V BLK 6216	
L0802	87-A91-551-010	FLTR,PCFJZH-450 L(TOK)		CN0502	87-A60-060-010	CONN,07P V 9604S-07C	
L0811	87-005-847-080	COIL,2.2UH K CECS		CNA0251	88-803-092-290	CONN,ASSY 9P	
L0832	87-005-847-080	COIL,2.2UH K CECS		FFC0102	88-914-451-110	FF-CABLE,14P 1.25 450MM	
L0861	87-005-847-080	COIL,2.2UH K CECS		FFC0252	88-905-251-110	FF-CABLE, 5P 1.25	
L0941	87-A50-020-010	COIL,ANT LW (COI) 252KHZ		FFC0351	88-914-101-110	FF-CABLE, 14P 1.25 100MM	
L0942	87-A50-019-010	COIL,OSC LW (COI) 856KHZ		FFC0451	88-904-121-110	FF-CABLE,4P 1.25 120MM	
L0951	8A-NF8-668-010	COIL,AM PACK 2(TOK)		FFC0502	88-907-371-110	FF-CABLE,7P 1.25 370MM	
R0161	87-A00-441-050	RES,270-1/2W J RP		FL0101	8A-DB6-610-010	FL,BJ775GNK	
R0162	87-A00-441-050	RES,270-1/2W J RP		L0151	87-A50-652-010	COIL,OSC 15.6MHZ	
R0163	87-A00-441-050	RES,270-1/2W J RP		LED0419	87-017-980-080	LED,SEL6210S RED	
R0164	87-A00-441-050	RES,270-1/2W J RP		LED0421	87-A40-380-180	LED,SEL6510C-TP5 GRN	
R0790	87-010-197-080	C-CAP,S 0.01-25 K B C2012		LED0422	87-017-980-080	LED,SEL6210S RED	
R0991	87-010-322-080	C-CAP,S 100P-50 J CH GRM		LED0423	87-A40-380-180	LED,SEL6510C-TP5 GRN	
R0993	87-010-322-080	C-CAP,S 100P-50 J CH GRM		LED0424	87-017-980-080	LED,SEL6210S RED	
R0995	87-010-322-080	C-CAP,S 100P-50 J CH GRM		LED0425	87-A40-380-180	LED,SEL6510C-TP5 GRN	
SFR0351	87-024-436-080	SFR,47K H RH063MC		LED0426	87-017-980-080	LED,SEL6210S RED	
SFR0352	87-024-436-080	SFR,47K H RH063MC		LED0427	87-A40-380-180	LED,SEL6510C-TP5 GRN	
TC0942	87-011-253-080	TRIMMER,CER 30P 4.0X4.5 ECRLA		LED0428	87-017-980-080	LED,SEL6210S RED	
WH0001	87-A90-510-010	HLDL,WIRE 2.5-9P		LED0429	87-A40-380-180	LED,SEL6510C-TP5 GRN	
X0861	87-A70-091-010	VIB,XTAL 4.332MHZ CSA-309		LED0430	87-017-980-080	LED,SEL6210S RED	
X0991	87-A70-061-010	VIB,XTAL 4.500MHZ CSA-309		LED0441	87-A91-818-080	LED,SEL6510C-TP8 GRN	
FRONT C.B				LED0442	87-A91-818-080	LED,SEL6510C-TP8 GRN	
C0038	87-012-140-080	C-CAP,S 470P-50 J CH		LED0443	87-A91-818-080	LED,SEL6510C-TP8 GRN	
C0039	87-012-140-080	C-CAP,S 470P-50 J CH		▲PR0251	87-A90-247-080	PROTECTOR,0.315A 60V 491	
C0040	87-010-178-080	C-CAP,S 1000P-50 K B C2012		▲PR0451	87-A90-247-080	PROTECTOR,0.315A 60V 491	
C0050	87-012-140-080	C-CAP,S 470P-50 J CH		R0402	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
C0141	87-010-182-080	C-CAP,S 2200P-50 K B C2012		S0301	87-A90-095-080	SW,TACT EVQ11G04M	
C0142	87-010-213-080	C-CAP,S 0.015-25 K B GRM		S0302	87-A90-095-080	SW,TACT EVQ11G04M	
C0153	87-016-669-080	C-CAP,S 0.1-25 K B		S0303	87-A90-095-080	SW,TACT EVQ11G04M	
C0154	87-A10-189-040	CAP,E 220-10 M 5L		S0304	87-A90-095-080	SW,TACT EVQ11G04M	
C0155	87-010-313-080	C-CAP,S 18P-50 J CH GRM		S0305	87-A90-095-080	SW,TACT EVQ11G04M	
C0156	87-010-322-080	C-CAP,S 100P-50 J CH GRM		S0306	87-A90-095-080	SW,TACT EVQ11G04M	
C0158	87-012-155-080	C-CAP,S 180P-50 J CH GRM		S0307	87-A90-095-080	SW,TACT EVQ11G04M	
C0160	87-010-196-080	C-CAP,S 0.1-25 Z F C2012		S0308	87-A90-095-080	SW,TACT EVQ11G04M	
C0162	87-010-196-080	C-CAP,S 0.1-25 Z F C2012		S0309	87-A90-095-080	SW,TACT EVQ11G04M	
C0163	87-A10-189-040	CAP,E 220-10 M 5L		S0310	87-A90-095-080	SW,TACT EVQ11G04M	
C0164	87-010-196-080	C-CAP,S 0.1-25 Z F C2012		S0321	87-A90-095-080	SW,TACT EVQ11G04M	
C0165	87-012-157-080	C-CAP,S 330P-50 J CH GRM		S0322	87-A90-095-080	SW,TACT EVQ11G04M	
C0166	87-010-075-040	CAP,E 10-16 M 5L SRE		S0323	87-A90-095-080	SW,TACT EVQ11G04M	
C0167	87-010-178-080	C-CAP,S 1000P-50 K B C2012		S0324	87-A90-095-080	SW,TACT EVQ11G04M	
C0171	87-010-194-080	C-CAP,S 0.047-25 Z F		S0325	87-A90-095-080	SW,TACT EVQ11G04M	
C0172	87-010-408-040	CAP,E 47-50 M 11L SME		S0326	87-A90-095-080	SW,TACT EVQ11G04M	
C0173	87-010-981-040	CAP,E 22-35 M 5L SRE		S0327	87-A90-095-080	SW,TACT EVQ11G04M	
C0174	87-015-690-040	CAP,E 22-35 M 7L SRA		S0328	87-A90-095-080	SW,TACT EVQ11G04M	
C0180	87-010-197-080	C-CAP,S 0.01-25 K B C2012		S0329	87-A90-095-080	SW,TACT EVQ11G04M	
C0181	87-010-197-080	C-CAP,S 0.01-25 K B C2012		S0330	87-A90-095-080	SW,TACT EVQ11G04M	
				S0341	87-A90-095-080	SW,TACT EVQ11G04M	
				S0342	87-A90-095-080	SW,TACT EVQ11G04M	

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
S0343	87-A90-095-080	SW,TACT	EVQ11G04M	WH0101	87-A90-459-010		HLDR, WIRE 2.5-5P
S0344	87-A90-095-080	SW,TACT	EVQ11G04M				
S0345	87-A90-095-080	SW,TACT	EVQ11G04M				
S0346	87-A90-095-080	SW,TACT	EVQ11G04M				
S0347	87-A90-095-080	SW,TACT	EVQ11G04M				
							Q SURROUND C.B
SW0162	87-A91-787-010	SW,RTRY	EC12E24504	C0701	87-010-402-080	CAP,E 2.2-50 M 11L SME	
SW0163	87-A91-618-010	SW,RTRY	EC12E12504-30MM	C0702	87-010-402-080	CAP,E 2.2-50 M 11L SME	
				C0703	87-010-112-080	CAP,E 100-16 M 11L SME	
				C0704	87-010-405-080	CAP,E 10-50 M 11L SME	
				C0705	87-010-260-080	CAP,E 47-25 M 11L SME	
AMP 1F C.B							
C0101	87-010-183-080	C-CAP,S	2700P-50 K B GRM	C0706	87-010-322-080	C-CAP,S 100P-50 J CH GRM	
C0102	87-010-183-080	C-CAP,S	2700P-50 K B GRM	C0707	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0103	87-010-545-080	CAP,E	0.22-50 M 11L SME	C0709	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
C0104	87-010-545-080	CAP,E	0.22-50 M 11L SME	CN0701	87-A60-689-010	CONN,7P H GRY TUC-P07X-C1	
C0107	87-010-405-080	CAP,E	10-50 M 11L SME				
C0108	87-010-405-080	CAP,E	10-50 M 11L SME				
C0111	87-010-179-080	C-CAP,S	1200P-50 K B GRM	CN0352	87-099-016-010	CONN,14P V BLK 6216	
C0112	87-010-179-080	C-CAP,S	1200P-50 K B GRM	LED0401	87-A40-380-180	LED,SEL6510C-TP5 GRN	
C0113	87-010-866-080	CAP,E	10-63 M VX	LED0402	87-A40-380-180	LED,SEL6510C-TP5 GRN	
C0114	87-010-866-080	CAP,E	10-63 M VX	LED0403	87-A40-380-180	LED,SEL6510C-TP5 GRN	
C0115	87-010-866-080	CAP,E	10-63 M VX	LED0404	87-A40-380-180	LED,SEL6510C-TP5 GRN	
C0116	87-010-866-080	CAP,E	10-63 M VX	LED0405	87-A40-380-180	LED,SEL6510C-TP5 GRN	
C0117	87-010-197-080	C-CAP,S	0.01-25 K B C2012	LED0406	87-A40-380-180	LED,SEL6510C-TP5 GRN	
C0119	87-010-197-080	C-CAP,S	0.01-25 K B C2012	LED0444	87-A40-380-180	LED,SEL6510C-TP5 GRN	
C0120	87-010-197-080	C-CAP,S	0.01-25 K B C2012	LED0445	87-A40-380-180	LED,SEL6510C-TP5 GRN	
C0120	87-010-197-080	C-CAP,S	0.01-25 K B C2012	LED0446	87-A40-380-180	LED,SEL6510C-TP5 GRN	
C0133	87-010-186-080	C-CAP,S	4700P-50 K B C2012				
C0153	87-010-188-080	C-CAP,S	6800P-50 K B C2012	S0348	87-A90-095-080	SW,TACT	EVQ11G04M
C0170	87-A11-132-080	CAP,TC U	0.01-50 K B	S0349	87-A90-095-080	SW,TACT	EVQ11G04M
C0201	87-A10-300-080	CAP,M	0.027-50 J	S0350	87-A90-095-080	SW,TACT	EVQ11G04M
C0202	87-A10-300-080	CAP,M	0.027-50 J	S0351	87-A90-095-080	SW,TACT	EVQ11G04M
C0203	87-A10-300-080	CAP,M	0.027-50 J	S0352	87-A90-095-080	SW,TACT	EVQ11G04M
C0204	87-A10-300-080	CAP,M	0.027-50 J	S0371	87-A90-095-080	SW,TACT	EVQ11G04M
C0205	87-010-182-080	C-CAP,S	2200P-50 K B C2012	S0372	87-A90-095-080	SW,TACT	EVQ11G04M
C0206	87-010-182-080	C-CAP,S	2200P-50 K B C2012	S0373	87-A90-095-080	SW,TACT	EVQ11G04M
C0207	87-010-402-080	CAP,E	2.2-50 M 11L SME	S0374	87-A90-095-080	SW,TACT	EVQ11G04M
C0208	87-010-402-080	CAP,E	2.2-50 M 11L SME	S0375	87-A90-095-080	SW,TACT	EVQ11G04M
C0209	87-010-184-080	C-CAP,S	3300P-50 K B C2012	S0376	87-A90-095-080	SW,TACT	EVQ11G04M
C0210	87-010-184-080	C-CAP,S	3300P-50 K B C2012	S0377	87-A90-095-080	SW,TACT	EVQ11G04M
C0211	87-010-403-080	CAP,E	3.3-50 M 11L SME	S0378	87-A90-095-080	SW,TACT	EVQ11G04M
C0212	87-010-403-080	CAP,E	3.3-50 M 11L SME	S0379	87-A90-095-080	SW,TACT	EVQ11G04M
C0215	87-010-179-080	C-CAP,S	1200P-50 K B GRM	S0380	87-A90-095-080	SW,TACT	EVQ11G04M
C0216	87-010-179-080	C-CAP,S	1200P-50 K B GRM	S0381	87-A90-095-080	SW,TACT	EVQ11G04M
C0217	87-010-405-080	CAP,E	10-50 M 11L SME	S0382	87-A90-095-080	SW,TACT	EVQ11G04M
C0218	87-010-405-080	CAP,E	10-50 M 11L SME	S0383	87-A90-095-080	SW,TACT	EVQ11G04M
C0221	87-010-405-080	CAP,E	10-50 M 11L SME				
C0222	87-010-405-080	CAP,E	10-50 M 11L SME				
C0223	87-010-197-080	C-CAP,S	0.01-25 K B C2012				
C0224	87-010-197-080	C-CAP,S	0.01-25 K B C2012	CN0452	87-A60-083-010	CONN,04P H 9604S-04F	
C0251	87-010-993-080	C-CAP,S	0.056-25 K B MK212	S0451	87-036-109-010	SW,MICRO SPPB61	
C0252	87-010-993-080	C-CAP,S	0.056-25 K B MK212				
C0253	87-010-196-080	C-CAP,S	0.1-25 Z F C2012				
C0254	87-010-196-080	C-CAP,S	0.1-25 Z F C2012				
C0255	87-010-190-080	C-CAP,S	0.01-50 Z F C2012	C0001	87-010-544-080	CAP,E 0.1-50 M 11L SME	
C0256	87-010-190-080	C-CAP,S	0.01-50 Z F C2012	C0002	87-010-248-080	CAP,E 220-10 M 11L SME	
C0257	87-010-190-080	C-CAP,S	0.01-50 Z F C2012	C0003	87-010-404-080	CAP,E 4.7-50 M 11L SME	
C0258	87-010-190-080	C-CAP,S	0.01-50 Z F C2012				
C0259	87-012-368-080	C-CAP,S	0.1-50 Z F				
C0260	87-012-368-080	C-CAP,S	0.1-50 Z F				
C0270	87-A11-132-080	CAP,TC U	0.01-50 K B	C0001	87-010-387-080	CAP,E 470-25 M SME	
C0401	87-010-260-080	CAP,E	47-25 M 11L SME	C0004	87-A11-148-080	CAP,TC U 0.1-50 Z F	
CN0101	87-A61-011-010	CONN,13P H BLK	TAC-L13P-A3	C0005	87-A11-148-080	CAP,TC U 0.1-50 Z F	
CN0102	87-A61-011-010	CONN,13P H BLK	TAC-L13P-A3	C0006	87-A10-627-000	CAP,E 2200-50 M SMG	
CNA0101	8A-NF8-656-010	CONN ASSY,5P	TID-A 400	C0007	87-A10-627-000	CAP,E 2200-50 M SMG	
J0201	87-A61-148-010	JACK,PIN 4P R/W	BLUE	C0008	87-A11-148-080	CAP,TC U 0.1-50 Z F	
L0251	87-A50-610-010	COIL,1UH	K(MDEC)	C0009	87-A11-148-080	CAP,TC U 0.1-50 Z F	
L0252	87-A50-610-010	COIL,1UH	K(MDEC)	C0010	87-A11-148-080	CAP,TC U 0.1-50 Z F	
R0129	87-A00-257-080	RES,M/F	0.15-1W J	C0011	87-A11-148-080	CAP,TC U 0.1-50 Z F	
R0130	87-A00-257-080	RES,M/F	0.15-1W J	C0012	87-016-520-000	CAP,E 3300-65 M SMG	
R0231	87-A00-258-080	RES,M/F	0.22-1W J	C0013	87-016-520-000	CAP,E 3300-65 M SMG	
R0232	87-A00-258-080	RES,M/F	0.22-1W J	C0014	87-A11-148-080	CAP,TC U 0.1-50 Z F	

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C0016	87-010-403-080		CAP, E 3.3-50 M 11L SME	SW4	87-A90-248-010		SW, MICRO ESE11SH2CXQ
CN0001	87-A61-110-010		CONN, 9P V TID-A	SW5	87-A90-248-010		SW, MICRO ESE11SH2CXQ
CN0002	87-A61-108-010		CONN, 5P V TID-A	SW6	87-A90-248-010		SW, MICRO ESE11SH2CXQ
△PT0001	8A-NF8-608-010		PT, ANF-8 EZ				
△PT0002	8A-NF8-662-010		PT, SUB ANF-8 (E)				
△RY0002	87-A90-976-010		RELAY, AC12V SDT-S-112LMR				RELAY C.B
△T0001	87-A60-317-010		TERMINAL, 1P MSC	CN301	86-ZM1-605-010		CONN ASSY, AR3
△T0002	87-A60-317-010		TERMINAL, 1P MSC				
							MOTOR-1 C.B
							F-CABLE, 2P 130MM LED
DECK C.B				CN1	86-NFZ-675-010		CONN, 5P H 6216-11H
CON2	87-009-352-010		CONN, 9P PH H	M1	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
SFR1	87-024-581-010		SFR, 3.3K DIA6V KOA	S2	87-A91-662-010		SW, PUSH 1-1-1 MPU11244MLBO
SOL2	82-ZM1-634-010		SOL ASSY, 23K				
SW2	87-A90-248-010		SW, MICRO ESE11SH2CXQ				SWITCH C.B
SW3	87-A90-248-010		SW, MICRO ESE11SH2CXQ	S1	87-A90-948-010		SW, LVR 2-1-2 MPU11263MLBO

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding

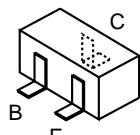
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)			抵抗コード Resistor Code : A	
				外形／Form	L	W		
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

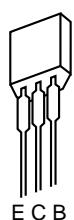
TRANSISTOR ILLUSTRATION



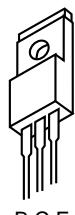
CD1585
CSA952
CSA1585
CSC4115
CSD655
KTA1266
KTC3198



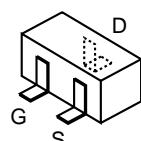
2SA1235
2SC2714
2SC3052
CMBT5401
CMBT5551
CSD1306
KRA102S
RT1N141C
RT1N144C
RT1P141C
RT1P144C
RT1P441C



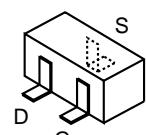
DTC114ES
KTC3199



2SB1370



2SJ461
2SK2158

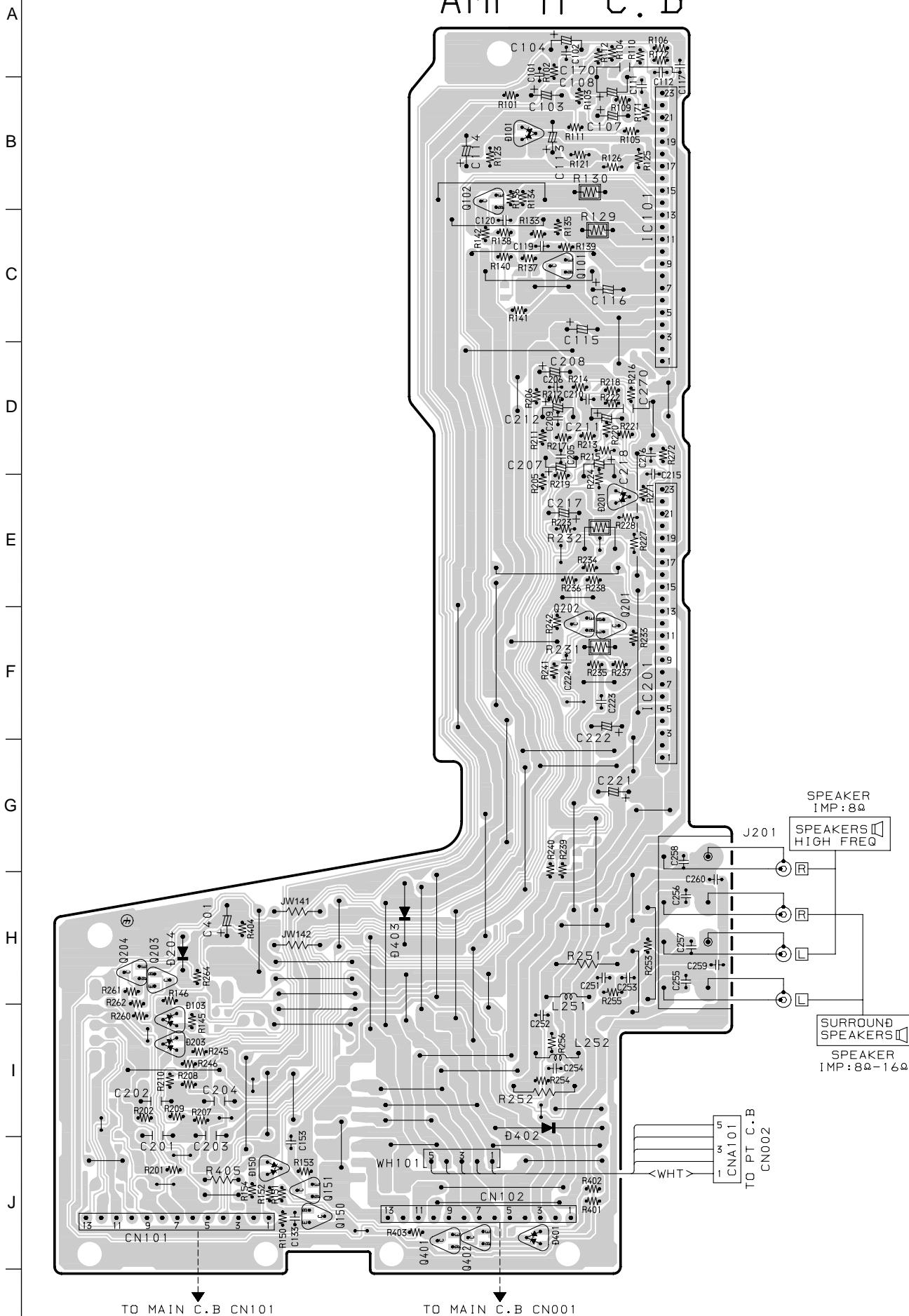


2SK360

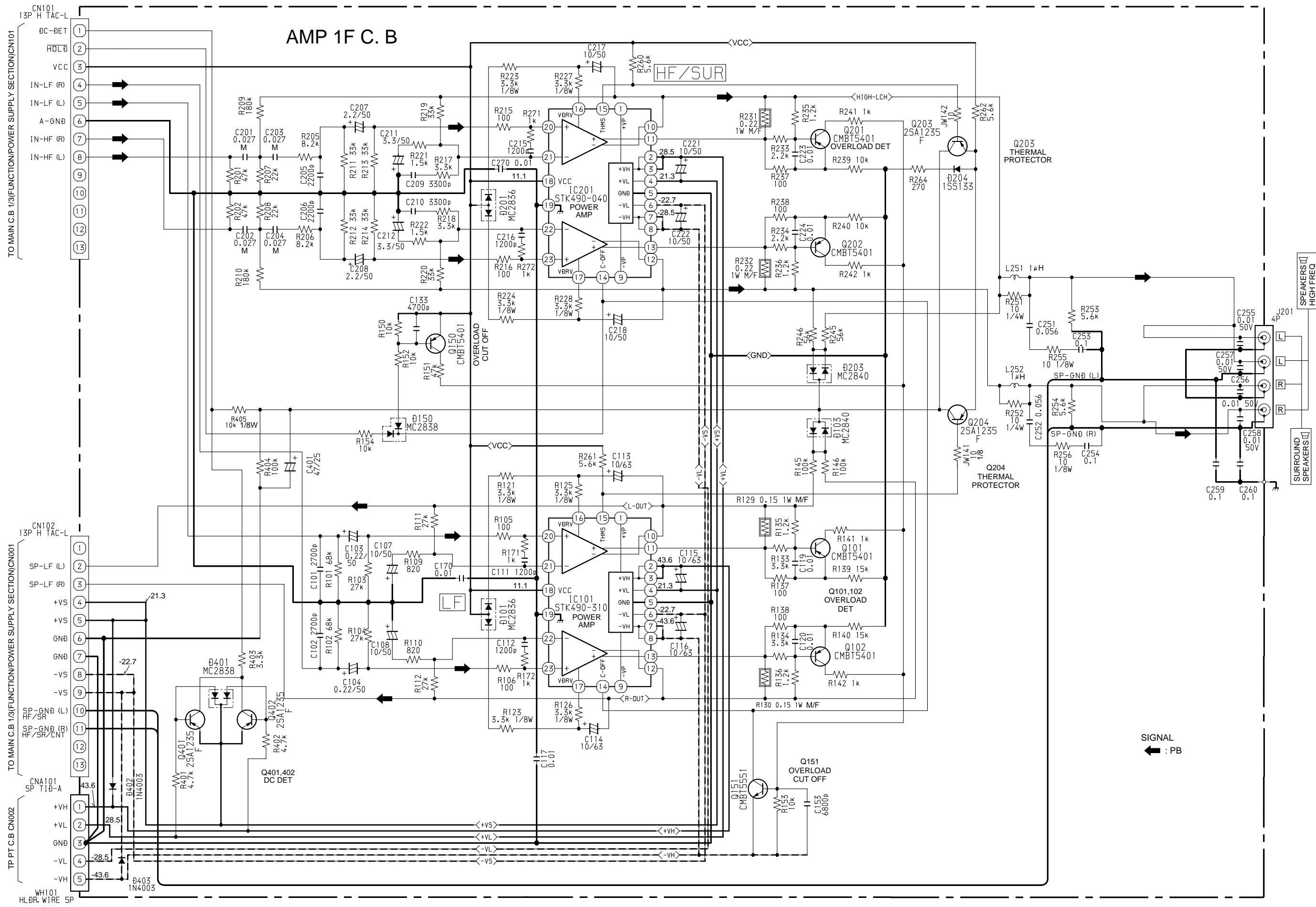
WIRING-1 (AMP 1F C.B)

1 | 2 | 3 | 4 | 5 | 6 | 7

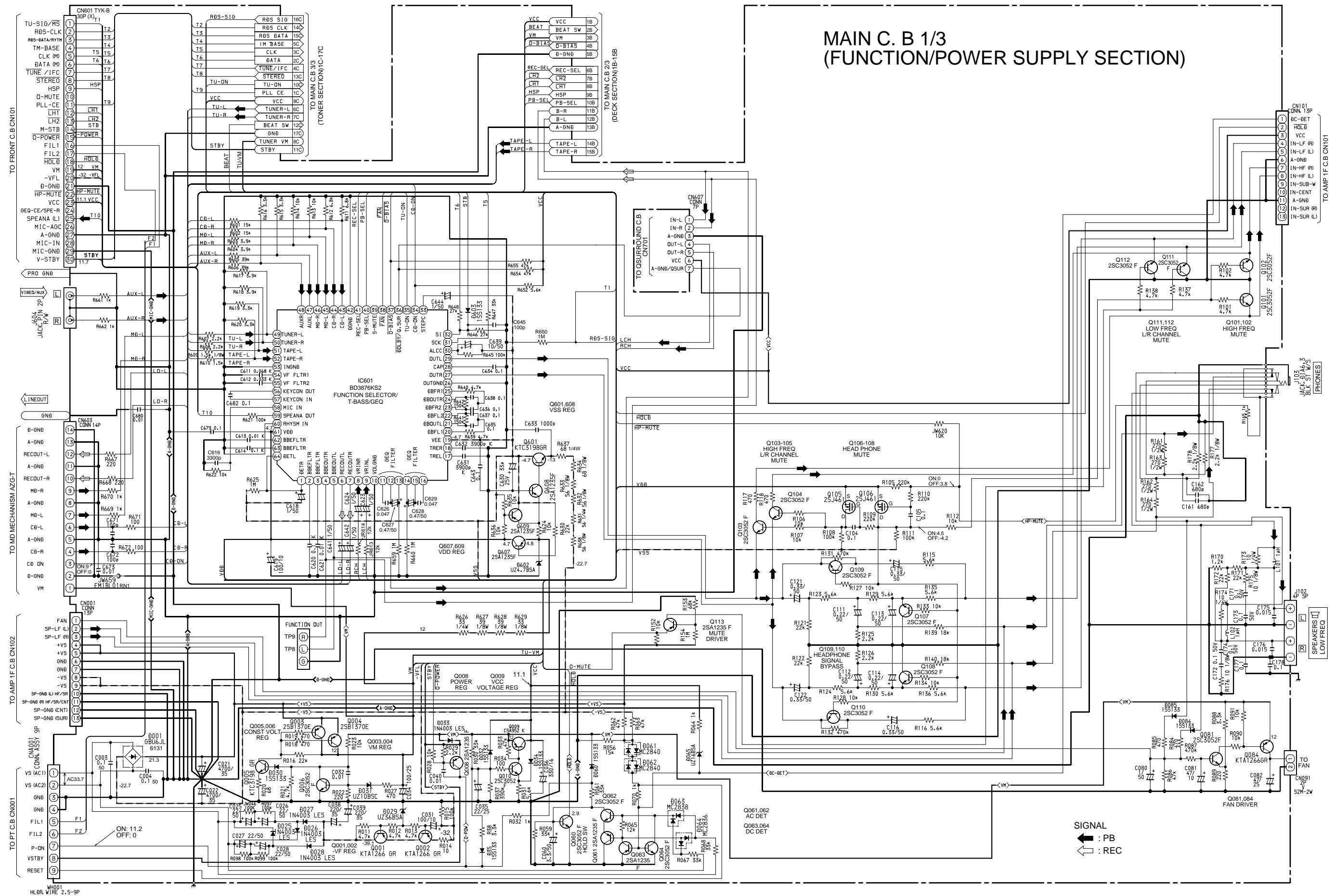
AMP 1F C. B



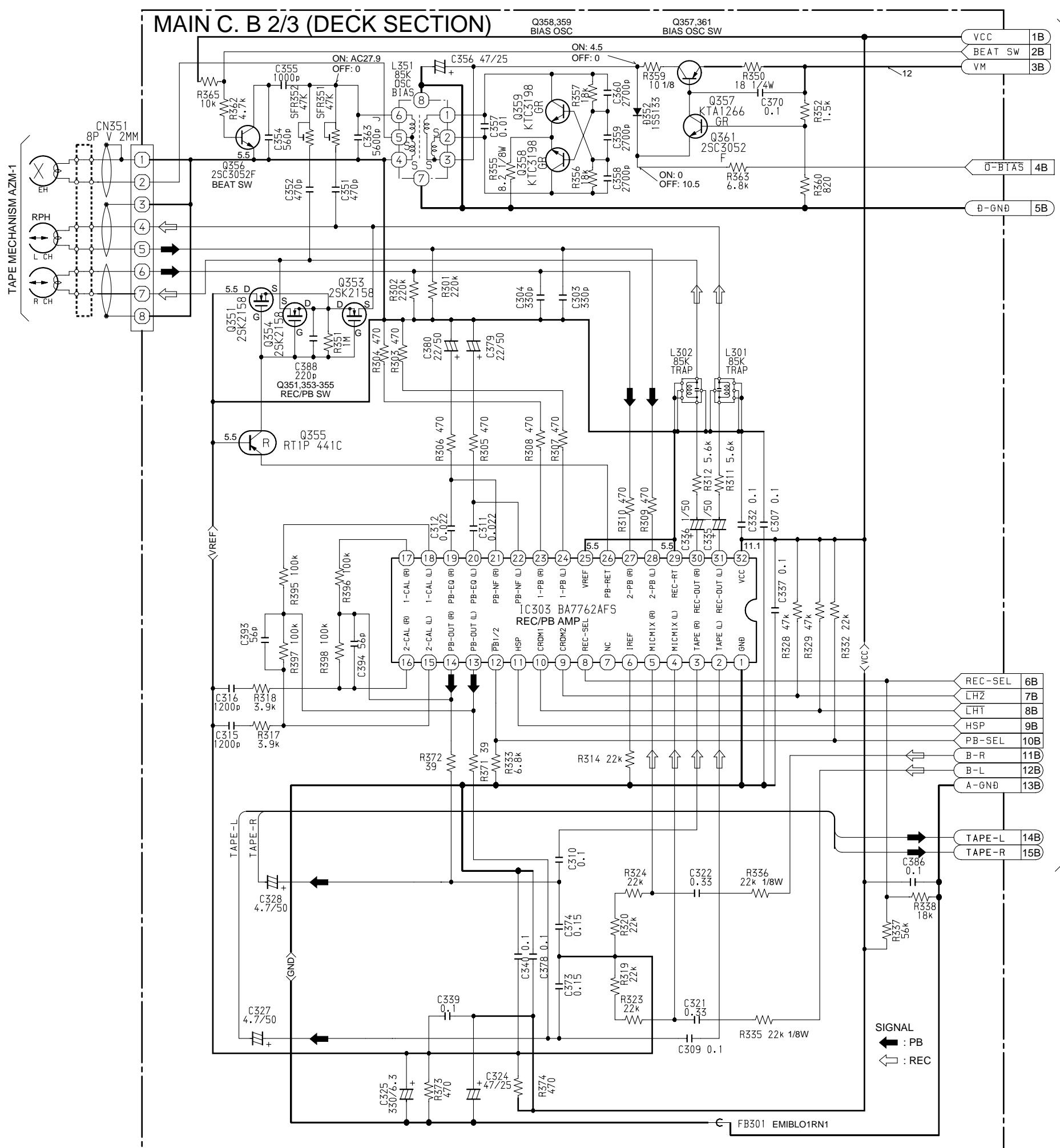
SCHEMATIC DIAGRAM-1 (AMP1F SECTION)



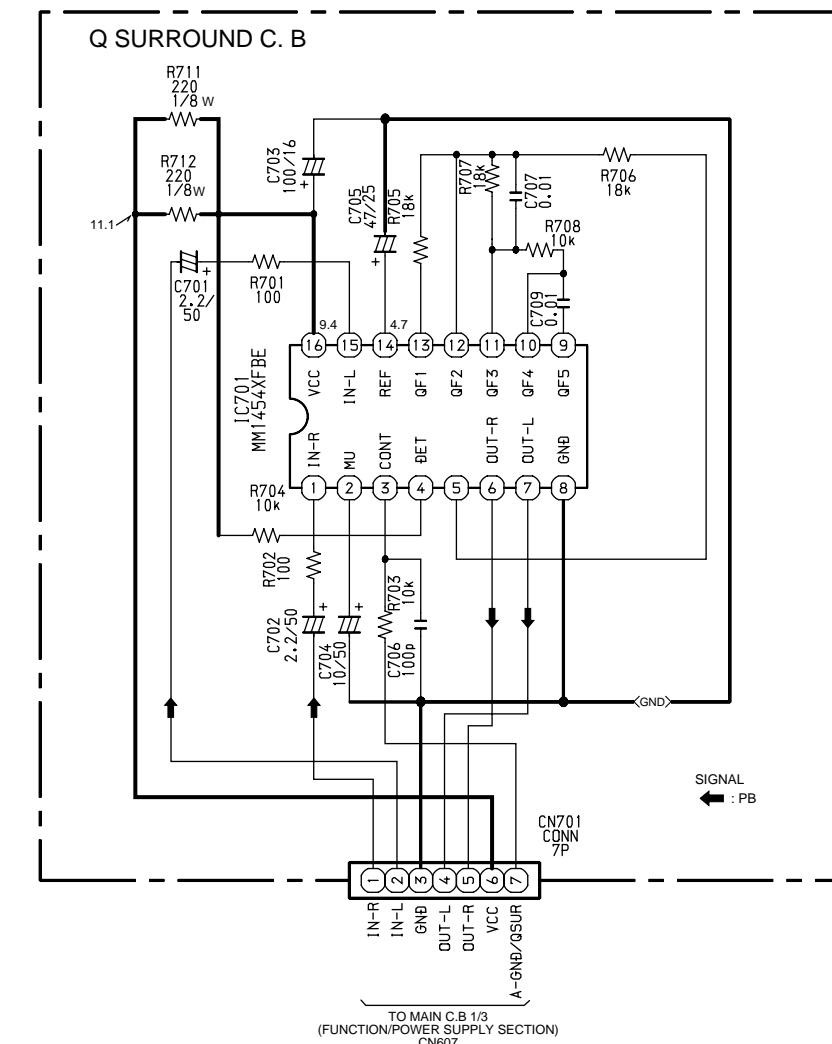
SCHEMATIC DIAGRAM-2 (MAIN 1/3 SECTION)



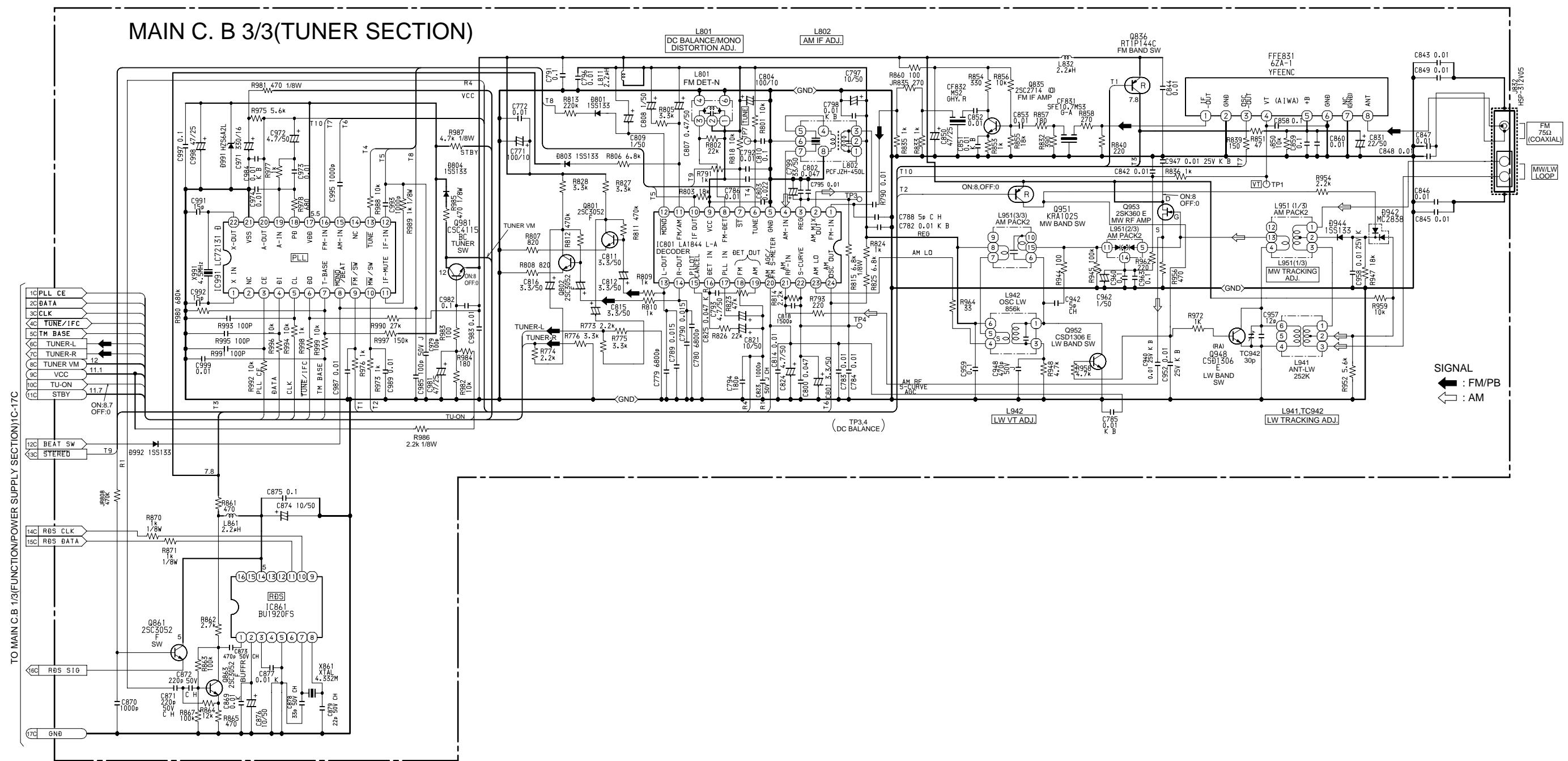
SCHEMATIC DIAGRAM-3 (MAIN 2/3 SECTION)



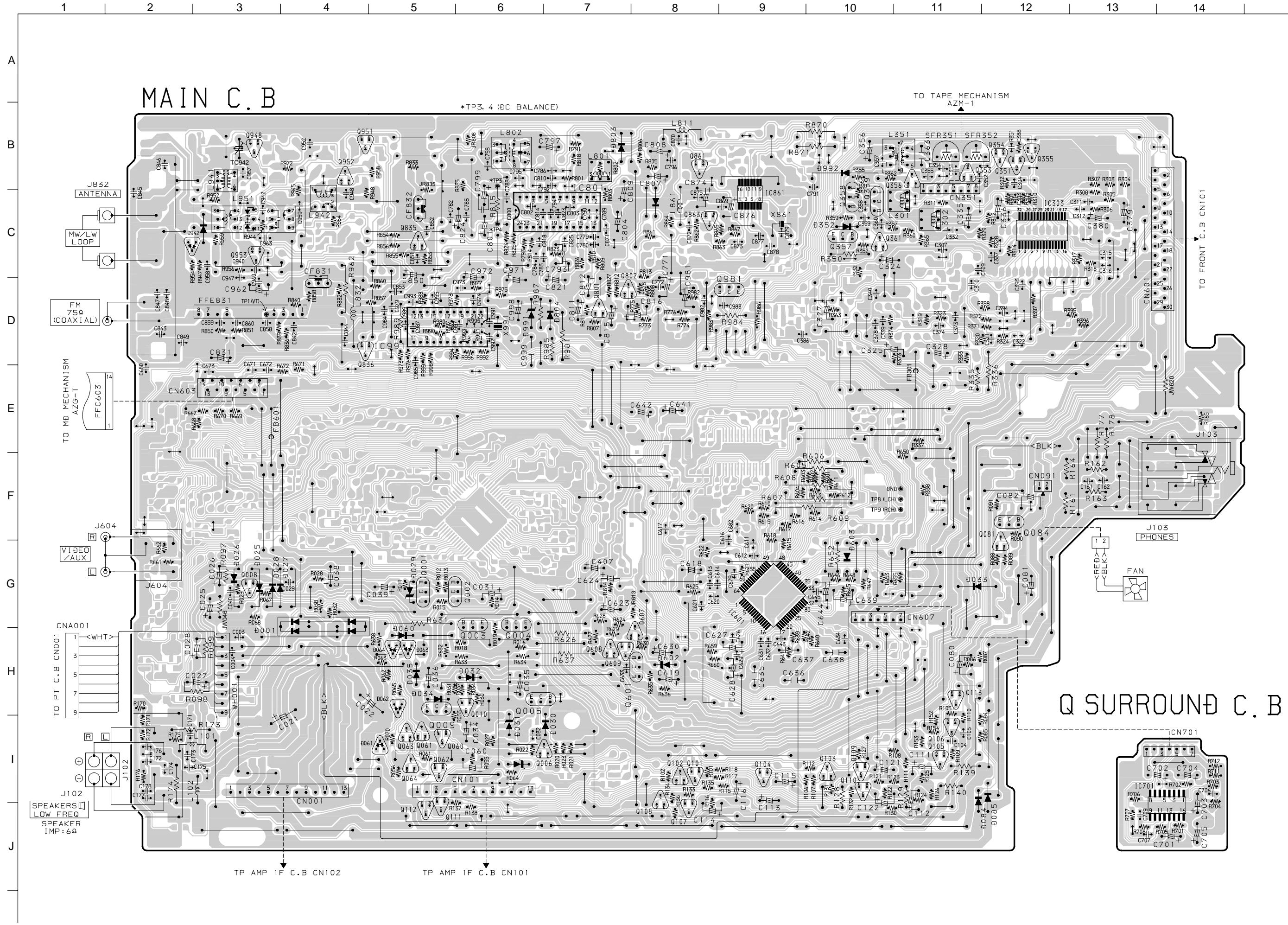
SCHEMATIC DIAGRAM-4 (Q SURROUND SECTION)



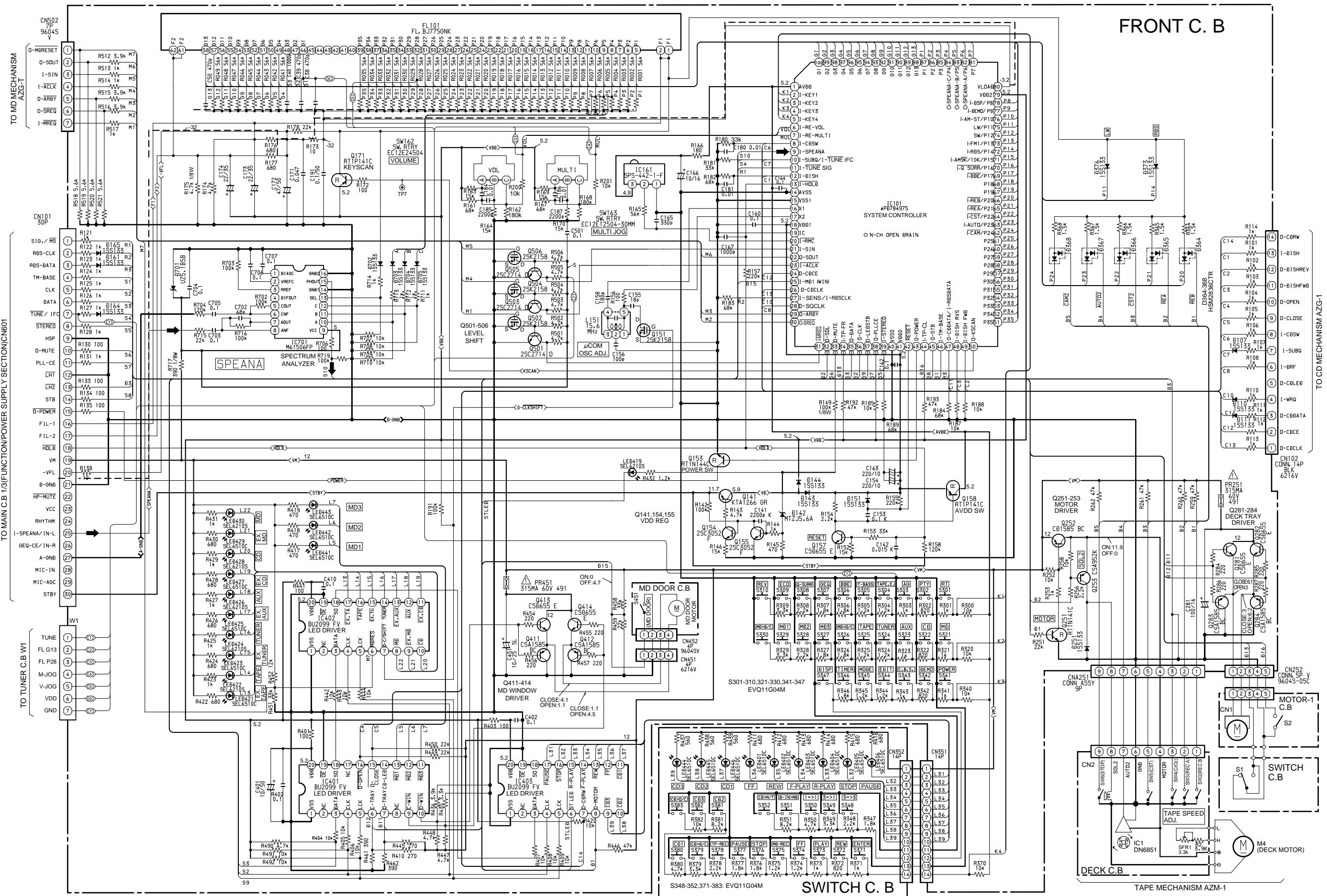
SCHEMATIC DIAGRAM-5 (MAIN 3/3 SECTION)



WIRING-2 (MAIN C.B)

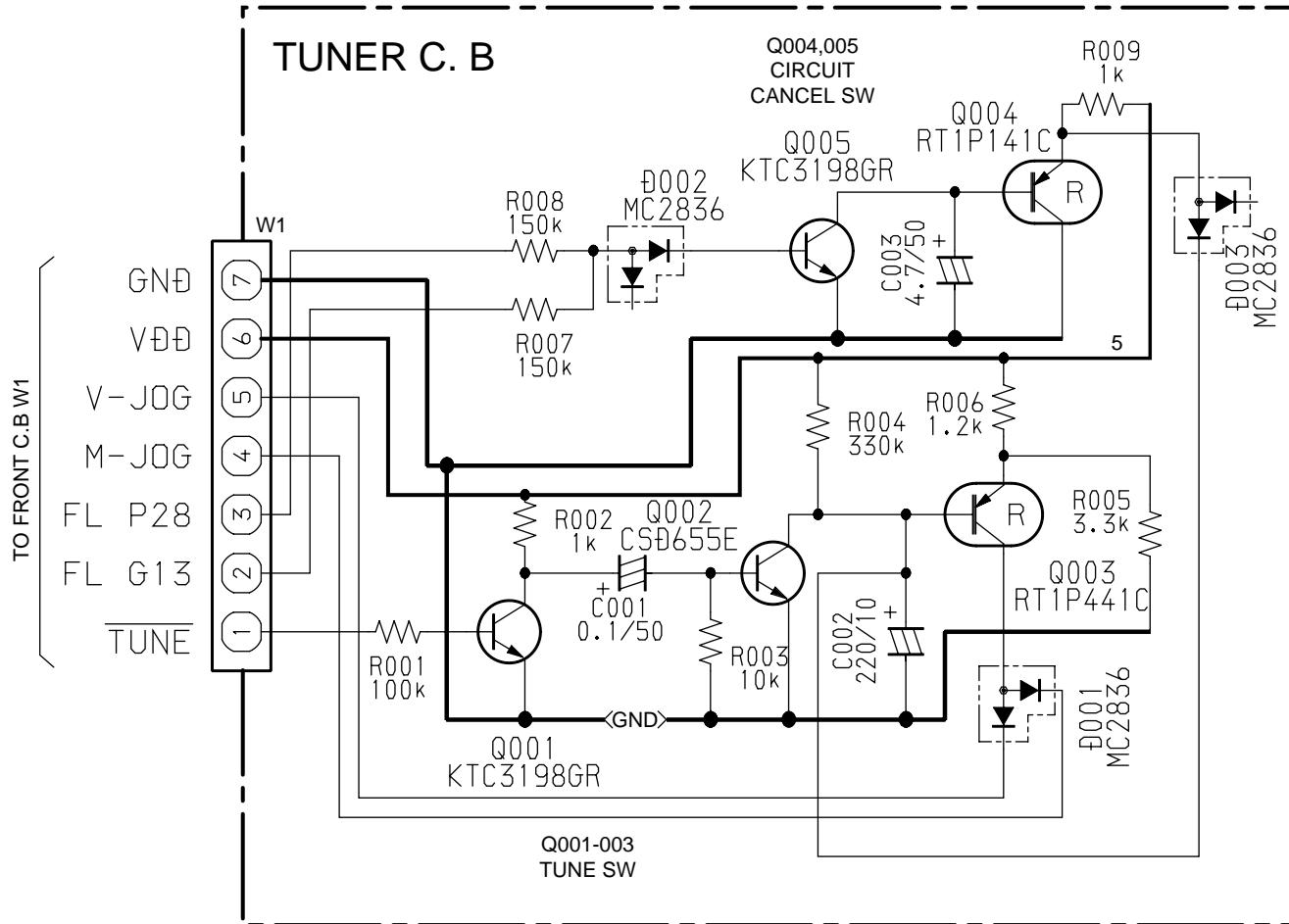


SCHEMATIC DIAGRAM-6 (FRONT SECTION)

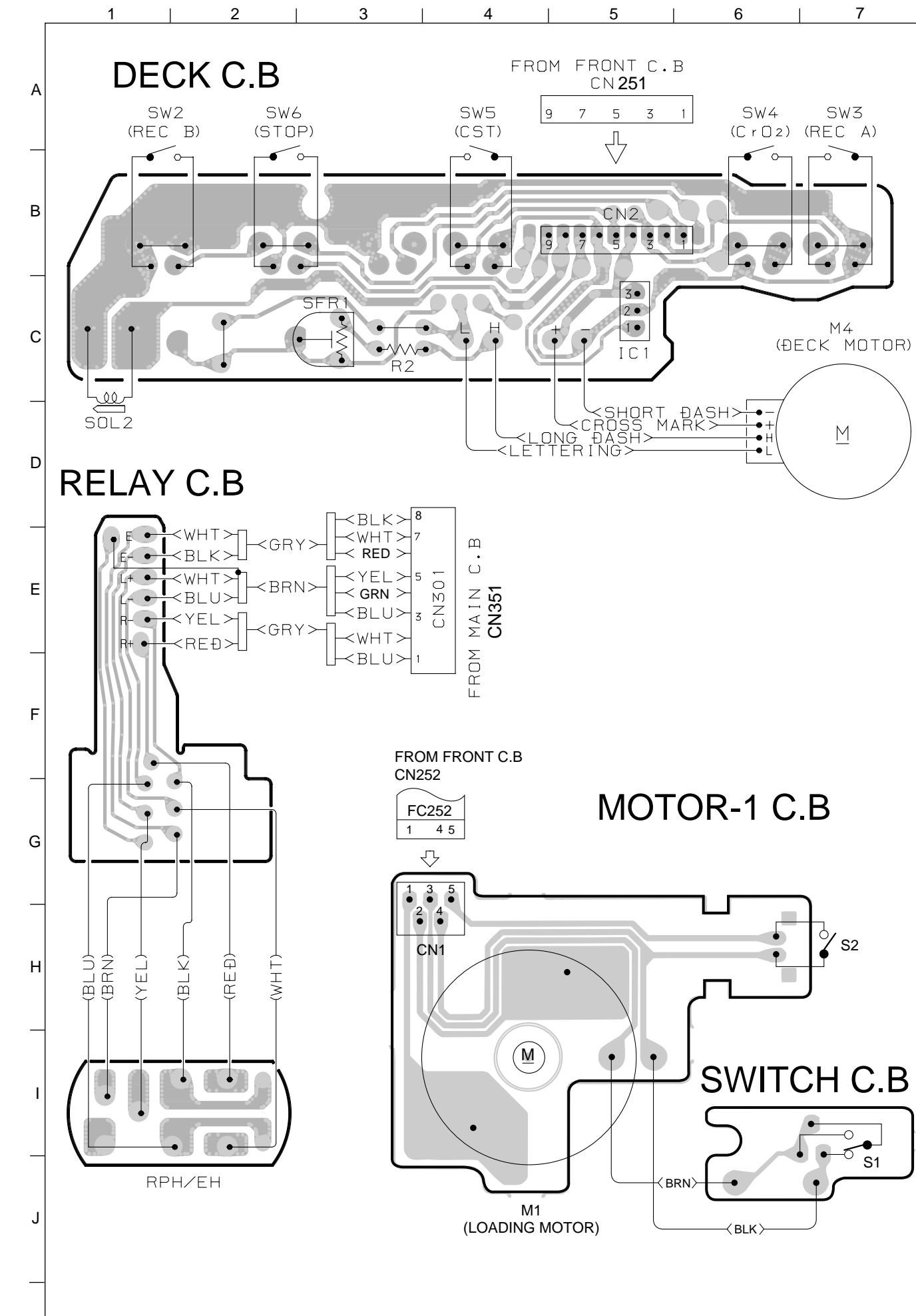


SIGNAL
← : PB

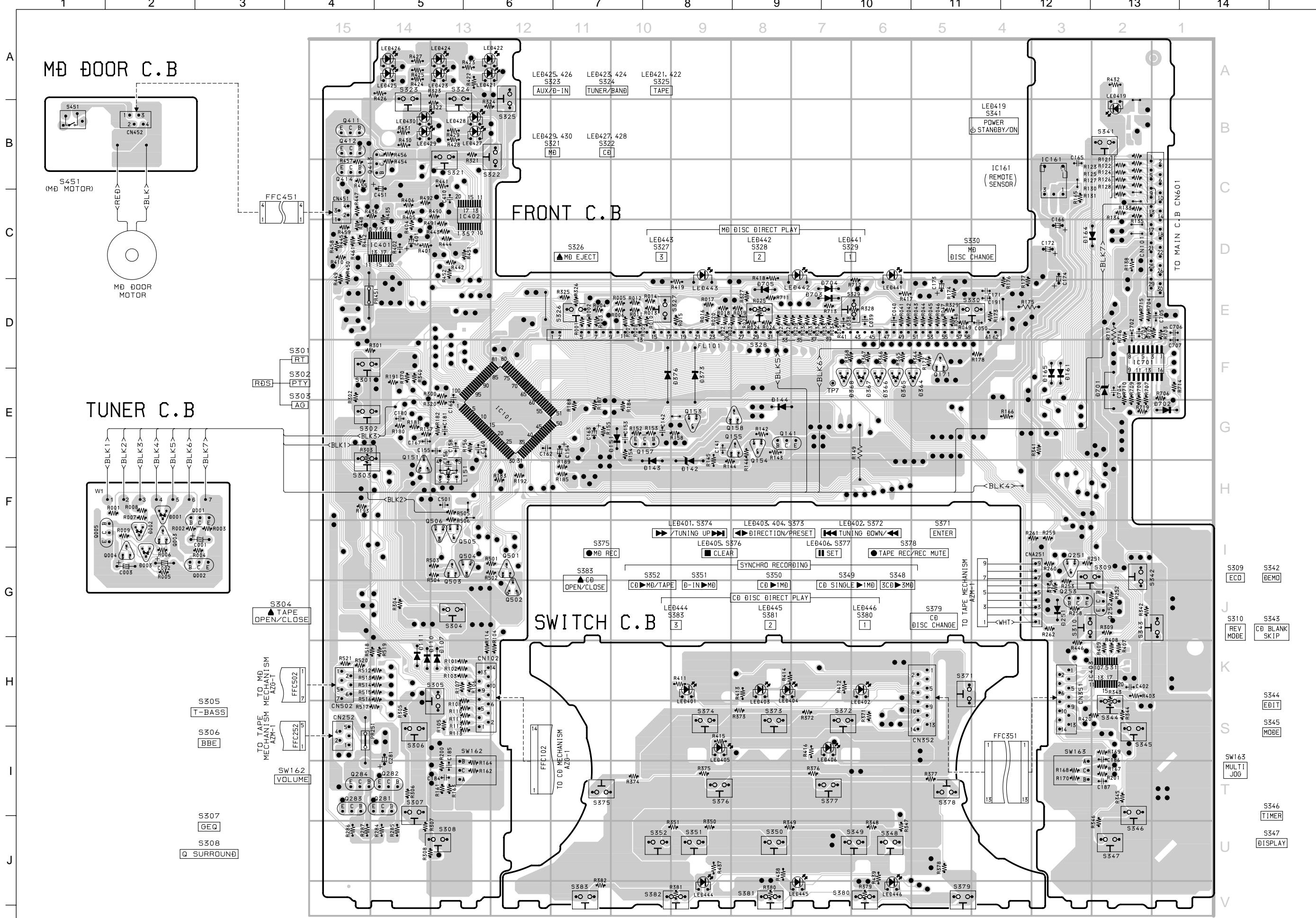
SCHEMATIC DIAGRAM-7 (TUNER SECTION)



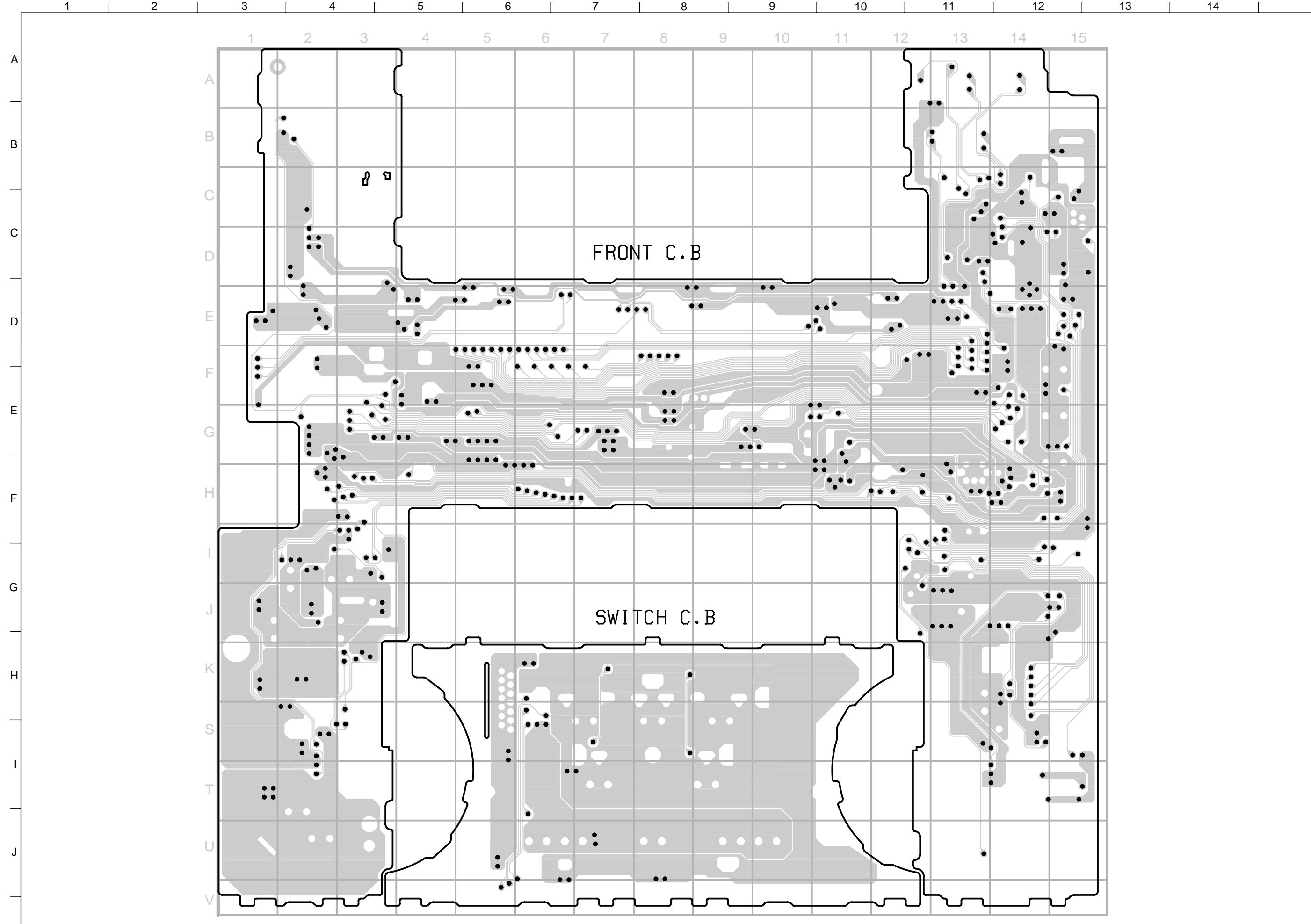
WIRING-3 (DECK C.B.)



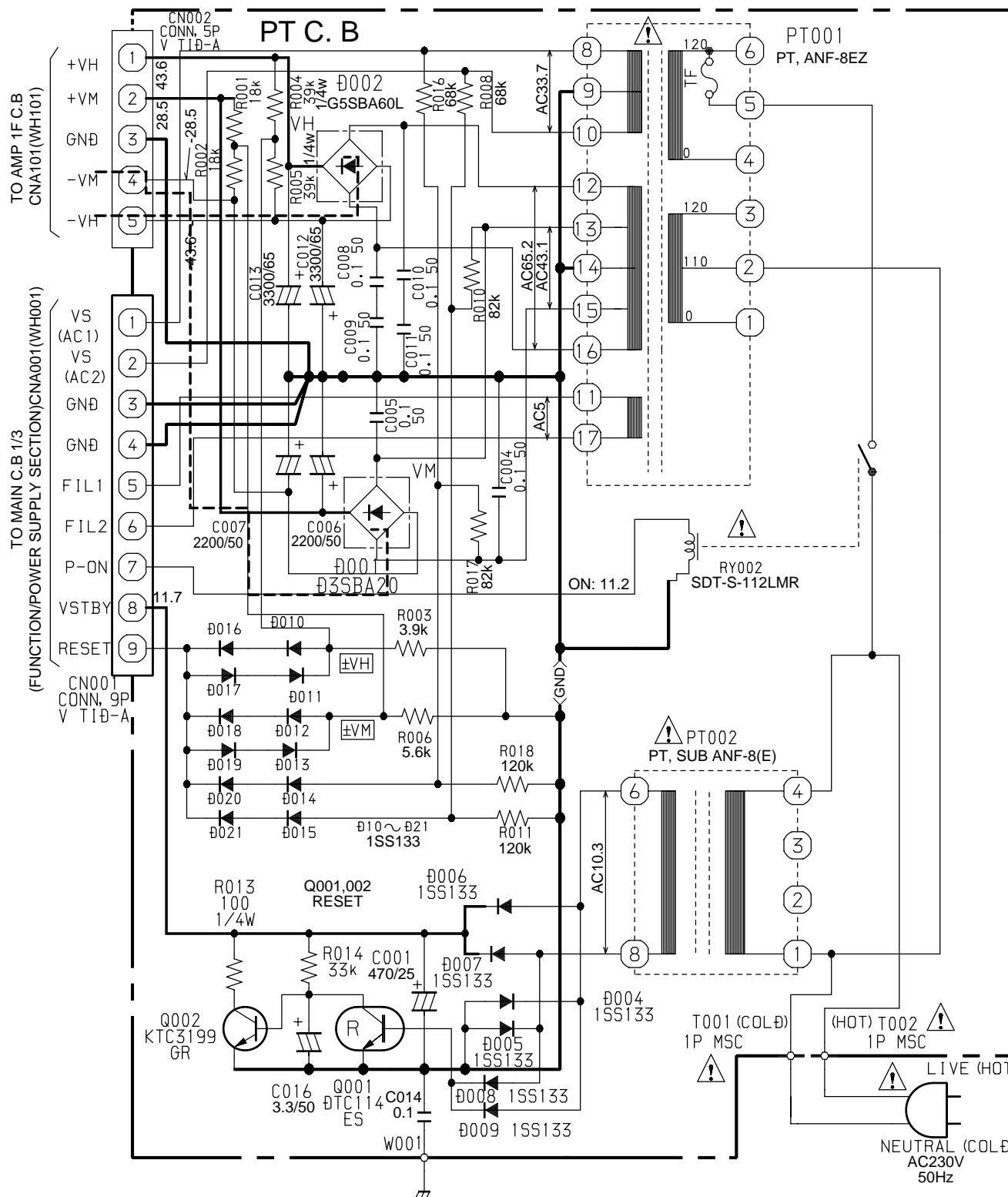
WIRING-4 (FRONT C.B Top View)



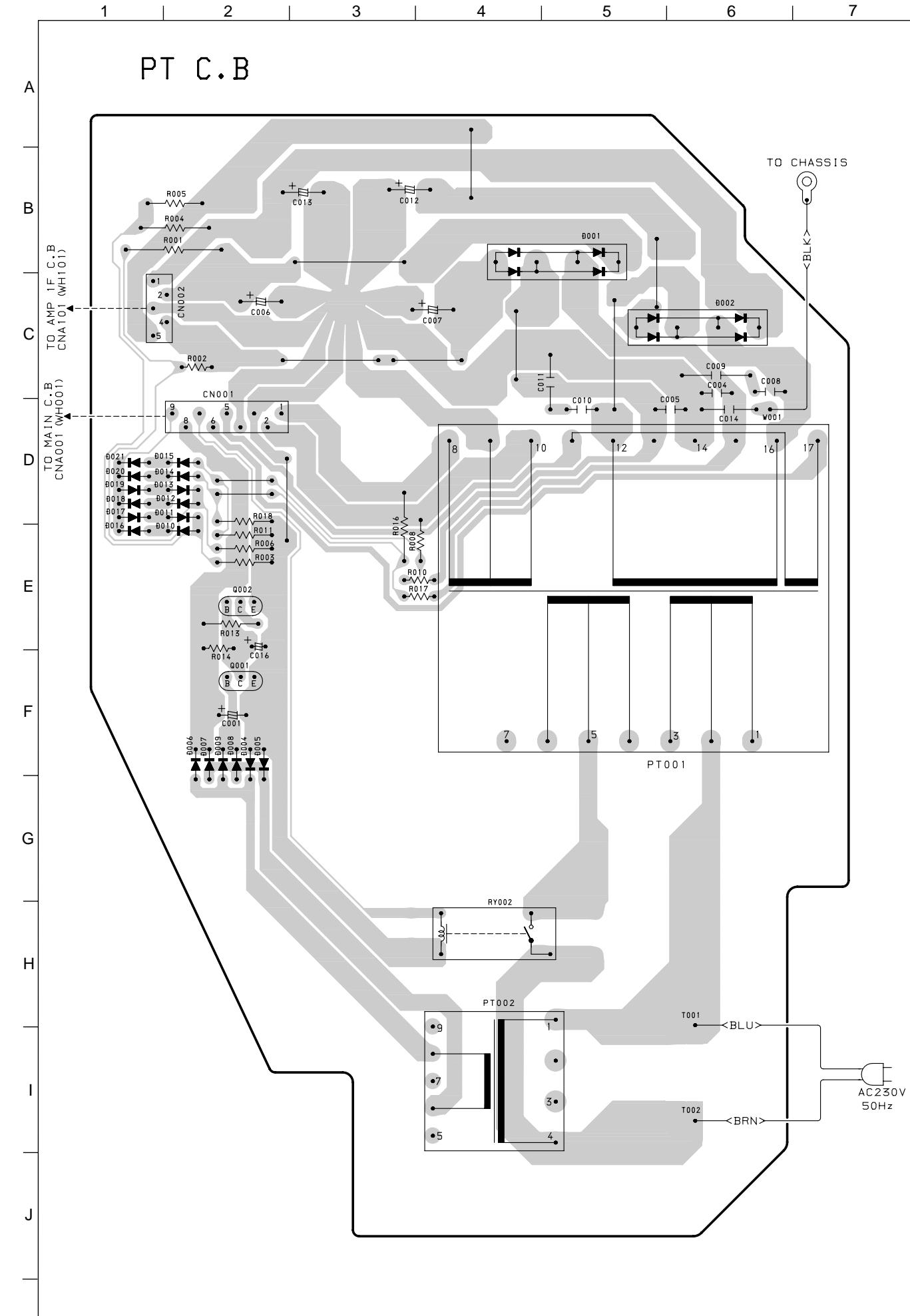
WIRING-5 (FRONT C.B Bottom View)



SCHEMATIC DIAGRAM-8 (PT SECTION)



WIRING-6 (PT C.B)



IC DESCRIPTION

IC, μPD784975

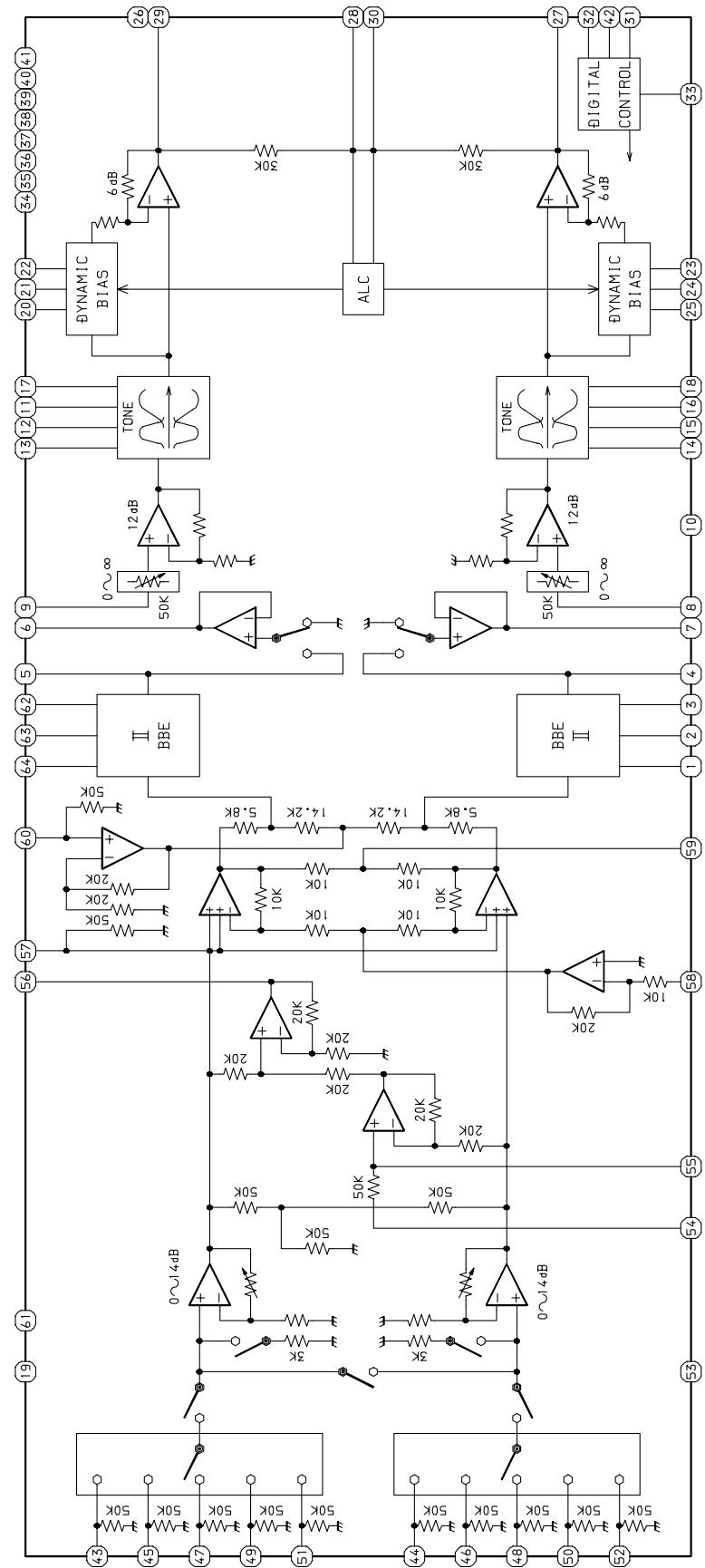
Pin No.	Pin Name	I/O	Description
1	AVDD	-	Power supply
2	I-KEY1	I	Tact key matrix 1 input
3	I-KEY2	I	Tact key matrix 2 input
4	I-KEY3	I	Tact key matrix 3 input
5	I-KEY4	I	Tact key matrix 4 input
6	I-RE-VOL	I	Waveform input for VOL rotary encoder
7	I-RE-MULT1	I	Waveform input for JOG rotary encoder
8	I-CDSW	I	CD MECHA SW matrix input
9	I-SPEANA	I	Spectrum analyser level detection input
10	I-SUBQ/I-TUNE IFC	I	During CD FUNC, SUBQ serial data input/ During TUNER FUNC, STEREO signal input
11	I-TUNE SIG	I	RDS signal level input
12	I-DISH	I	CD turntable photo sensor input
13	I-HOLD	I	System HOLD input (A/D level port)
14	AVSS	-	Connected to GND
15	VSS1	-	Connected to GND
16	X1	O	Oscillator output for system clock (15.6 MHz)
17	X2	I	Oscillator input for system clock (15.6 MHz)
18	VDD1	-	Power supply
19	IC	I	Connected to GND
20	I-RMC	I	Remote control singnal input
21	I-SIN	I	MD control serial DATA input
22	O-SOUT	O	MD control serial DATA output
23	I-ACLK	I	MD control serial CLOCK input
24	O-CDCE	O	CD DSP control CHIP ENABLE output
25	I-MD1WIN	I	MD window sw input
26	O-CDCLK	O	CD DSP control serial CLOCK output
27	I-SENS/I-RDSCLK	I	During CD FUNC, SENS serial data input/During TUNER FUNC,RDS serial clock input
28	O-SQCLK	O	CD control SUBQ serial clock output
29	O-ARDY	O	MD control ARDY input
30	O-SREQ	O	MD control SREQ output
31	I-MREQ	I	MD control MREQ input
32	O-SOL	O	DECK MECHA plunger control output
33	O-MUTE	O	System mute control output
34	I-TP-FR	I	DECK MECHA FRAME sw input
35	O-DATA	O	FRONT-MAIN IC control DATA output
36	O-CLK	O	FRONT-MAIN IC control CLK output
37	O-LEDSTB	O	FRONT IC control STB output
38	O-PLLCE	O	TUNER PLL IC control CHIP ENABLE output
39	I-STEREO	I	TUNER STEREO signal input
40	VSS0	-	Connected to GND

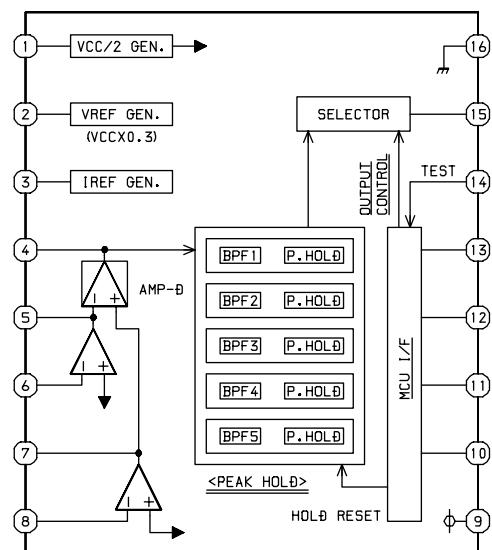
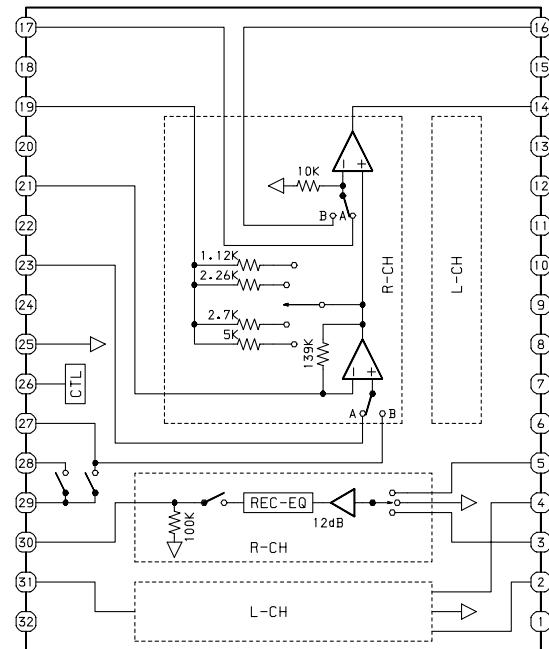
Pin No.	Pin Name	I/O	Description
41	VDD0	-	Power supply
42	RESET	I	Reset input
43	O-POWER	O	System power control output
44	I-TP-CL	I	DECK MECHA clamp sw input
45	O-STB	O	Main IC control STB output
46	I-TM-BASE	I	Reference signal input for clock
47	O-CDDATA/ I-RDS DATA	O	During CD FUNC, CD DSP control serial data output/During TUNER FUNC, RDS serial data input
48	I-DISH-RVS	I	CD turntable reverse output
49	I-DISH-FWD	I	CD turntable forward output
50	O-KSCAN	O	Segment input timing output
51	P35	O	FL segment P35 output
52	P34	O	FL segment P34 output
53	P33	O	FL segment P33 output
54	P32	O	FL segment P32 output
55	P31	O	FL segment P31 output
56	P30	O	FL segment P30 output
57	P29	O	FL segment P29 output
58	P28	O	FL segment P28 output
59	P27	O	FL segment P27 output
60	P26	O	FL segment P26 output
61	P25	O	FL segment P25 output
62	I-CAM/P24	I/O	FL segment P24 output/DECK cam-operation detection SW input L: ON
63	I-AUTO/P23	I/O	FL segment P23 output/DECK reel-rotation detection signal input
64	I-CST/P22	I/O	FL segment P22 output/DECK cassette existence detection
65	I-REA/P21	I/O	FL segment P21 output/DECK side-A recording able/enable detection input L: ON
66	I-REB/P20	I/O	FL segment P20 output/DECK side-B recording able/enable detection input L: ON
67	P19	O	FL segment P19 output
68	P18	O	FL segment P18 output
69	I-BBE/P17	I/O	FL segment P17 output/BBE setting switching input H: Absent (Not used)
70	I-QSURR/P16	I/O	FL segment P16 output/QSURR setting switching input H: Absent (Not used)
71	I-AM9K/10K/P15	I/O	FL segment P15 output/AM10K setting switching input H: 10k step (Not used)
72	I-RDS/P14	I/O	FL segment P14 output/RDS setting switching input H: Present
73	I-FMI/P13	I/O	FL segment P13 output/FMI setting switching input H: Present (Not used)
74	I-SW/P12	I/O	FL segment P12 output/SW setting switching input H: Present (Not used)
75	I-LW/P11	I/O	FL segment P11 output/LW setting switching input H: Present
76	I-AM ST/P10	I/O	FL segment P10 output/AM ST setting switching input H: Present (Not used)
77	I-DEMO-P9	I/O	FL segment P9 output/DEMO setting switching input H: Absent (Not used)
78	I-DSP/P8	I/O	FL segment P8 output/DSP setting switching input H: Present (Not used)
79	VDD2	-	Power supply
80	VLDAD	-	Power supply for FL input

Pin No.	Pin Name	I/O	Description
81	P7	O	FL segment P7 output
82	O-SPEANA-A/P6	O	FL segment P6 output/Spectrum analyser BPF switching control A output
83	O-SPEANA-B/P5	O	FL segment P5 output/Spectrum analyser BPF switching control B output
84	O-SPEANA-C/P4	O	FL segment P4 output/Spectrum analyser BPF switching control C output
85	P3	O	FL segment P3 output
86	P2	O	FL segment P2 output
87	P1	O	FL segment P1 output
88	G13	O	FL grid G13 output
89	G12	O	FL grid G12 output
90	G11	O	FL grid G11 output
91	G10	O	FL grid G10 output
92	G9	O	FL grid G9 output
93	G8	O	FL grid G8 output
94	G7	O	FL grid G7 output
95	G6	O	FL grid G6 output
96	G5	O	FL grid G5 output
97	G4	O	FL grid G4 output
98	G3	O	FL grid G3 output
99	G2	O	FL grid G2 output
100	G1	O	FL grid G1 output

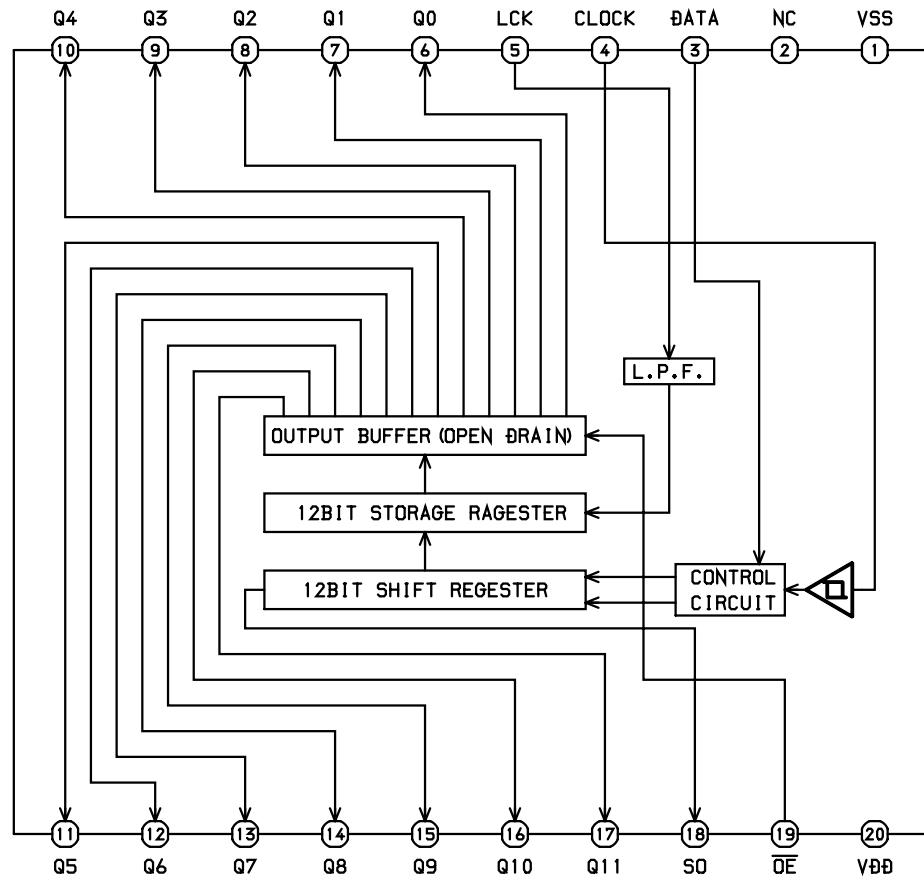
IC BLOCK DIAGRAM-2

IC, BD3876KS2

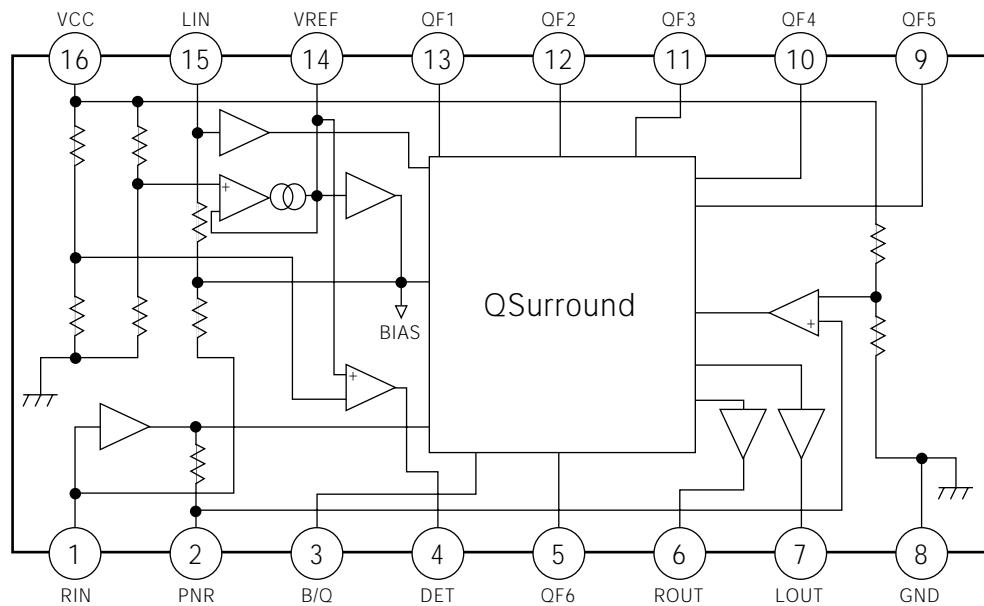




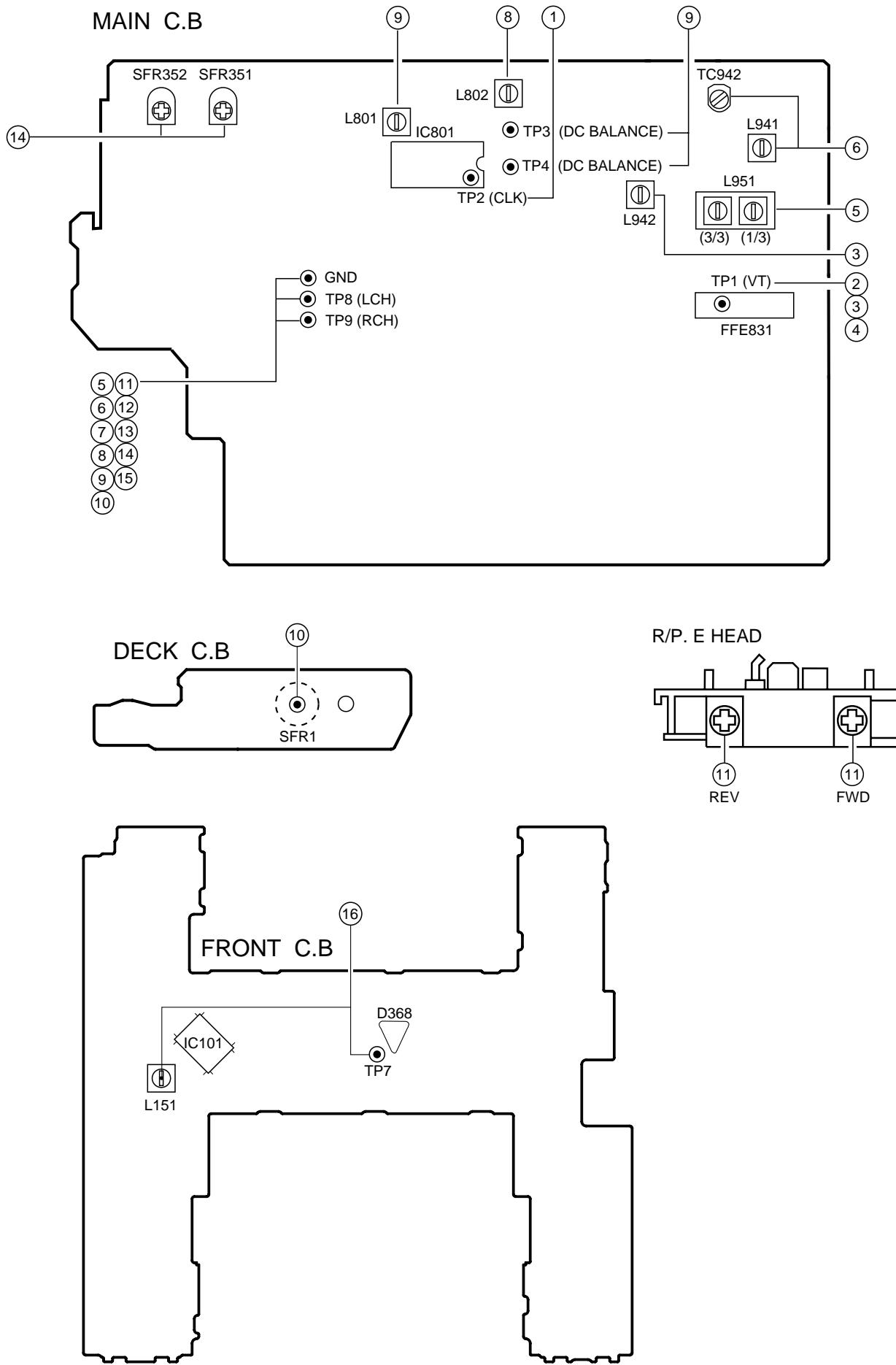
IC, BU2099FV



IC, MM1454XFBE



ADJUSTMENT



< TUNER SECTION >

- Clock frequency Check
Settings : • Test point : TP2
Method : Set to AM 1602kHz and check that the test point is 2052kHz ± 45Hz.

2. MW VT Check

- Settings : • Test point : TP1 (VT)
Method : Set to MW 1602kHz, 531kHz and check that the test point is less than 8.0V (1602kHz) and more than 0.6V (531kHz).

3. LW VT Adjustment

- Settings : • Test point : TP1 (VT)
• Adjustment location: L942
Method : Set to LW 144kHz and adjust L942 so that the test point is 1.3V ± 0.05V.
Then set to LW 290kHz and check that the test point is less than 8.0V.

4. FM VT Check

- Settings : • Test point : TP1 (VT)
Method : Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).

5. MW Tracking Adjustment

- Settings : • Test point : TP8(Lch), TP9(Rch)
• Adjustment location :
L951(1/3) 999kHz
Method : Set to MW 999kHz and adjust L951(1/3) so that the level at the test point becomes maximum.

6. LW Tracking Adjustment

- Settings : • Test point : TP8(Lch), TP9(Rch)
• Adjustment location : L941, TC942
Method : Set up TC942 to center position.
Set to LW 144kHz and adjust L941 so that the level at test point becomes maximum.
Then set to LW 290kHz and adjust TC942 so that the level at test point becomes maximum.

7. FM Tracking Check

- Settings : • Test point : TP8(Lch), TP9(Rch)
Method : Set to FM 98.0MHz and check that the test point is less than 13dB μ V.

8. AM IF Adjustment

- Settings : • Test point : TP8(Lch), TP9(Rch)
• Adjustment location :
L802 999kHz

9. DC Balance / Mono Distortion Adjustment

- Settings : • Test point : TP3, TP4 (DC Balance)
• TP8(Lch), TP9(Rch) (Distortion)
• Adjustment location : L801
• Input level : 60dB μ V
Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes 0V ± 0.3V.
Next, check that the distortion is less than 1.3%.

< DECK SECTION >

- Tape Speed Adjustment
Settings : • Test tape : TTA-100
• Test point : TP8(Lch), TP9(Rch)
• Adjustment location : SFR1
Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz and ±45Hz (REV) with respect to forward speed.

11. Head Azimuth Adjustment

- Settings : • Test tape : TTA-330
• Test point : TP8(Lch), TP9(Rch)
• Adjustment location : Head azimuth adjustment screw
Method : Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on REV PLAY mode.

12. PB Frequency Response Check

- Settings : • Test tape : TTA-300
• Test point : TP8(Lch), TP9(Rch)
Method : Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is ± 3dB.

13. PB Sensitivity Check

- Settings : • Test tape : TTA-200
• Test point : TP8(Lch), TP9(Rch)
Method : Play back the test tape and check that the output level of the test point is 320mV ± 3dB.

14. REC/PB Frequency Response Adjustment

- Settings : • Test tape : TTA-602
• Test point : TP8(Lch), TP9(Rch)
• Input signal : 1kHz / 10kHz (LINE IN)
• Adjustment location : SFR351 (Lch)
SFR352 (Rch)
Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes -20VU. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes 0dB ± 1.0dB with respect to that of the 1kHz signal.

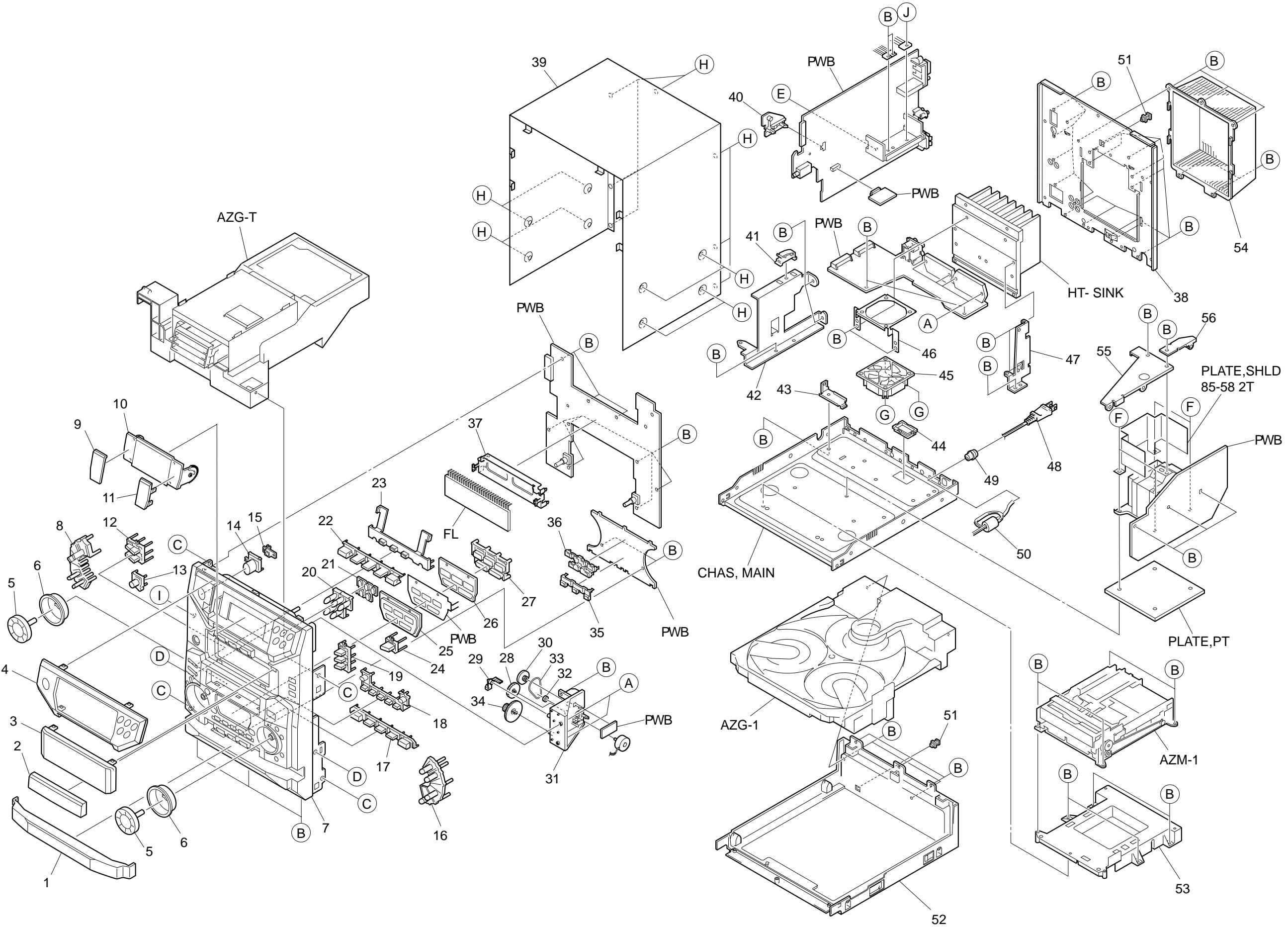
15. REC/PB Sensitivity Check

- Settings : • Test tape : TTA-602
• Test point : TP8(Lch), TP9(Rch)
• Input signal : 1kHz (LINE IN)
Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU. Record and play back the 1kHz signals and check that the output is +1.0dB ± 2.5dB.

< FRONT SECTION >

- μ -CON OSC Adjustment
Settings : • Test point : TP7 and GND
• Adjustment location : L151
Method : Insert AC plug while pressing POWER and TUNER function keys. Adjust L151 so that the frequency at the test point is 67.604Hz ~ 67.776Hz(14.79ms ~ 14.75ms).

MECHANICAL EXPLODED VIEW 1/1



MECHANICAL MAIN PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-DB6-011-010		PANEL,TRAY	36	8A-DB6-224-010		GUIDE,PLAY
2	8A-DB6-010-010		PANEL,DECK	37	87-NF5-203-110		GUIDE,FL(*)
3	8A-DB6-008-010		WINDOW,DISPLAY	38	8A-DB6-051-010		PANEL,REAR EZ
4	8A-DB6-004-010		WINDOW,FR	39	8Z-NB6-040-010		CABI,STEEL K
5	8A-DB6-012-010		KNOB,RTRY VOL	40	8A-NF8-206-010		HLDR,PWB M
6	8A-DB6-013-010		RING,VOL	41	87-NF4-221-010		HLDR,CABLE
7	8A-DB6-041-010		CABI,FR EZ	42	8A-DB6-213-010		HLDR,HT-SINK L
8	8A-DB6-026-010		KEY,TIMER	43	8A-DB6-212-010		HLDR,PWB BTM
9	8A-DB6-007-010		PANEL,MD L	44	8Z-NB5-205-010		CAP,CHAS
10	8A-DB6-005-010		WINDOW,MD	45	87-A91-751-010		FAN,DSB0812M-S382 -400MM
11	8A-DB6-006-010		PANEL,MD R	46	8A-NF6-219-010		HLDR,FAN
12	8A-DB6-024-010		KEY,DEMO	47	8A-DB6-204-010		HLDR,HT-SINK R
13	8A-DB6-027-010		KEY,ENTER	A	87-A80-157-010		AC CORD ASSY,E BLK CC
14	8A-DB6-015-010		KEY,ASSY POWER	49	87-085-185-010		BUSHING, AC CORD (E)
15	8A-DB6-221-010		GUIDE,POWER	50	87-A90-457-010		F-BEAD,15-25-15 E251
16	8A-DB6-032-010		KEY,GEQ	51	84-ZG1-245-210		CAP,OPTICAL
17	8A-DB6-033-010		KEY,ASSY CD	52	8A-NF6-003-010		CABI,BOTTOM<EZS>
18	8A-DB6-031-010		KEY,REC	52	8A-NF6-049-010		CABI,BOTTOM K<KS>
19	8A-DB6-036-010		KEY,RDS	53	8A-DB6-203-010		HLDR,DECK
20	8A-DB6-018-010		KEY,ASSY FUNCTION	54	8A-DB6-058-010		COVER, REAR EZS<EZS>
21	8A-DB6-222-010		GUIDE,FUNCTION	54	8A-DB6-059-010		COVER, REAR KS<KS>
22	8A-DB6-021-010		KEY,ASSY MD	55	8A-DB6-214-010		HLDR,PWB PT 76
23	8A-DB6-223-010		GUIDE,MD	56	8A-DB6-218-010		HLDR,PWB PT SUB
24	8A-DB6-025-010		KEY,DECK	A	87-067-581-010		TAPPING SCREW, BVT2+3-15
25	8A-DB6-009-010		WINDOW,PLAY	B	87-067-703-010		TAPPING SCREW, BVT2+3-10
26	8A-DB6-226-010		HLDR,PLAY	C	87-721-097-410		QT2+3-12 GLD
27	8A-DB6-028-010		KEY,ASSY PLAY	D	87-721-096-410		QT2+3-10 GLD
28	8Z-NB6-213-010		GEAR,RELAY	E	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
29	8Z-NB6-215-110		LEVER,SW	F	87-067-975-010		S-SCREW,IT+4-8 SWCH12A
30	8Z-NB6-212-010		GEAR,WINDOW	G	87-067-689-010		TAPPING SCREW, BVTT+3-8
31	8A-DB6-215-010		HLDR,MECHA MD	H	87-B10-091-010		UTT2+3-10 W/O BLK
32	84-ZG1-267-010		PULLEY,LOAD MO 8	I	87-723-096-410		QT2+3-10W/O SLOT BL
33	8Z-NB6-216-010		BELT,SQ1.4-99.2	J	87-067-001-010		S-SCREW BVWWST 2+3-12
34	8Z-NB6-214-010		PULLEY,RELAY				
35	8A-DB6-225-010		GUIDE,CD				

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink

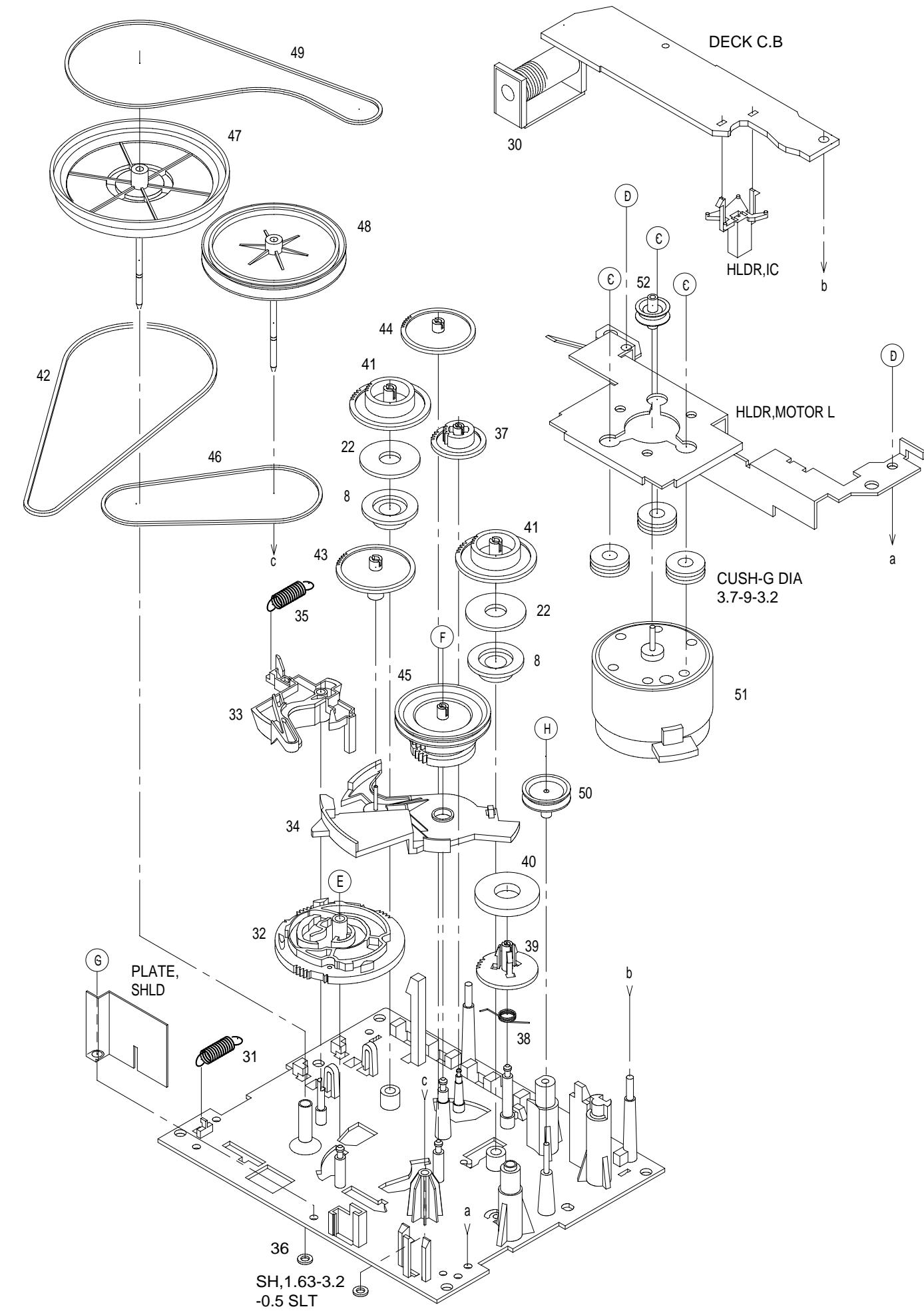
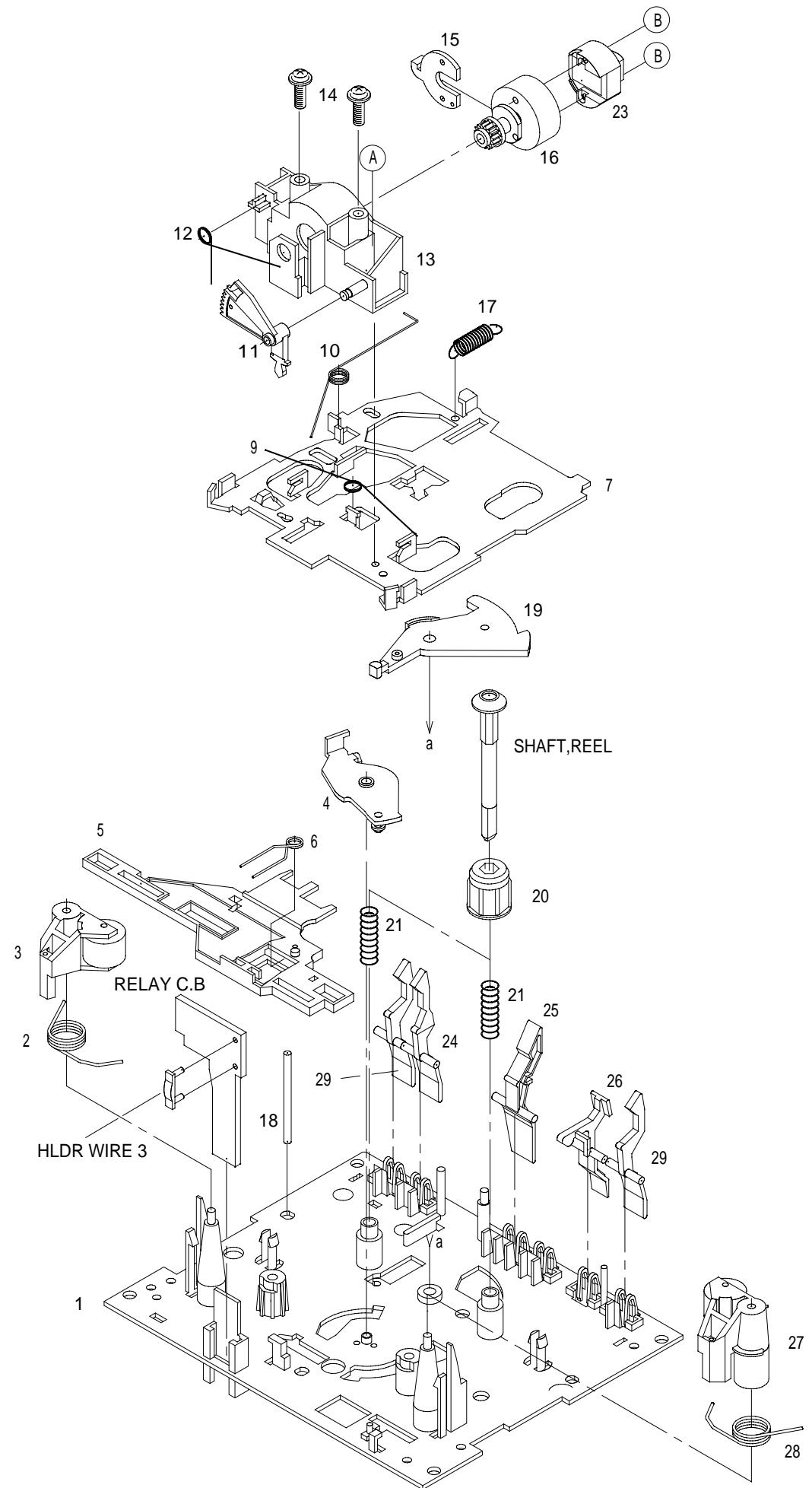
TAPE MECHANISM MAIN PARTS LIST 1/2 <6ZM-4 YR4NF>

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

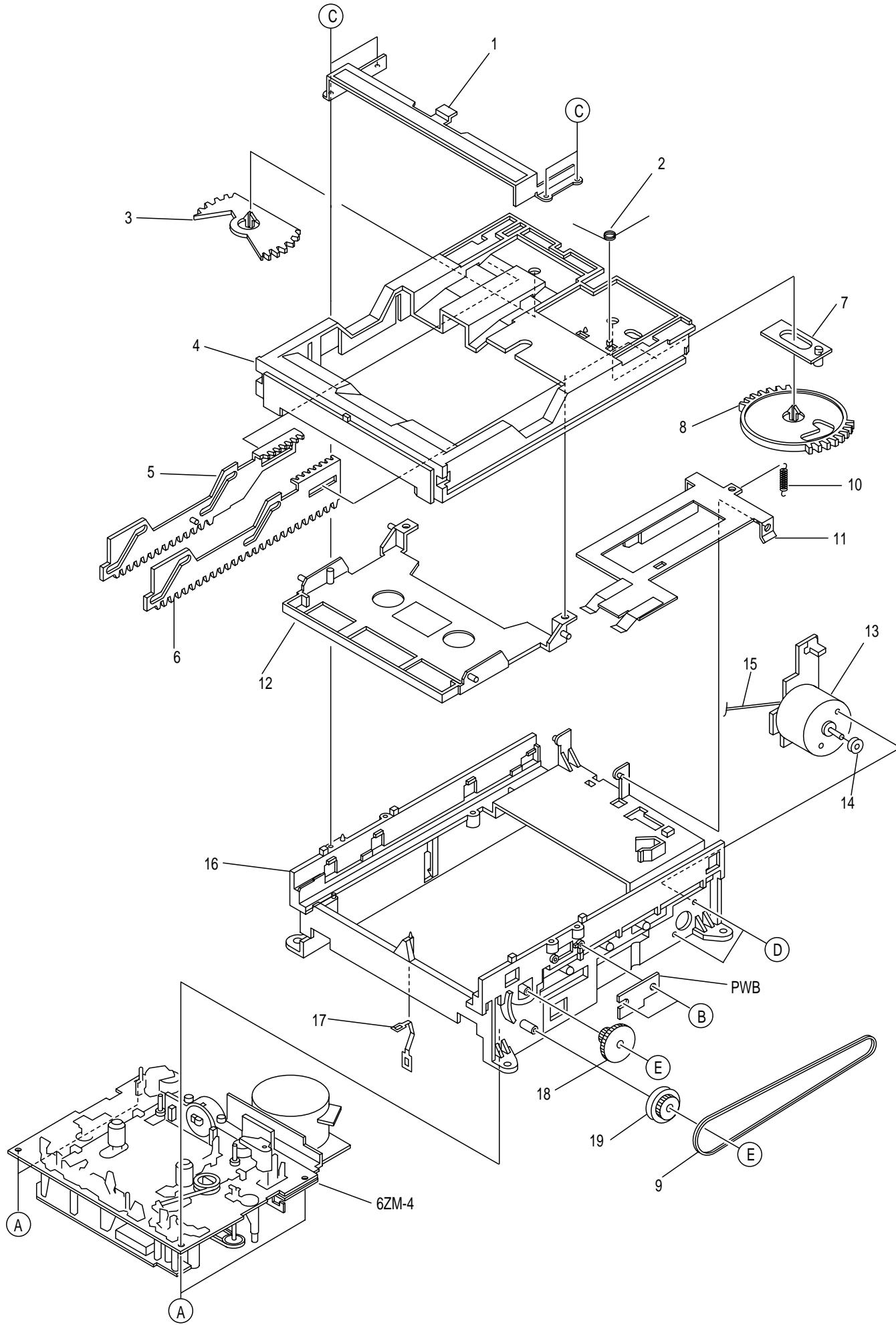
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
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- 1 86-ZM1-218-210 1C CHAS ASSY,R
- 2 82-ZM1-258-210 OE SPR-T,PINCH L
- 3 82-ZM1-341-210 1A LVR ASSY,PINCH L2
- 4 82-ZM1-333-210 OE PLATE,LINK2
- 5 82-ZM1-266-310 OE LVR,DIR
- 6 82-ZM1-214-010 OE SPR-T,DIR
- 7 82-ZM1-206-910 1A CHAS,HEAD
- 8 86-ZM1-219-010 OE CLR,REEL SLIP
- 9 82-ZM1-269-210 OE SPR-T,BRG
- 10 82-ZM1-219-110 OE SPR-T,LINK
- 11 82-ZM1-210-110 OE GEAR,H T
- 12 82-ZM3-353-010 OE SPR-T,HEAD 2
- 13 82-ZM1-207-910 1A GUIDE,TAPE
- 14 82-ZM1-283-310 OE S-SCREW,AZIMUTH
- 15 82-ZM1-314-110 OE PLATE,HEAD
- 16 82-ZM1-208-310 OE HLDL,HEAD
- 17 82-ZM1-218-010 OE SPR-E,HB
- 18 82-ZM3-339-110 OE SHAFT,COUPLER N3
- 19 82-ZM1-222-310 OE LVR,PLAY(*)
- 20 86-ZM1-203-010 OE CAP,REEL
- 21 86-ZM1-221-010 OE SPR-C,BT 2L
- 22 86-ZM1-220-010 OE FELT,DIA 5.3-14-0.8
- 23 87-046-399-110 2A HEAD,PPH YK56R-BS411
- 24 82-ZM1-241-310 OE LVR,MC
- 25 82-ZM1-242-010 OE LVR,CAS
- 26 82-ZM1-243-010 OE LVR,STOP
- 27 82-ZM1-344-210 OE LVR ASSY,PINCH R2
- 28 82-ZM1-259-210 OE SPR-T,PINCH R
- 29 82-ZM1-240-110 OE LVR,REC(*)
- 30 82-ZM1-634-010 1B SOL ASSY,23K
- 31 82-ZM1-255-310 OE SPR-E,LVR DIR
- 32 82-ZM1-221-310 OE GEAR,CAM(*)
- 33 82-ZM1-227-310 OE LVR,TRIG
- 34 82-ZM1-224-410 OE LVR,FR
- 35 82-ZM1-305-210 OE SPR-E,TRIG 2
- 36 80-ZM6-243-010 OE SH 1.75-3.6-0.5 SLT
- 37 82-ZM1-223-010 OE GEAR,PLAY
- 38 82-ZM1-322-010 OE SPR-T,FR 60
- 39 82-ZM1-220-210 OE GEAR,IDLER
- 40 82-ZM3-616-010 OE RING MAGNET 4
- 41 82-ZM1-216-510 OE GEAR,REEL
- 42 86-ZM1-217-110 OE BELT,MOT
- 43 82-ZM1-225-210 OE GEAR,FR
- 44 82-ZM1-226-010 OE GEAR,REW
- 45 82-ZM3-333-310 1A SLIP DISK ASSY 2
- 46 82-ZM1-338-110 OE BELT,FR 4
- 47 09-001-420-010 - FLY-WHL RL ASSY
- 48 82-ZM3-207-510 - FLY-WHL L2 ASSY
- 49 86-ZM1-206-010 OE BELT,MAIN L
- 50 82-ZM3-335-310 OE PULLEY,COUPLER M3
- 51 87-A90-343-010 1E MOT,SHU2R 70
- 52 82-ZM3-221-210 OE PULLEY,MOT 2M
- A 85-ZM3-202-010 OE S-SCREW,TG
- B 80-ZM6-207-010 OE V+1.6-7
- C 82-ZM3-318-110 OE S-SCREW W,MOTOR M2
- D 87-067-178-010 OE VTT+2.6-3
- E 87-B10-008-010 OE W-P,2.08-8-0.4-SLIP
- F 82-ZM3-334-010 OE PW 2.16-6-0.4
- G 82-ZM3-222-010 OE S-SCREW,SHILD PLATE
- H 87-B10-043-010 OE W-P,0.99-4-0.25 SLT

TAPE MECHANISM EXPLODED VIEW 1/2 <6ZM-4 YR4NF>



TAPE MECHANISM EXPLODED VIEW 2/2 <AZM-1 A1>



TAPE MECHANISM MAIN PARTS LIST 2/2 <AZM-1 A1>

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-ZM1-214-010	1A	PLATE, F STOPPER
2	8A-ZM1-223-010	OE	SPR-T, LOCK F
3	8A-ZM1-209-010	OE	GEAR, SLIDE B
4	8A-ZM1-203-010	1E	FRAME, MAIN
5	8A-ZM1-215-010	1A	LEVER ASSY, SLIDE L
6	8A-ZM1-217-010	1A	LEVER ASSY, SLIDE R
7	8A-ZM1-212-010	OE	LEVER, LOCK F
8	8A-ZM1-208-010	OE	GEAR, SLIDE A
9	8A-ZM1-230-010	OE	BELT, BASE
10	8A-ZM1-220-010	OE	SPR-E, CLAMP
11	8A-ZM1-216-010	1C	PLATE ASSY, CLAMP
12	8A-ZM1-204-010	1C	TRAY, CASSETTE
13	87-045-305-010	1F	MOTOR, RF-500TB DC-5V (2MA)
14	86-ZL1-210-010	OE	PULLEY, MOT
15	8Z-ZG4-614-010	1A	F-CABLE, 2P 130MM LED
16	8A-ZM1-202-010	1E	BASE, B
17	86-ZL1-214-010	OE	SPR-P, CASS
18	8A-ZM1-207-010	OE	GEAR, FRAME
19	8A-ZM1-213-010	OE	GEAR, PULLEY
A	87-067-660-010	OE	TAPPING SCREW, BVT2+3-8
B	88-ZG5-302-010	OE	S-SCREW, 8ZG5+2-4 W/O
C	88-ZG5-317-010	OE	S-SCREW, 8ZG5S+2-4 W/O
D	87-251-072-410	OE	U+2.6-5
E	8A-ZM1-240-010	OE	S-SCREW, GEAR F/P

SPEAKER PARTS LIST <SX-WNH81>

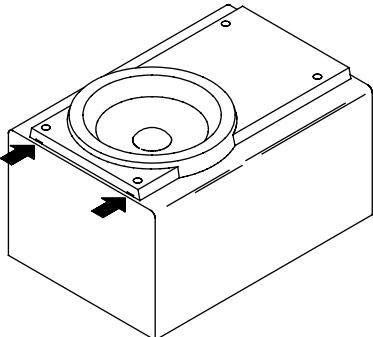
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NSY-001-010		PANEL, FR R
2	8A-NSY-002-010		PANEL, FR L
3	8A-NSY-003-010		PANEL, BA R
4	8A-NSY-004-010		PANEL, BA L
5	8A-NSY-005-010		GRILLE, FRAME ASSY
6	8A-NSY-011-010		RING, W
7	8A-NSY-012-010		COVER, REAR
8	8A-NSJ-006-010		BADGE, AIWA S35
9	88-NS5-610-010		CORD, SPKR
10	88-NS5-611-010		CORD, SPKR B/L
11	8A-NS0-604-010		SPKR, M 120
12	8A-NS6-604-010		SPKR, W 200

SPEAKER DISASSEMBLY INSTRUCTIONS

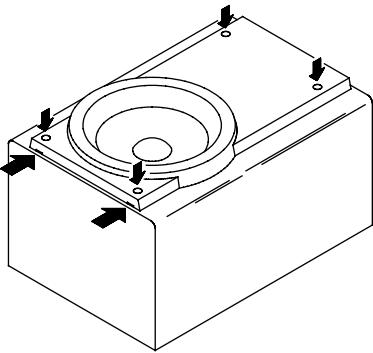
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



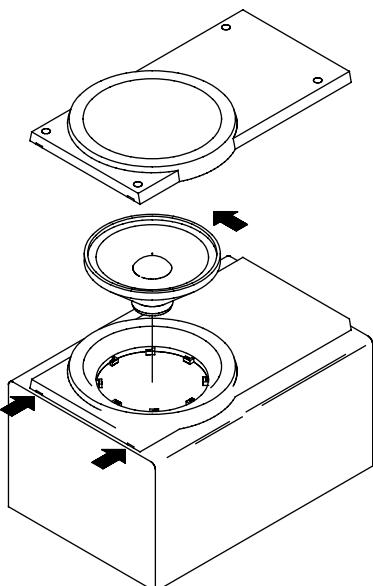
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

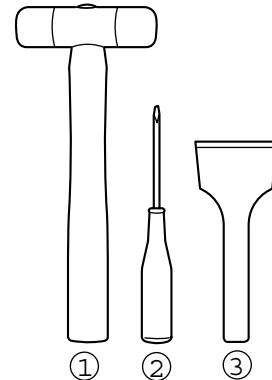


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

- (1) Plastic head hammer
- (2) (⊖) flat head screwdriver
- (3) Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.
2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.
3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

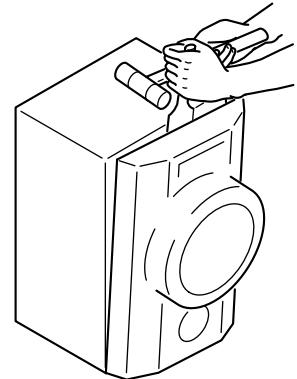
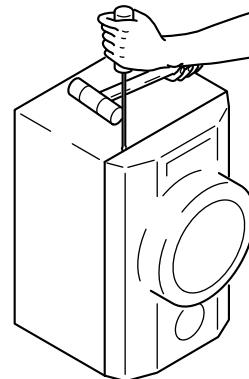


Fig-1

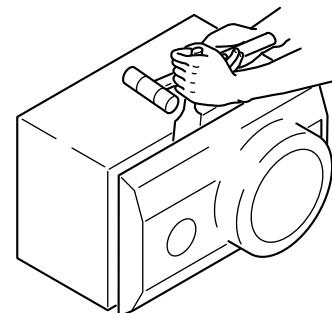


Fig-2

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.



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